Sterling B2B Integrator

**IBM**

# Reference

*Version 5.2*

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# Contents

# Partner Onboarding REST APIs

By using REST APIs, you can integrate Sterling B2B Integrator and Sterling File Gateway with IBM Partner Engagement Manager, or another partner onboarding tool, to onboard your trading partners.

Partner Onboarding REST APIs are released with Sterling B2B Integrator V5.2.6.1 or later, and Sterling File Gateway V2.2.6.1 and later. You must upgrade to a supported version to use the REST APIs, with or without IBM PEM Integration.

**Important:** If you are using IBM PEM Integration, the Partner Onboarding REST APIs must be downloaded and installed before you set up IBM Partner Repository or IBM Partner Provisioner.

The REST API documentation can be accessed using a web browser. It is composed of a set of static HTML, CSS, and JavaScript that dynamically documents the available REST APIs. For more information, see "Accessing the Partner Onboarding REST APIs and documentation" on page 7.

The Partner Onboarding REST APIs for Sterling B2B Integrator and Sterling File Gateway work on any supported platform.

# Sterling B2B Integrator Partner Onboarding REST APIs (V5.2.6.1 or later)

The REST API documentation contains a list of resources that are provided by the Partner Onboarding REST APIs in Sterling B2B Integrator. Each REST resource contains information such as URIs, descriptions, and sample input and output data.

To access the Partner Onboarding REST APIs and documentation, see "Accessing the Partner Onboarding REST APIs and documentation" on page 7.

The following table describes the Partner Onboarding REST APIs in Sterling B2B Integrator:

| Sterling B2B Integrator REST APIs | Description |
|---|---|
| **SSH** | |
| Known Host Key | A public key is used to authenticate the remote SFTP servers to Sterling B2B Integrator. You can request this key from your trading partner.<br><br>Using this API, the Known Host key can be uploaded to the system that can be read, updated, or deleted. |
| User Identity Key | A private or public key pair that is used to identify Sterling B2B Integrator as a user on a remote server.<br><br>Using this API, the User Identity key can be uploaded to the system that can be read, updated, or deleted. |

| Sterling B2B Integrator REST APIs | Description |
|---|---|
| Authorized User Key | A public key that is used to authenticate remote users to Sterling B2B Integrator. You can request the keys from your trading partner and include the keys in the Sterling B2B Integrator user account.<br><br>Using this API, the Authorized User key can be uploaded to the system that can be read, updated, or deleted. |
| **Remote Profile** | The SSH Remote Profile provides the details that are needed for the `SftpClientAdapter` adapter that is used to connect to a particular remote SFTP server.<br><br>Using this API, the SSH Remote Profile can be created, read, updated, or deleted. |
| **Schedules** | Enables a user to set up schedules for a business process so that it runs automatically on hourly, daily, weekly, or monthly intervals. |
| **Accounts** | |
| Permissions | Enables the Sponsor Administrator to grant permissions for user accounts or groups.<br><br>Using this API, user permissions can be created, read, updated, or deleted. |
| User Groups | Enables the Sponsor Administrator to administer user groups.<br><br>Using this API, user groups can be created, read, updated, or deleted. |
| User Account | Enables the Sponsor Administrator to administer user accounts.<br><br>Using this API, user accounts can be created, read, updated, or deleted. |
| **Digital Certificates** | |
| CA | A digital certificate for which the system does not have the private key. This certificate is stored in the standard Distinguished Encoding Rules (DER) format.<br><br>Using this API, the CA digital certificate can be uploaded to the system that can read, updated, or deleted. |
| Trusted | A digital certificate for which the system does not have the private key. This certificate is stored in the standard DER format.<br><br>Using this API, the Trusted digital certificate can be uploaded to the system that can read, updated, or deleted. |

| Sterling B2B Integrator REST APIs | Description |
|---|---|
| System | A digital certificate for which the system maintains the private key. This certificate is stored with the private key in a secure format.<br><br>Using this API, the System digital certificates such as `Key Certificate` and `PKCS12` can be uploaded to the system that can read, updated, or deleted. |
| **PGP** | |
| PGP Server Profile | Using this API, a PGP server profile can be created, read, updated, or deleted. |
| PGP Key | All PGP key services require a Command Line Adapter 2 in Sterling B2B Integrator. By default, the base PGP CLA2 is used: `PGPCmdlineService`. The command line service is preconfigured with the correct host, port, and other information. The executable does not need to be specified.<br><br>Each service runs an executable on the server. By default, these are expected to exist in the `<CLA2 directory>/pgp/` directory and have the following names: `create.sh`, `read.sh`, `export.sh`, or `delete.sh`. The script paths and names as well as the name of CLA2 can be overwritten in the `b2bapis.properties.in` property file.<br><br>Using this API, a PGP key can be created, read, or deleted. |
| **Sterling Connect Direct** | |
| Node | A node refers to Sterling Connect:Direct® server. Both local and remote Sterling Connect:Direct servers perform data transfers. Either of the node can initiate the work by submitting a Process. When a session is established, the node that initiates the session is the PNODE, regardless of the information flow. The other node is SNODE. The Process can specify the work that is destined for either PNODE or SNODE.<br>**Note:** The Sterling Connect:Direct Server Adapter can be designated as a Sterling Connect:Direct local or remote node. If it initiates a connection with the remote Sterling Connect:Direct node, it can function as PNODE or SNODE.<br><br>Using this API, a node can be created, read, updated, or deleted. |

| Sterling B2B Integrator REST APIs | Description |
| --- | --- |
| Netmap | The Sterling Connect:Direct Server Adapter configuration identifies the remote nodes that it can communicate with by using the netmap, which is the network map. Therefore, when you create a Sterling Connect:Direct Server Adapter, ensure to specify a netmap.<br><br>Using this API, a netmap can be created, read, updated, or deleted. |
| Netmap Xref | You can reuse nodes for one or more netmaps by creating a cross-reference between the node and netmap. You need not create a node for each Sterling Connect:Direct Server Adapter.<br><br>Using this API, an xref can be created, read, updated, or deleted by referencing the nodes in a netmap. |
| **Duplicate Check APIs** | |
| SSH Duplicate Check | This API checks for duplicate SSH entities such as SSH keys and remote profile. For example, in the API URL (http://<host name:port number> /B2BAPIs/svc/ sshduplicatechecks/?name=<ssh entity name>&type=<ssh entity type>), provide the name to check for duplicate SSH entity and the corresponding SSH entity type. The list of entity types are as follows:<br>• AUK - Authorized User Key<br>• KHK - Known Host Key<br>• UIK - User Identity Key<br>• RP - Remote profile |
| Digital Certificate Duplicate Check | This API checks whether digital certificate exists. In the API URL http://<host name:port number> /B2BAPIs/svc/ digitalcertificateduplicatechecks/ ?certName=<certificate name >&certType=<certificate type>, provide the certificate name to verify the duplicate certificate entity and the corresponding certificate entity type. The certificate entity types are as follows:<br>• CA<br>• TRUSTED<br>• SYSTEM |

| Sterling B2B Integrator REST APIs | Description |
|---|---|
| Routing Channel Duplicate Check | This API checks whether a routing channel exists. In the API URL http://<host name:port number> /B2BAPIs/svc/ routingchannelduplicatechecks/ ?template=<routing channel template>&consumer=<consumer partner name>&producer=<producer partner name>, if the template is static, provide the template name, consumer, and producer. If the template is dynamic, provide the template name and producer. |
| Sterling Connect Direct Node Duplicate Check | This API checks whether Connect Direct node exists. In the API URL http://<host name:port number>/B2BAPIs/svc/ sterlingconnectdirectnodeduplicatechecks/ ?nodeName=<node name>, provide the name of a node to check, if it exists. |
| Sterling Connect Direct XREF Duplicate Check | This API checks whether Connect Direct node exists in the netmap. In the API URL http://<host name:port number> B2BAPIs/svc/ sterlingconnectdirectxrefduplicatechecks/ ?netmapName=<netmap name>&nodeName=<node name>, provide the node name to check whether it exists in the netmap. |

# Sterling File Gateway REST APIs

By using REST APIs, IBM Partner Engagement Manager can be integrated with Sterling File Gateway.

The REST API documentation contains a list of resources that are provided by the REST APIs. Each REST resource contains information such as URIs, descriptions, and sample input and output data. The REST API documentation can be accessed in a web browser. It is composed of a set of static HTML, CSS, and JavaScript files that dynamically document the available REST APIs.

To access the REST API documentation:
1. Install Sterling B2B Integrator V5.2.6.1 or later (includes Sterling File Gateway).
2. Install the APIs. See Installing the B2Bi APIs. Note the port number assigned. You need this information in the next step.
3. Go to <Host_Name>:<port>/B2BAPIs/svc/doc, where <Host_Name> is the server address where Sterling B2B Integrator is installed, and <port> is the port number assigned in Step 2.

**Attention:** You can delete one or more records from a database. However, the records that are deleted cannot be recovered.

- To delete a particular record from the database, provide the resource ID in the URL as follows:

  `http://<Host_Name>:<port>/B2BAPIs/svc/APIDomain/<ID>`

- To delete all the records from the database, provide `?_bulk=true` in the URL as follows:

  `http://<Host_Name>:<port>/B2BAPIs/svc/APIDomain/?_bulk=true`

**Important:** Before you set up IBM Partner Repository or IBM Partner Provisioner, make sure to download REST APIs that are released with the Sterling File Gateway v2.2.6.1 fix pack. You also must create a system user with external authentication and the APIUser permission.

The following table describes the Sterling File Gateway REST APIs:

| Sterling File Gateway REST APIs | Description |
|---|---|
| Trading partner profile | A trading partner is an organization that conducts e-business with other organizations.<br><br>Sterling File Gateway enables the exchange of files between partners through routing channels that are set up to connect specific partners. Partners that send files to Sterling File Gateway are referred to as producers, and partners that retrieve files are referred to as consumers. From an operational standpoint, a partner can be a producer, a consumer, or both.<br><br>Using this API, a trading partner can be created, read, updated, or deleted. |
| Routing Channel | Routing channels match the incoming producer files to the appropriate consumer, and transform the file and file name according to the policies of the consumer.<br><br>Route Provisioners create routing channels. However, before routing channels are created, the Integration Architect must create a routing channel template and the Route Provisioner must create the producer and consumer partners.<br><br>Using this API, a Routing Channel can be created, read, or deleted. |
| PGP Server Profile | Using this API, a PGP server profile can be created, read, updated, or deleted. |

| Sterling File Gateway REST APIs | Description |
|---|---|
| PGP Key | All PGP key services require a Command Line Adapter 2 in Sterling B2B Integrator. By default, the base PGP CLA2 is used: `PGPCmdlineService`. The command line service is preconfigured with the correct host, port, and other information. The executable does not need to be specified.<br><br>Each service runs an executable file on the server. By default, the services are expected to exist in the `<CLA2 directory>/pgp/` directory and have the following names: `create.sh`, `read.sh`, `export.sh`, or `delete.sh`. The script paths and names and the name of CLA2 can be overwritten in the `b2bapis.properties.in` property file.<br><br>Using this API, a PGP key can be created, read, or deleted. |

## Accessing the Partner Onboarding REST APIs and documentation

To use the Partner Onboarding Rest APIs, you must first download and install them, and configure your system to use them.

### About this task

To access the Partner Onboarding REST APIs and documentation:

### Procedure

1. Install Sterling B2B Integrator V5.2.6.1 or later, and Sterling File Gateway, V2.2.6.1 or later. You must install both products to access the APIs.
2. Create a new system user account in Sterling B2B Integrator (or use an existing account) and give it the APIUser permissions.
   **CAUTION:**
   **The APIUser permission is equivalent to admin and includes the permissions to create, delete, update and read all system configurations within a supported API.**
3. Run startCluster.cmd true 1 (even if you are running a non-clustered install). This also enables startup of the Liberty API server.

   **Note:** The Partner Onboarding REST APIs require a clustered Sterling B2B Integrator instance, but you can run a non-clustered instance in cluster mode. A true cluster is not required to use the REST APIs, unless you are implementing a high-availability scenario.
4. Install the APIs. See Installing the B2Bi APIs.
5. Get the LIBERTY_HTTPS_PORT number from sandbox.cfg. This is typically the base port + 75.
6. Go to `<Host_Name>:<port>/B2BAPIs/svc/doc`, where <Host_Name> is the server address where Sterling B2B Integrator is installed, and <port> is the Liberty server port number. This is a unique IP/Port for each node. Typically, a deployment consists of many nodes that share a common port for all nodes. If you are creating a vertical cluster, every node could have a unique port.

7. (Optional) To make the REST API HA-ready, configure a REST API DNS/VIP address for the B2Bi REST API service and configure your load balancer to spray across the physical IP address and port for each of your Sterling B2B Integrator nodes. The load balancer hosts the received DNS/VIP and routes the requests to the configured destinations:
   - <Host_Name1>:<port1>/B2BAPIs/svc/doc
   - <Host_Name2>:<port2>/B2BAPIs/svc/doc
   - <Host_Name3>:<port3>/B2BAPIs/svc/doc
8. Log in to Sterling B2B Integrator as the system user with APIUser permissions.

# Deleting a record from a Partner Onboarding REST API

You can delete one or more records from a Partner Onboarding REST API.

### About this task

Records that are deleted cannot be recovered.

### Procedure

Do one of the following:
- To delete a record from a REST API, issue an HTTP DELETE request to the following URI, where <APIDomain> is the API domain name and <ID> is the resource ID of the API entity you want to delete:

  `http://<Host_Name>:<port>/B2BAPIs/svc/<APIDomain>/<ID>`
- To delete all records from a REST API, issue an HTTP DELETE request to the following URI, where <APIDomain> is the API domain name:

  `http://<Host_Name>:<port>/B2BAPIs/svc/<APIDomain>/?_bulk=true`

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