Fiserv SnapPay Integration and Credit Card Processing

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Onboarding/Set Up Steps

Fiserv SnapPay is predefined as a payment system. Only the steps specific to Fiserv SnapPay for processing credit card payments are provided in this document. Refer to Payment Gateway Integration and Credit Card Processing document for the end-to-end process of onboarding a payment gateway.

Funds Capture Formats

There are 4 types of Funds Capture Formats that are essential for a credit card transaction flow. Each format corresponds to a particular credit card transaction type (which has an outbound request and an inbound response). This table describes the transaction types, and their corresponding funds capture formats.

TRANSACTION TYPE	REQUEST/ RESPONSE TYPE	FUNDS CAPTURE FORMAT TYPE	DESCRIPTION
Card Tokenization	Outbound request	Funds Capture Card Tokenization Request Formats	The request sent to the payment gateway to launch the HPP where user can enter the card details. The funds capture format type specifies the required parameters for this outbound call.
Card Tokenization	Inbound response	Funds Capture Card Tokenization Request Response Formats	The response sent by the payment gateway for the outbound card tokenization request. The funds capture format type specifies the parameters to be saved from this inbound call.
Authorization/ Settlement/ Refund	Outbound request	Funds Capture Card-On-File Request Formats	The request sent to the payment gateway to perform authorization/settlement/refund transactions. The funds capture format type specifies the required parameters for this outbound call.
Authorization/ Settlement/ Refund	Inbound response	Funds Capture Online Response Formats	The response sent by the payment gateway for the outbound authorization/settlement/refund request. The funds capture format type specifies the parameters to be saved from this inbound call.
Transaction Query	Outbound request	Funds Capture Transaction Query Request Formats	The request sent to the payment gateway to fetch the transaction status. The funds capture format type specifies the required parameters for this outbound call.
Transaction Query	Inbound response	Funds Capture Transaction Query Response Formats	The response sent by the payment gateway for the outbound transaction query request. The funds capture format type specifies the parameters to be saved from this inbound call.

For each of these format types, you must create a format based on the Service Provider's specifications. The formats required for Fiserv SnapPay payment system are predefined in the system.

1. In the **Setup and Maintenance** work area, go to the **Manage Formats** task.

   - Offering: Financials

   - Functional Area: Customer Payments

   - Task: Manage Formats

2. Ensure that the following formats are available in the system.

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a. **Funds Capture Card Tokenization Request Formats**: Fiserv SnapPay Card Tokenization Request.

b. **Funds Capture Card Tokenization Request Response Formats:** Fiserv SnapPay Card Tokenization Request Response.

c. **Funds Capture Card-On-File Request Formats:** Fiserv SnapPay Transaction Request.

d. **Funds Capture Online Response Formats:** Fiserv SnapPay Transaction Response.

e. **Funds Capture Transaction Query Request Formats**: Fiserv SnapPay Transaction Query Request.

f. **Funds Capture Transaction Query Response Formats**: Fiserv SnapPay Transaction Query Response.

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You can design custom formats to accommodate any changes in the request/response bodies of the communications with Fiserv SnapPay . Follow these steps to create a custom format:

1. Navigate to the **Manage Formats** setup page.

    Note: Steps required to navigate to a setup page are provided in the **Funds Capture Payment Methods** section of this document.

2. Select the format type of the custom format and click **Create**.

3. Enter these format details in the **Create Format** page.

    -   Name: Name of the format

    -   From Date: Date from which the format would be valid

    -   To Date: Expiry date of the format

    -   Type: Format type

    -   Message Direction: Inbound/Outbound

    -   Payload Type: Payload type can JSON, Text, or XML.

    -   Choose File: Select and upload custom format. Refer to the Credit Card Integration – Technical Specifications document for details on what to include in the template.

4. Click **Save and Close**.

Transmission Configurations

A transmission configuration contains the transmission details specific to a payment system or a financial institution.

Two transmission configurations should be configured for Fiserv SnapPay as follows:

1. SnapPay COF: This is required for Authorization/Settlement/Refund transactions.

2. SnapPay Query: This is required for querying the transaction status.

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SnapPay COF: Here are the steps required to set up SnapPay COF transmission configuration:

1. In the Setup and Maintenance work area, go to the **Manage Transmission Configurations** task.

   - Offering: Financials

   - Functional Area: Customer Payments

   - Task: Manage Transmission Configurations

2. Create a new transmission configuration with these details.

   - Configuration: Name of the Transmission Configuration (SnapPay COF)

   - Protocol: Http(s) POST Request

   - Destination URL: Provided by Fiserv SnapPay directly to the Customer.

   - HTTP Authentication User Name: <SnapPay Account user id>

   - HTTP Authentication Password: <SnapPay Account password>

   - Send Body Content Type: application/json

   - Receive Body Content Type: application/json

3. Click **Save and Close**.

SnapPay Query: The steps required to set up SnapPay Query transmission configuration are as follows:

1. In the Setup and Maintenance work area, go to the Manage Transmission Configurations task.

   - Offering: Financials

   - Functional Area: Customer Payments

   - Task: Manage Transmission Configurations

2. Create a new transmission configuration with these details.

   - Configuration: Name of the transmission configuration (SnapPay Query)

   - Protocol: Http(s) POST Request

   - Destination URL: Provided by Fiserv SnapPay directly to the Customer.

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- HTTP Authentication User Name: <SnapPay Account user id>

- HTTP Authentication Password: < SnapPay Account password>

- Send Body Content Type: application/json

- Receive Body Content Type: application/json

3. Click **Save and Close**.

Payment System

The set of steps required to configure the Fiserv SnapPay Payment System are described in this section. Fiserv SnapPay is predefined as a payment system.

1. In the Setup and Maintenance work area, go to the **Manage Payment Systems** task.

    - Offering: Financials

    - Functional Area: Customer Payments

    - Task: Manage Payment Systems

2. Search by name for **Fiserv SnapPay**. Click **Fiserv SnapPay** link from the search results to navigate to **Edit Payment System** page.

3. Ensure that the following fields and the corresponding values are present. Refer to the screenshot following these details.

    - Processing Model: Gateway

    - Funds Capture: **Credit Card** box is selected.

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- Tokenization Payment System Settings: **Credit Card Tokenization** box is selected.

- Formats: The formats created for the following format types should be added here.

  - Funds Capture Card-On-File Request Formats

  - Funds Capture Online Response Formats

- In case of Fiserv SnapPay, add the following formats in the **Formats** section.

  - Fiserv SnapPay Transaction Request

  - Fiserv SnapPay Settlement Response

Formats ⑦

View ▼ ✚ ✖ ▦ Freeze ⤶ Wrap	
* Name	
Fiserv SnapPay Transaction Request	
Fiserv SnapPay Transaction Response	

- Transmission Protocols: Http(s) POST Request

- **Settings Required by Payment System**: Ensure that the parameters provided in the screenshot are added and the corresponding Code, Data Type, and Secured/Unsecured flag are available.

◢ Settings Required by Payment System ⑦

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* Name	* Code	* Data Type	Secured
Business Unit	BU_NAME	Character	No
Client Identifier	ACCT_TOKEN_CREATE_CLIENT	Character	Yes
Commerce Indicator	COMMERCE_INDICATOR	Character	No
Key Identifier for Card Security Code	ACCT_MICROFORM_KEY_ID	Character	Yes
Merchant City	DESCRIPTOR_CITY	Character	No
Merchant ISO Country Code	DESCRIPTOR_COUNTRY	Character	No
Merchant Identifier	MERCHANT_ID	Character	No
Merchant Name	DESCRIPTOR	Character	No
Merchant Phone Number	DESCRIPTOR_CONTACT	Character	No
Merchant Postal Code	DESCRIPTOR_POSTALCODE	Character	No
Merchant State	DESCRIPTOR_STATE	Character	No
Merchant Street Address	DESCRIPTOR_STREET	Character	No
Point of Sale Operating Environment	POS_ENVIRONMENT	Character	No
Secure Acceptance Signature Key	ACCT_SIG_KEY	Character	Yes
Shared Secret Key for Card Security Code	ACCT_MICROFORM_SHARED_SEC_KEY	Character	Yes

- Tokenization Payment System Settings: Enter the following values:

  - **Client Identifier**: <SnapPay Account Id>

  - **Credit Card Token Request Format:** Fiserv SnapPay Card Tokenization Request

  - **Credit Card Token Request Response Format:** Fiserv SnapPay Card Tokenization Request Response

  - Credit Card Transaction Query Request Format: Fiserv SnapPay Transaction Query Request

  - Credit Card Transaction Query Response Format: Fiserv SnapPay Transaction Query Response

  - Digital Signature Algorithm: HMACSHA256

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- Merchant Account for Card Security Code and Transaction Query: <SnapPay Merchant ID>
- Secure Acceptance Signature Key: <SnapPay HMAC Key>
  - Add this field manually with the following values, if not found.
  - Name = Secure Acceptance Signature Key
  - Code = SIG_KEY
  - Data Type = VARCHAR2
  - Secured = Y
- **Token Creation Module:** CyberSource Secure Acceptance Web
- **Token Upgrade Module:** Tokenization Upgrade Disabled
- **Tokenization Payment URL:** Reach out to SnapPay support team.
- **Tokenization Servlet Base URL:** Same as Tokenization Payment URL.
- **Tokenization Upgrade URL:** Same as Tokenization Payment URL.
- **User Identifier:** <SnapPay Account Id>
- **User Password:** <SnapPay Account password>
- **Credit Card Transaction Query Transmission Configuration:** Transmission Configuration created in the Transmission Configurations section.
- **Payment Session Required:** No (Ignore if not present in the options, default is N.)
- **OAuth Required**: No (Ignore if not present in the options, default is N.)

4. Click **Save and Add Accounts**.

5. **Payment System Account Creation**: Create a payment system account and enter the appropriate values for the following fields on the Edit Payment System Accounts page.
   - Business Unit
   - Client Identifier: <SnapPay Account Id>
   - Merchant Identifier: <SnapPay Merchant ID>
   - Secure Acceptance Signature Key: <SnapPay HMAC Key>. Reach out to SnapPay support team for this key.
   - Token Creation Currency: Currency
   - User Identifier: <SnapPay Account Id>
   - User Password: <SnapPay Account password>

Note: Please ensure that one business unit doesn't have more than one payment system account under a particular payment system.

6. Click **Save and Close**.

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Funds Capture Process Profile

An FCPP (Fiserv SnapPay Version 2021 Profile) is predefined for Fiserv SnapPay.

1. Click **Navigator** > **My Enterprise** > **Setup and Maintenance**.

2. In the Setup and Maintenance work area, go to the **Manage Funds Capture Process Profiles** task:

   - Offering: Financials

   - Functional Area: Customer Payments

   - Task: Manage Funds Capture Process Profile

3. Search by name for **Fiserv SnapPay Version 2021 Profile** as shown.

4. Click **Fiserv SnapPay Version 2021 Profile link** from the search results to navigate to **Edit Funds Capture Process Profile** page.

   a. Ensure that the following fields and the corresponding values are present. Refer to the screenshot following the steps.

      - Processing Type: Credit Card

      - Payment System: Fiserv SnapPay

   b. Ensure that the following values are configured in the **Formats** section. Refer to the screenshot following the steps.

      - Authorization configuration:

         - Outbound Format: Fiserv SnapPay Transaction Request

         - Inbound Response: Fiserv SnapPay Transaction Response

      - Settlement Configuration:

         - Outbound Format: Fiserv SnapPay Transaction Request

         - Inbound Response: Fiserv SnapPay Transaction Response

      - Settlement Response Processing configuration:

         - Outbound Format: NA (This is required only for Bank Account settlements.)

         - Inbound Response Format: NA (This is required only for Bank Account settlements.)

      - Notification to Payer configuration:

         - Format: Receipt of Payment Notification format

         - Delivery Method: Email

         - Select the **Override payer delivery method preference** check box.

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c. Ensure that the following values are configured in the **Accounts** section. Refer to the following screenshot.

- Payment System Account: Payment system account(s) created for Fiserv SnapPay would be displayed here.

- **Configuration Profile**: Specify a name for the configuration profile.

- **Transmission Configuration for Authorization**: Select the SnapPay COF Transmission Configuration created earlier in the section **Transmission Configurations**.

- **Transmission Configuration for Settlement**: Select the SnapPay COF Transmission Configuration created earlier in the section **Transmission Configurations**.

- **Transmission Configuration for Acknowledgement**: NA

5. Click **Save and Close**.

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Internal Payee Setup

The process of associating the payment system account to an internal payee is described here.

1. Click **Navigator** > **My Enterprise** > **Setup and Maintenance**.

2. In the Setup and Maintenance work area, go to the **Manage System Security Options** task.

    *   Offering: Financials

    *   Functional Area: Customer Payments

    *   Task: Manage System Security Options

3. Click on the **Create** icon to create a new payee as shown.

    a. Enter the Payee details.

    b. Select **Credit card** check box under Configured Processing Types section.

4. Associate the payment system, the payment system account, and the business unit with the payee.

    Note: A business unit can only be assigned to one payee.

5. Click **Save and Close**.

Payee Routing Rule Setup

This is an optional setup required only in case of multiple business units, Fiserv SnapPay accounts, and so on, to ensure that payments are routed to the correct Fiserv SnapPay merchant ID (MID) and profile. For a simple setup with just one business unit, one Fiserv SnapPay MID and profile, no routing is required. To create a routing rule, select the payee and click **Manage Routing Rule**.

The Manage Routing Rules page has default routing rules which apply when no routing rule is specified, or when none of the routing rule conditions were met.

On the same page, you can also define the routing rules with specific conditions and routing rules.

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To create a routing rule, follow these steps:

1. Select **Credit Card** as **Payment Method** and then click **Create**.

2. Enter the following details to create a routing rule that sends any payment with amount between $501–$1000 to Fiserv SnapPay '**snappay**' MID/payment system account.

3. You can see the following attributes in the Criterion drop-down list to create the routing rule condition

Note: Not all attributes are applicable to Credit Card payment method.

4. Click **Save and Close**.

Enable Tokenization in System Security Options

To secure your credit card data, complete these steps:

Verify Tokenization Status and Wallet File Setup

1. In the Setup and Maintenance work area, go to the Manage System Security Options task.

   - Offering: Financials

   - Functional Area: Customer Payments

   - Task: Manage System Security Options

2. Check if **Apply Quick Defaults** button is enabled.
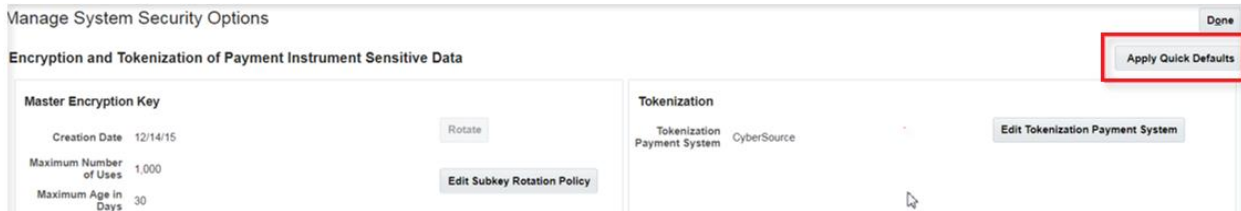
3. Click the button if it's enabled. Select all the three check boxes. The first check box is required for the tokenization process. The second and third check boxes (for encrypting credit card data and bank account data, respectively) are recommended as a best practice for securing credit card and bank account data.

Note: The wallet is an Oracle Applications program module that protects stored data in an encrypted format.
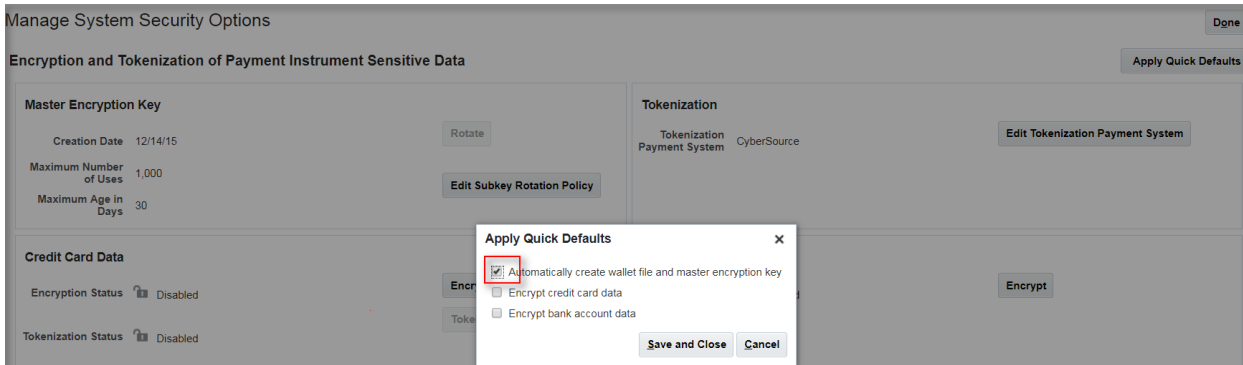
4. Click **Save and Close**.

5. Verify the existing Tokenization Status for the Credit Card data. If the status is either **Tokenized** or **Tokenization in Progress**, it means that the tokenization setup is already done. If the status is **Disabled**, then proceed to the next step, **Enable Tokenization**.

Enable Tokenization

1. If **Tokenization Status** is **Disabled**, then click on **Edit Tokenization Payment System**. Select **Fiserv SnapPay** from drop-down and save.

2. **Credit Card Data**: If the status is **Enabled**, then skip this step. If the status is **Disabled**, click **Tokenize** to activate Tokenization. Verify that the **Tokenization Status** is either **Tokenized** or **Tokenization in Progress.**

3. **Bank Account Data**: If the status is **Enabled**, then skip this step. If the status is **Disabled**, then click **Encrypt** to trigger the process. Verify that the **Encryption Status** is **Enabled**.
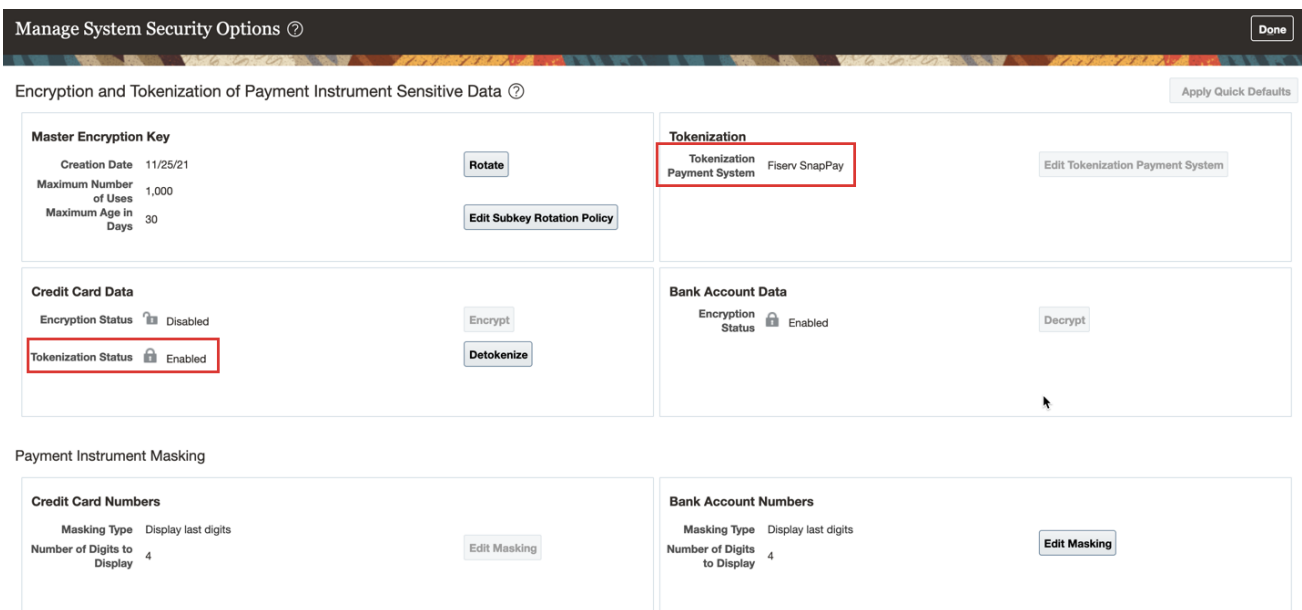
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