Chapter 5, Contract Accounts Receivable and Payable, explores how to set up and use Contract Accounts Receivable and Payable (FI-CA), along with key concepts like account determination, open item management, account balance display, and integration with the general ledger, as well as some of the standard out-of-the-box reporting capabilities and relevant transaction codes for FI-CA.
Chapter 5
Contract Accounts Receivable and Payable

This chapter explains how to set up and use Contract Accounts Receivable and Payable (FI-CA). It provides a brief overview of master data and transactional data, some key concepts like account determination, open item management, account balance display, and integration with FI-GL, as well as some of the standard out-of-the-box reporting capabilities and relevant transaction codes for FI-CA.

Contract Accounts Receivable and Payable (FI-CA) enables subledger accounting for receivables and payables, typically in industries that require processing of huge volumes of business transactions and business partners. It also enables necessary capabilities to manage accounts receivable and payable (e.g., open item management and account balance display) along with capabilities like dunning and interest calculation. Figure 5.1 shows some of the relevant industry applications for the FI-CA solution.

Figure 5.1 Relevant Industry Applications for FI-CA
This chapter describes the relevant master data for posting documents (e.g., business partners, contract accounts, and general ledger accounts) and then shows how to configure and use FI-CA with step-by-step instructions. The chapter concludes with a description of core FI-CA reporting and analytics capabilities.

SAP Convergent Invoicing, which we discussed in Chapter 4, is a submodule of FI-CA. All the necessary master data attributes that SAP Convergent Invoicing uses for transaction processing is primarily defined in FI-CA. Let’s take a look at the following key functionalities carried out in each of the modules within the SAP BRIM solution:

- **Non-SAP system**
  Captures network data usages and sends payload

- **SAP Convergent Mediation by DigitalRoute**
  Transforms raw consumption data into SAP Convergent Charging–readable CSV file

- **SAP Convergent Charging**
  Performs rating and charging on the usage items and creates billable items in SAP Convergent Invoicing

- **SAP Convergent Invoicing**
  Stores rated usage items and performs billing and invoicing

- **Contract Accounts Receivable and Payable**
  Posts receivables from invoicing, process payments, collections, dunning, and more

### Contract Accounts Receivable and Payable

As a quick refresher of our example case study, Martex Corp., a company that distributes cloud products, has transformed itself into a company that distributes cloud products with infrastructure-as-a-service (IaaS) and software-as-a-service (SaaS) offerings. With its new strategy, it obtains products from multiple vendors and sells them to its customers on behalf of those vendors. Each of the products are sold in different types of offerings, such as recurring, usage consumption, one-off, and pay per use. There are two use cases, which were explained in Chapter 1, related to SaaS combo charges and SaaS prorated charges. In this chapter, we will work through the setup and concepts primarily related to account determination, open item management, and account balance display.

The steps of the consume-to-cash process are as follows:

1. **Capture of consumption data**
   The usage of a service is captured in a non-SAP system. The usage is the consumption of the service provided by the service provider. The consumption data records details like the time of usage, quantity consumed, and master data of the customer for which consumption is tracked. This consumption data is in a raw format and needs to be formatted before rating can be performed on it.

2. **Transformation of consumption data**
   The consumption data recorded outside of SAP needs to be transformed into an SAP format before it can be used for the rating process. SAP provides SAP Convergent Mediation by DigitalRoute to transform the raw data captured in the non-SAP system and transform it into a format that can be fed into SAP Convergent Charging.

3. **Rating and charging**
   The consumption data record transformed by SAP Convergent Mediation by DigitalRoute is fed into SAP Convergent Charging for the rating and charging process. The rating and charging process calculates the amount of the consumed quantity based on the pricing rules maintained in the SAP Convergent Charging system. The calculated amount is then associated with the business partner account that has consumed the service in the charging process. The rated and charged consumption items, which are known as billable items, are sent to the SAP Convergent Invoicing system for the billing and invoicing process.

4. **Billing and invoicing**
   The billable items received from SAP Convergent Charging act as an input to the billing process. The billing process groups and aggregates the billable items and creates the billing documents, which are used as an input to the invoicing process. The invoicing process groups and aggregates the billing documents and creates the invoicing document that is sent to the customer.

5. **receivables management**
   The invoicing process creates a posting document for the receivables posting in FI-CA. The posting document posts the accounting entries to the customer account, against which payment is received from the customer.

As described in Chapter 4, the receivables created by the invoicing process finally get posted in FI-CA as a subledger posting. The payment is later realized in FI-CA, and the customer open items and the account balance is managed. The general ledger postings are transferred to financials as a result of general ledger integration from FI-CA.
5.1 Master Data

In this section, we will look at the master data elements in FI-CA relevant to the Material case study established in Chapter 1. The master data elements will be required to create and process transactions using FI-CA. We will discuss business partners, business agreements, products, contract accounts, provider contracts, and partner agreements.

The following master data objects will be explained in detail in this chapter:

- Business partner
- Contract account
- Provider contract
- Partner agreement

The following master data objects have been explained in detail in other chapters, so in this chapter we will only call out their significance for transaction postings from a FI-CA perspective:

- Business agreement (SAP BRIM, subscription order management)
- Product (SAP BRIM, subscription order management)

5.1.1 Business Partner

This section will explain the concept of the business partner master data object from a FI-CA perspective. We will go through the configuration set up for the business partner in FI-CA and discuss why we need a business partner object as a prerequisite for account determination, open item management, and account balance display.

In this chapter, we will be referencing a customer or a vendor in FI-CA as a business partner. A business partner can be an organization, a person, or a group of persons or organizations that have a business relationship with a company.

A business partner can also be extended to various partner roles (e.g., general business partner, contract partner, customer, or vendor).

Figure 5.3 shows the business partner view in FI-CA under the business partner general role.
Use Transaction BP to view a business partner in FI-CA.

Next, let’s extend the business partner to the contract partner role to ensure that a corresponding contract account is created for the business partner.

Figure 5.4 shows some of the business partner roles in the Display in BP Role drop-down that the business partner can be extended to, including the Business Partner (Gen.) (general business partner) and Contract Partner roles, which are particularly relevant for our case study.

The general business partner role enables maintenance of business partner general data such as name, address, and payment data (bank details, payment card information, etc.). In FI-CA, it is necessary to create a business partner and a contract account to be able to record a transaction in the system.

We will walk through the key integration points and setup needed to create a business partner in FI-CA. Similar set up is also needed in SAP CRM to enable business partner setup and replication to FI-CA.

Figure 5.5 shows the master data flow across SAP systems.

Now let’s configure a business partner. To configure a business partner in SAP ERP or SAP S/4HANA, navigate to SAP Customizing Implementation Guide • Cross Application Components • SAP Business Partner • Activation Status for Functions.
Several standard business partner roles are delivered by the application, and each role determines the functions that can be carried out with the business partner. The business partner is the highest level, equivalent to a customer in accounts receivable. The contract account is the next level. A contract account cannot be created without a corresponding business partner.

To create a contract account for a business partner, the prerequisite is to extend the business partner to an MKK contract partner role. To create the contract partner role, navigate to SAP Customizing Implementation Guide • Cross Application Components • SAP Business Partner • Business Partner • Basic Settings • Business Partner Roles • Define BP Roles. Then, click New Entries and create the MKK role. Once the MKK role has been created and saved, the new entry is visible under the list of business partner roles, as shown in Figure 5.7.

![Figure 5.7 MKK Role for Contract Partner Created as New Business Partner Role](image)

Now, let’s assign the business transactions, such as Business Partner Usage (BPUS) and Change Business Partner (CHAN), functions needed for the MKK role. Click New Entries as shown in Figure 5.8, then assign BPUS and CHAN as shown in Figure 5.9.

![Figure 5.8 Business Partner Role Category to Business Transaction Assignment](image)

What we have seen thus far, is creation of the MKK ‘Contract Partner’ Role relevant for Contract Accounts Receivable and Payable as shown in Figure 5.10.

![Figure 5.10 Business Transactions Assigned to MKK Contract Partner Business Partner Role](image)

### 5.1.2 Business Agreement

A business agreement is a master data object that is the equivalent of a contract account in FI-CA. One business partner can have several business agreements associated with it. Business agreements house data that controls processes in billing and invoicing in SAP Convergent Invoicing, payments, correspondences, and tax calculations.
A business agreement created in SAP BRIM, subscription order management is replicated to FI-CA as a contract account with SAP-standard replications.

Navigate to the following SAP Customizing Implementation Guide menu path Financial Accounting • Contract Accounts Receivable and Payable • Integration • Customer Relationship Management • Business Agreement • Determine Template for Contract Account for Replication. Next, as shown in Figure 5.11, enter a reference contract account, which will be used as a template when a business agreement is replicated as a contract account in FI-CA. All the attributes available in the template will be copied over to the new contract account.

A business partner and business agreement are required to be able to create a provider order in SAP BRIM, subscription order management. For more information about business agreements, see Chapter 2, Section 2.1.2.

With SAP S/4HANA release 1809 release, SAP has moved SAP BRIM, subscription order management to customer management within the SAP S/4HANA system.

Figure 5.11 FI-CA Integration with SAP CRM for Business Agreement Replication

5.1.3 Product

A product is another component necessary to create a provider order. The product can either be a tangible product defined within materials management that contains all the relevant information required for purchasing, sales, accounting, and so on, or a subscription product defined within FI-CA as a FI-CA product that contains a lean product structure required for subscription processing (as explained in Chapter 4, Section 4.1.2). As illustrated in Figure 5.12, the FI-CA subscription product is a lean structure containing the description of the product and the sales area data. Once created in SAP BRIM, subscription order management, the product will be replicated to FI-CA.

Use Transaction FPPRD3 to view the FI-CA product in FI-CA.

Figure 5.12 FI-CA Product in Contract Accounts Receivable and Payable

The next step is to define the type of product to be used for a provider contract.

5.1.4 Contract Account

A contract account is an essential master data object in FI-CA that stores payment/tax, dunning/correspondence, and SAP Convergent Invoicing attributes that will be applicable for the contract items created for the contract account. It is a mandatory object required to create billable items in SAP Convergent Invoicing. The billable items are created for a business partner and contract account combination. A contract account will be extended to a company code, and all the attributes stored in the contract account will be at the company code level.

Figure 5.13 illustrates the relationship between a business partner and a contract account. As shown, the business partner is extended to one or more sales organizations. A contract account is extended to a company code. A 1:N relationship exists between a business partner and a contract account.

For Martex Corp., a business partner and contract account will need to be created to create billable items for the business partner and contract account combination.
A contract account category categorizes contract accounts that require similar controls or reporting for a specific business. Now that you understand what a contract account is and its relationship with the business partner, let’s configure the number ranges and the contract account categories.

First, navigate to menu path SAP Customizing Implementation Guide • Financial Accounting • Contract Accounts Receivable and Payable • Basic Functions • Contract Accounts • Number Ranges and Contract Account Categories • Define Number Ranges. Here you can define the number ranges for the contract account, as shown in Figure 5.14.

Next, navigate to menu path SAP Customizing Implementation Guide • Financial Accounting • Contract Accounts Receivable and Payable • Basic Functions • Contract Accounts • Number Ranges and Contract Account Categories • Define Number Ranges. Here you can define the number ranges for the contract account, as shown in Figure 5.14.

Contract account relationships are required to determine the relationship that the business partner holds with the contract account. If there are multiple business partners for a contract account, the account relationship differentiates the relations that each business partner holds for a contract account.

Navigate to menu path SAP Customizing Implementation Guide • Financial Accounting • Contract Accounts Receivable and Payable • Basic Functions • Contract Accounts • Contract Account Relationships • Define Contract Account/Business Partner Relationships. Here, assign Account Holder as the account relationship (Acct Rel.).

As shown in Figure 5.16, the account relationship is defined to determine the relation between the business partner and the contract account.

Now, navigate to SAP Customizing Implementation Guide • Financial Accounting • Contract Accounts Receivable and Payable • Basic Functions • Contract Accounts • Define Account Determination Characteristics. Here you can configure the account determination ID, a key characteristic that will be used in subsequent configurations to automatically determine the general ledger accounts for posting a document in FI-CA (see Figure 5.17).
The business agreement 120000000300 created in SAP BRIM, subscription order management for the Martex Corp. case study has been replicated as a contract account. The tabs for the contract account are as follows:

- **General Data**
  As shown in Figure 5.18, the General Data tab contains some key information, such as contract account name, account reference from legacy, account relationship with the business partner, tolerance group, account determination ID, payment terms, and so on.
  The values updated in this object will be common for all the billable items created for this contract account.

- **Payments/Taxes**
  As shown in Figure 5.19, the Payments/Taxes tab contains some key information related to the group: standard company code information, incoming and outgoing payment methods, and more.
Dunning/Correspondence
As shown in Figure 5.20, the Dunning/Correspondence tab contains key information such as alternative dunning recipient, dunning procedure, dunning lock, correspondence controls, and so on. We will not be using this tab for the Martex case study.

Convergent invoicing
As shown in Figure 5.21, the Convergent invoicing tab contains some of the key billing/invoicing attributes that will be used to determine the selection criteria for the accounts for billing/invoicing, as well as for determination of the billing cycles for the periodic bills.

The business agreement created in SAP BRIM, subscription order management is replicated in FI-CA as a contract account. This is defined in FI-CA as part of FI-CA integration with SAP CRM. See Section 5.1.2 for FI-CA integration with SAP CRM in order to replicate the business agreement as a contract account in FI-CA.
5.1.5 Provider Contract

A provider contract is the contractual agreement between the business partner and the provider offering the contract. The provider contract contains a header section to capture general data such as name, business partner, and contract header validity dates. It also contains an item section in which some key item level details are captured, such as item text; contract account; master agreement (see Chapter 2, Section 2.1.4); organizational data determining which sales organization, distribution channel, and division combination the contract belongs to; product information; and billing cycle and discount information. There can be multiple provider contracts created for a business partner and contract account combination.

Figure 5.22 illustrates the relationship between the business partner, contract account, and provider contract. As seen above, the provider contract is a lower-level item that represents the contract. A provider contract can also contain multiple items pertaining to different contract accounts.

The configuration for provider contract setup in FI-CA is found under Contract Account Receivables & Payable • Basic Functions • Provider Contract • Activate Provider Contract.

Now let’s define the central settings for the provider contract, as shown in Figure 5.23.

![Figure 5.23 Defining Provider Contract in FI-CA](image-url)

In addition to this setup, it is necessary to define identification types for the provider contract. For the Martex example, a customer ID has been defined to uniquely identify the provider contract in FI-CA.

The configuration to define types of IDs for the provider contract setup in FI-CA is found under Contract Account Receivables & Payables • Basic Functions • Provider Contract • Define the Type of ID.
As shown in Figure 5.24, Customer ID CN has been configured as a unique identifier for the contract. A contract created for a customer will have a unique identifier (e.g., a mobile number).

Figure 5.24 Type of Identification for Provider Contract

Once the type of identification has been configured, select the Relevant for Partner checkbox. This will ensure that the corresponding partner agreement (for any partner payouts) is looked up automatically with reference to this unique ID.

As explained in Section 5.1.3, the subscription product is defined as a FI-CA product, which is assigned to the provider contract in FI-CA. Now, as shown in Figure 5.25, define the type of product assigned to the provider contract. The FI-CA product is a lean product structure that contains the product description and sales area data. The menu path to maintain the central settings for a product is SAP Customizing Implementation Guide • Financial Accounting • Contract Accounts Receivable and Payable • Basic Functions • Provider Contract • Make Central Settings for Products.

Figure 5.25 Product Storage Definition Indicating Product Used for Provider Contract Is FI-CA Product

The setup explained above was focused on the key configuration elements required to create and replicate a provider contract in FI-CA.

Now, use Transaction FP_VT3 to view the provider contract in FI-CA, which has been created for the Martex example case study. Figure 5.26 shows the details of the general data stored in the provider contract. This represents the header section of the contract. Here you see key attributes like Contract Start Date, Contract End Date, and Company Code.

Figure 5.26 Provider Contract in FI-CA: General Data

Figure 5.27 and Figure 5.28 show the contract item view of the provider contract. The item-level details—Valid From, Valid To, Contract Account, Sales Organization Data, Company Code, and Product—are stored in this section.
5.1 Master Data

As shown in Figure 5.29, the **Customer ID** configured to uniquely identify the contract, CN, is stored in this section of the provider contract.

Billable items created for the provider contract inherit the attributes stored in the provider contract. For example, the billing cycle stored in the provider contract will be used to determine the billing date for the billable item. If the billing cycle is not stored in the provider contract, the billing cycle at the contract account level will be picked up for processing. The values for the attributes maintained at the provider contract level precede the values maintained for the attributes at the contract account level.

5.1.6 Partner Agreement

A partner agreement is the contractual agreement between the business partner and the provider offering the contract. The partner agreement contains a header section to capture general data such as name, business partner, and contract header validity dates. It also contains an item section in which some key item-level details are captured, such as item text; contract account; master agreement (see Chapter 2, Section 2.1.4); organizational data determining which sales organization, distribution channel, and division combination the contract belongs to; product information; and billing cycle and discount information. There can be multiple provider contracts created for a business partner and contract account combination.
Now use Transaction FP_PV3 to view the partner agreement object in FI-CA. Figure 5.30 illustrates the partner agreement object in FI-CA representing the vendor agreement.

![Partner Agreement in FI-CA: General Data](image)

**Figure 5.30** Partner Agreement in FI-CA: General Data

This object has been replicated in FI-CA from SAP BRIM, subscription order management. The **General Data** tab contains some key attributes like the business partner (representing a vendor, Loren Systems), contract start date, contract end date, and company code.

Figure 5.31 shows the contract item view of the partner agreement. Note the key fields like **Valid From**, **Valid To**, **Contract Account**, and **Partner Settlement Rule** that are stored in this section.

![Partner Agreement in FI-CA: Contract Item: Overview](image)

**Figure 5.31** Partner Agreement in FI-CA: Contract Item: Overview

Chapter 4, Section 4.2.6 explains the partner settlement setup and the partner settlement rule definition in detail. The partner settlement rule is referenced in the partner agreement.

Figure 5.32 shows customer ID CN, which is referenced in the partner agreement.

![Partner Agreement in FI-CA (Assigned IDs)](image)

**Figure 5.32** Partner Agreement in FI-CA (Assigned IDs)
As explained in Chapter 4, Section 4.2.6, this ID will be referenced in the revenue billable item, based on which the partner agreement will automatically be determined for any given transaction relevant for partner payouts.

5.2 Configuring Contracts Accounts Receivable and Payable

In this section, we will continue to look at some of key configuration elements for posting a document, viewing the account balance display, and open item management in FI-CA. We will explain key concepts like main transactions and subtransactions, needed to determine accounts for posting a FI-CA document. Figure 5.33 shows how the general ledger account for receivables and revenue and expense is derived based on the combination of key transaction attributes like company code, division, account determination, main transaction, and subtransaction.

5.2.1 Account Determination

In this section, we will explain basic concepts like the account determination ID, main transactions, and subtransactions related to FI-CA document postings and will configure the same in FI-CA. The account determination ID helps automatically determine the general ledger account for a business transaction. See Section 5.1.4 for more details on account determination ID setup. When an invoicing document in SAP Convergent Invoicing is posted, a financial posting can be automatically enabled in FI-CA. The subledger posting and a general ledger posting is possible with a combination of company code, account determination, division, and main and subtransactions.

Main Transaction

The main transaction is a key element used to determine the receivables and payables account, along with a combination of other document posting characteristics, as shown in Figure 5.33. Each main transaction has a description associated with the definition, which is printed on the customer’s invoice.

The configuration setup for main transactions is found under Contract Account Receivables & Payables • Basic Functions • Postings and Documents • Document • Maintain Document Assignments • Maintain Main Transaction. Now, create a main transaction as shown in Figure 5.34. This will be the main transaction used to determine the account assignment for the Martex example case study.

Subtransactions

The subtransactions are key elements used to determine the revenue and expense accounts, along with a combination of other document posting characteristics, as shown in Figure 5.33. See Section 5.2.5 for further details. Subtransactions also control the following:

- Tax determination
- Debit/credit posting for a transaction
- Additional account assignments (company account assignment and business area)
The configuration setup for subtransactions is found under Contract Account Receivables & Payables • Basic Functions • Postings and Documents • Document • Maintain Document Assignments • Maintain Sub Transaction. Now, create a subtransaction as shown in Figure 5.35 to determine the account assignment for the Martex example.

5.2.2 Open Item Management

Every financial subledger posting as a result of a business transaction remains as an open item until it has been completely paid. An accounts receivable or accounts payable invoice posting to a contract account has to be paid and cleared to appear as a closed transaction. Similar to accounts receivable, FI-CA provides a capability for users to manage such open accounts receivable or accounts payable transactions.

Every open subledger posting can be tracked under the FI-CA subledger as an open item against which an incoming payment can be received or an outgoing payment can be posted. Various screen layouts can be configured to ensure that select fields relevant to the business process are available for display as part of an open item report. The report provides a view of open invoices as well as unapplied payments (if any), which aids accounts receivable in carrying out cash application.

Let's now look at some of the key steps involved in configuring open item management in FI-CA. To start, navigate to menu path Contract Account Receivables & Payables • Basic Functions • Open Item Management • Define Line Layout Variants for Open Item Processing.

Next, configure a line layout YN1 with the variant fields as shown in Figure 5.36. Some of the fields configured are GPART (Business Partner), VKONT (Contract Account), OBPEL (Document Number), FAEDN (Net Due Date), and TXTU1 (Text). You can choose any field available in the FI-CA open item management table FKKCLIT as required.

Figure 5.36 Line Layout Variants for Open Item Processing

Next, use Transaction FP06 (Account Maintenance: Process Open Items) to view the layout you have defined. As shown in Figure 5.37, enter the business partner ID, then press Enter.

Figure 5.37 Open Item Management: Transaction FP06, Account Maintenance: Process Open Items
As shown in Figure 5.38, the fields visible are as configured in the line layout variants for open item management.

Appropriate tolerance groups can also be defined if needed to accept any minor payment differences. The tolerance group is primarily defined in FI-AR and can be invoked as a configuration item within FI-CA.

The configuration setup for open item management is found under Contract Account Receivables & Payables • Basic Functions • Open Item Management • Maintain Tolerance Groups. The next step is to configure the tolerance group as shown in Figure 5.39.

Once the tolerance group has been defined, next step is to determine the dollar or percentage of tolerance allowed, which in this case has been set to zero (Zero Tolerance) as shown in Figure 5.40.

5.2.3 Account Balance Display

The account balance display provides a detailed view of the account transactional information, including any open, cleared, or statistical transactions for a business partner. The account balance can be viewed for a given business partner and contract account relation or for all the contract accounts for a business partner. The report also can be executed for a group of business partners. Various screen layouts can be configured to ensure that selection fields relevant to the business process are available for display as part of the report output.

The configuration setup for account balance display is found under Contract Account Receivables & Payables • Basic Functions • Account Balance Display • Define List Category. Now, create an account balance list type as the first step. As shown in Figure 5.41, create your own List Type (in this case, enter “ALLES” for all items) definition for the account balance.

Once the list type has been created, refer to Figure 5.42 to configure further selections to display Open Items, Cleared Items, and Nonstatistical Items. The list type will need to be selected on the account balance display screen to execute the report.
Once the account balance list type has been configured, the next step is to configure the line layout variants for the account balance display. Navigate to menu path  **Contract account receivables & Payables**  -  **Basic Functions**  -  **Account Balance Display**  -  **Define Line Layout Variants for Account Balance**. Now configure the line layout as shown in Figure 5.43. FI-CA provides the capability of defining your own line layout for the account balance display. This configuration screen contains two main sections. Enter the header of the layout with the desired spacing in the  **Text**  section.

Next select the  **Fields of the Variant**  that need to be displayed on the account balance report. See Figure 5.43 for the field selections.

For further details on how to use the account balance display, Section 5.4.5.

**5.2.4 Payments and Returns**

Similar to accounts receivable, FI-CA also provides standard out-of-the-box capabilities to handle incoming payments to clear open accounts receivable and outgoing payments to clear open accounts payable invoices. FI-CA also supports the returns process in case of payment returns from the bank.
This section highlights the capabilities of incoming and outgoing payments that can be enabled within FI-CA, including payment lot, check lot, credit card lot, and more. Clarification account postings, which are a key feature of FI-CA, enables posting to a clarification account in case a corresponding open item or contract account is not determined automatically for payment posting.

This book does not dwell on the specifics of enabling incoming payments and clearing the open accounts receivable posted for our running example. Our primary focus is on the integration aspects of FI-CA within the SAP BRIM solution.

The automatic payment program within FI-CA enables payment postings and clearing of open accounts receivable and accounts payable transactions, in addition to creating a payment medium output with payment instructions to carry out bank transfers, check payments, and so on.

Electronic bank statement postings within FI-CA enable bank statement reconciliation and clearing of open accounts receivable postings in case of bank transfers. The bank statement setup includes integration aspects of the electronic bank statement setup between FI and FI-CA.

As of SAP S/4HANA 1909, FI-CA also provides a feature to receive and automate payment clearing by receiving bank files that contain a customer’s check information.

5.2.5 Integration with SAP Convergent Charging

Replication of business partners (as external accounts in SAP Convergent Charging) and contract accounts (as subscriber accounts in SAP Convergent Charging) is enabled via integration between FI-CA and SAP Convergent Charging. Similarly, provider contracts are also replicated from SAP BRIM, subscription order management to SAP Convergent Invoicing/FI-CA and then to SAP Convergent Charging.

Some of the key integration aspects of contract accounts receivable and payable with SAP Convergent Charging are as follows:

■ Activate joint replication of all master data

This option ensures that the business partner, contract account and provider contract is replicated from FI-CA to SAP Convergent Charging at the same time. The business partner is created first, followed by the contract account, and finally the provider contract. If this option is selected, the business partner and the contract account remain in FI-CA and are not replicated to SAP Convergent Charging until the provider contract is created in FI-CA.

Navigate to menu path Contract Accounts Receivable and Payable • Integration • Convergent Charging • Activate Joint Replication of All Master Data. Select the Joint Replication of All Master Data to SAP CC checkbox, as shown in Figure 5.44.

![Figure 5.44 FI-CA Integration with SAP Convergent Charging: Joint Replication of Master Data](image)

- Make specifications for connecting multiple FI-CA systems to an SAP Convergent Charging system

It is possible to connect multiple FI-CA systems to an SAP Convergent Charging System. This a feature provided by SAP BRIM. We are not using this feature for our example case study, so we will not be activating it.

- Specifications for connecting multiple SAP CC systems to a FI-CA system

It is also possible to connect multiple SAP Convergent Charging systems to a FI-CA system. We are not using this feature for our example case study, so we will not be activating it.

Master data replication between SAP BRIM, subscription order management, SAP Convergent Charging, and SAP Convergent Invoicing can be seen in Figure 5.45.

In addition to this integration setup, SOAMANAGER settings are needed to enable replication of data and transactions between SAP BRIM, subscription order management, SAP Convergent Charging, and SAP Convergent Invoicing. As discussed in Chapter 3, SAP Convergent Charging is a Java-based application, and web service settings are required for SAP BRIM, subscription order management and SAP Convergent Invoicing to communicate with SAP Convergent Charging.
5.2.6 Integration with General Ledger

This section explains the capability of transferring general ledger summary records from FI-CA to general ledger. All of the financial documents posted in FI-CA are eventually transferred to general ledger for reporting.

Let’s discuss the reconciliation key (as in Figure 5.46). It’s a key that stores a summary of all the line items resulting from the FI-CA posting. This key is stored in the Document Headers section of the documents transferred. The reconciliation key is used to reconcile the FI-CA document postings with the corresponding general ledger postings. The reconciliation key can be determined automatically by background system batch runs, as well as manually during any foreground execution of a transaction.

Reconciliation key statuses are described in Table 5.1.

Table 5.1 Reconciliation Key Status

<table>
<thead>
<tr>
<th>Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Created/open</td>
<td>Postings can be made under the key</td>
</tr>
<tr>
<td>Closed</td>
<td>No further postings can be made under the key and key is ready for transfer</td>
</tr>
<tr>
<td>Transferred</td>
<td>Indicates whether the key is transferred to general ledger and profitability analysis</td>
</tr>
</tbody>
</table>

Now that you have learned about the reconciliation key, let’s use Transaction FPF3 to display the reconciliation key in FI-CA (as in Figure 5.47).

Click on Totals Records to view all of the documents tied to the reconciliation key that are related to the general ledger account. As shown in Figure 5.48, a detailed list of multiple records tied to the reconciliation key is displayed.
Double-click a line item to view the documents tied to that line item. As shown in Figure 5.49, here you can view the document itemization of the posting totals.

The reconciliation key holds information about all the postings done on the general ledger accounts. Once closed and transferred to FI, it updates the general ledger accounts.
Reconciliation keys for most of the mass processes are closed automatically as soon as the job is completed, but certain processes in which individual postings are done require closing reconciliation keys manually. A reconciliation key can be closed via Transaction FPG4 (as in Figure 5.51).

The closed reconciliation keys are then transferred using the Transaction FPG1M for mass transfer (as in Figure 5.52).

As of SAP S/4HANA 1909, manually posted and reversed FI-CA documents can be updated directly to the general ledger.

5.3 Using Contract Accounts Receivable and Payable

This section explains how to use key transaction codes in FI-CA, including creating a business partner or contract account, viewing or editing a document, viewing the customer’s balance, and using open item management. After learning to configure account determination, account balance display, and open item management in the previous sections, it is now time to run a few transaction codes and view the output.

5.3.1 Creating a Business Partner

The business partner can be created directly in SAP BRIM, subscription order management and replicated to FI-CA or directly created in FI-CA. For our example, the business partner is created in SAP BRIM, subscription order management and replicated to FI-CA and to SAP Convergent Charging.

The main definition of a business partner within the SAP ERP or SAP S/4HANA system resides at menu path SAP Customizing Implementation Guide – Cross-Application Components – SAP Business Partner. The definition of business partner roles, number ranges, business partner types, and so on is performed in this node.

In this section, we’ll focus on the master data elements needed for the case study. Business partner 1100000356 (McFarland Systems) has been created for the Martex Corp. example.

First, use Transaction BP to view business partner 1100000356. As shown in Figure 5.53, enter the Business Partner number and click Start. This will return the business partner replicated in FI-CA from SAP BRIM, subscription order management.
Next, double-click the business partner. As shown in Figure 5.54, the **General Data** view of the business partner contains key attributes such as the name, search term, and address information of the customer.

![Figure 5.54 Business Partner: General Data View](image)

Now, click the **Where-Used List** tab for the business partner, as shown in Figure 5.55. You will be able to see the references of the contract accounts and the provider contracts created for the business partner. Double-clicking any of the references will take you to the related screen; for example, double-clicking **Contract Account** will lead you to the contract account screen. This feature is very useful for navigating from one screen to another and is very prevalent across all FI-CA screens.

![Figure 5.55 Business Partner: Where-Used List](image)

To create a business partner directly in FI-CA, use Transaction BP. The business partner will need to be extended to the MKK contract partner role to create a corresponding contract account.

### 5.3.2 Creating a Contract Account

A contract account holds the transactional data for the business partner. All FI-CA document postings done for a business partner, whether payments, receivables, or interest, are recorded under the contract account. The contract account master data contain various details associated with mode payments, dunning, account determination, and billing cycles. This info is available under various tabs on the contract account display screen.

The contract account can be created directly in SAP BRIM, subscription order management (as a business agreement linked to the business partner) and replicated to FI-CA or can be created directly in FI-CA and replicated to SAP Convergent Charging (as subscriber account).
The basic settings required for the creation of the contract account are described in detail in Chapter 4, Section 4.1.3.

The contract account can be directly created in FI-CA using Transaction CAA1, which can also be accessed via the SAP Easy Access menu: Accounting • Financial Accounting • Contract Account Receivables & Payables • Master Data • Contract Account (as in Figure 5.56).

![Figure 5.56 Contract Account Creation: Initial Screen](image)

The contract account can be created in reference to the existing contract account by providing the reference contract account on the creation screen. Certain details like contract account category, account relationship, tolerance group, clearing category, account determination ID, payment terms, and company code are mandatory values for creating a contract account.

Contract Account 110000000194 for McFarland Systems has been created for the Martex example.

Now let’s use Transaction CAA3 to view the contract account. It can also be accessed via the SAP Easy Access menu: Accounting • Financial Accounting • Contract Account Receivables & Payables • Master Data • Contract Account (as in Figure 5.57).

![Figure 5.57 Contract Account Display Screen](image)

5.3.3 Viewing or Editing a Posting Document

A posting document in FI-CA is an accounting document that gets posted during the invoicing process execution. The posting document contains both master data details of the customer, like business partner, contract account, and contract, and also the transaction data for the business transaction, like sale of service, tax data, and other payment-related details. FI-CA documents can originate directly within FI-CA via processes like interest calculation, dunning charges, installment plans, and payment lot postings.

The documents in FI-CA can be viewed using Transaction FPE3, which also can be accessed via the SAP Easy Access menu: Accounting • Financial Accounting • Contract Account Receivables & Payables • Master Data (as in Figure 5.58).

![Figure 5.58 Document Display Screen](image)

The screen provides the option to directly view the business partner items, general ledger items, and document header details. Upon execution, the header, summarized business partner items, and summarized general ledger items are displayed (as in Figure 5.59).
Certain posting document fields can be modified using the change document option available under the menu on the display screen (as in Figure 5.60).

A document can also be modified using Transaction FPE2, which can be accessed via the SAP Easy Access menu: Accounting • Financial Accounting • Contract Account Receivables & Payables • Document (as in Figure 5.61).

The fields that are made changeable via configuration are available to change in the change document screen.
Fields can be made changeable under the SPRO node at Contract Account Receivables & Payables - Basic Functions - Postings & Documents - Basic Settings - Define Authorizations for Field Changes (as seen in Figure 5.62).

For the created group, change authorization can be given to users.

5.3.4 Viewing a Customer’s Balance on Account

The customer’s account balance display provides a view of all the transactions or accounting entries posted to the customer’s account and even provides other details, like receivable item status (open, cleared, or overdue) or dunning level.

The customer account balance can be viewed in FI-CA using Transaction FPL9, which also can be accessed via the SAP Easy Access menu: Accounting - Financial Accounting - Contract Account Receivables & Payables - Account (as seen in Figure 5.63 and Figure 5.64).

The receivables and payment postings are displayed under the Receivables tab. The Down Payment tab contains the released security deposit payment or down payment items, the Totals tab shows the total amount, the Payment List tab shows only the payments posted on the account, and the Chronology tab displays the receivables and associated posted payments.
Further details of each posted document can be seen by double-clicking the document. The various columns shown in the account balance screen are controlled using the line item layout. The account balance display is described in detail in Section 5.2.3.

5.3.5 Using Open Item Management

This section explains the various FI-CA functionalities for managing the open items on the customer/vendor account. Functionalities like clearing, account maintenance, clearing control, and clearing restrictions are covered here.

Account Maintenance

Account maintenance is used to set off a credit balance with a debit balance present on a customer's account. This is key in scenarios in which there is a credit balance originating from a credit posting or the release of a security deposit and the credit amount needs to be adjusted with the monthly or the final invoice.

Account maintenance can be performed explicitly by manually executing the account maintenance transaction or in a mass batch job each day at the end of business hours, or it can be done implicitly during the process like clearing during payments or invoicing.

To execute manual account maintenance, use Transaction FP06, which also can be accessed through the SAP Easy Access menu:

Figure 5.65 Account Maintenance Screen

On the account maintenance screen, the selection parameters are entered to determine account for which account maintenance needs to be performed. On execution, the list of open items and payment or credit on an account is displayed. The following steps should performed for account maintenance:

1. Selection and activation
   The items that are to be set off are selected and activated. Upon activation, the items are marked for account maintenance. Under the processing status the difference becomes green if the difference amount is zero; otherwise it is red. If difference amount is not zero, then a debit balance amount is made equal to the credit item in the Gross Clearing field (as in Figure 5.66).

Figure 5.66 Selection and Activation of Account Items

2. Posting
   Selecting the Post option posts the clearing document, and the credit and debit items are set off (as in Figure 5.67).

   The account maintenance in the production system is done using a mass batch job. When account maintenance must be done on multiple accounts and in parallel, the mass run is executed. The mass run is executed to set off the credit balance on the customer’s account with the debit balance. Use Transaction FPMA for this task, which also can be accessed through the SAP Easy Access menu:

Accounting • Financial Accounting • Contract Account Receivables & Payables • Periodic Processing • For Contract Accounts.
The date ID and identification are entered, and the selection parameters are maintained, based on which the open credit and debit balances are picked up and cleared on execution, based on the clearing rules maintained for the automatic clearing.

There are certain configurations required to be maintained for the account maintenance for determination of the document type clearing reason while the transaction is executed for posting the clearing document. Posting area 1020 is maintained for these entries.

**Posting Area 1020**

Default settings associated with the account maintenance like document type, clearing reason, and whether a clearing proposal should be created during account maintenance are maintained in posting area 1020 (as in Figure 5.68).

SAP provides a set of standard clearing reasons for the type of process the clearing is originating from. Clearing reason 08 is used for the account maintenance performed using Transaction FP06 or manually.

**Reset Clearing**

A document can be cleared by the incoming payment, account maintenance, or during the invoicing process. When there is a need to separate the clearing document from the cleared item to either reverse the receivable item or to make the incoming payment a payment on account, in such scenarios the clearing document is reset. Resetting the clearing document makes the receivable document an open item again, and the payment document becomes the payment on account.
Transaction FP07 is used to perform the clearing reset and it can also be accessed through the SAP Easy Access menu: Accounting • Financial Accounting • Contract Account Receivables & Payables • Periodic Processing • For Contract Accounts • Documents (as in Figure 5.70).

Figure 5.70  Reset Clearing Screen

The clearing document that needs to be reset is entered in the Clearing Document field of the reset clearing screen.

Then the setting for the scope of the reset is selected. If a full reset of the clearing document is required, which makes the receivable item fully open (not partially cleared), the Whole Clearing option is selected.

Then the setting for the posting clearing amount is selected. To retain the original accounting entries of the receivable item, the Retain Distribution to Accounts option is selected. If the Create a New Option Item option is selected, the original receivable remains cleared and the new receivable is posted. In this scenario, the original receivable cannot be reversed.

On selecting the Post option, you reset the clearing and the payment, and the receivable item becomes open on the customer account.

On the reset clearing screen, parameters like document type and clearing reason are required for posting the reset clearing document.

Posting Area 1060

A clearing reason and document type for the reset clearing document are maintained in posting area 1060. These values are automatically populated on the reset clearing screen and are used for posting the reset clearing document (as in Figure 5.71).

Figure 5.71  Default Parameters for Reset Clearing

Posting Area 1090

While posting the reset clearing, if the Create New Open Items option is selected in the settings for the posting clearing amount, a new receivable item is created. The creation of a new receivable item requires the main and subtransactions for the posting. Posting area 1090 is used to assign the main and subtransactions for creation of new items during the reset clearing (as in Figure 5.72).

Figure 5.72  Main and Subtransactions Assignment to Clearing Reason for New Item Creation
Clearing Restrictions

Clearing restrictions are generally applied on the open items that should be ignored during the automatic clearing process. Based on business requirements, these restrictions can be removed and the account items can be considered for clearing.

Clearing restrictions can be created under the Contract Account Receivables & Payables - Basic Functions - Open Item Management - Define Modifiable Clearing Restrictions node (as in Figure 5.73).

The clearing restrictions applied on the documents can be removed manually using the change document functionality described in Section 5.3.3.

Clearing Control

This is a very important functionality when it comes to the clearing of the open items. Product or service provider companies have different rules or laws based on which the clearing of different kinds of receivables should be cleared.

Clearing control provides a set of configuration nodes in which you can set up rules for how the clearing of open items takes place. Different rules can be assigned to different payment originating processes, like payment lot, payment run, account maintenance, invoicing, and so on.

These rules guide the selection, grouping, and sorting of the open items for the payment or clearing to be applied.

The configuration for the clearing control is maintained under Contract Account Receivables & Payables - Basic Functions - Open Item Management - Clearing Control - Clearing Variants.

Clearing Variant

A clearing variant is created for different processes and the steps are maintained which are basically rules for selection, grouping and sorting for the clearing process. These variants are assigned to the standard processes.

The various steps involved in setting up clearing variants are as follows:

1. Defining grouping and sorting features

SAP provides a set of standard fields that can be used for grouping and sorting the open items. These fields are from the FKKOP structure. Standard function module FSC_SAMPLE_TFK116 can also be used to create a custom function module based on requirements for the grouping fields (as in Figure 5.74).
2. Defining a clearing variant and the clearing steps

A clearing variant is created that is specific to the processes through which the clearing process is executed, like account maintenance, invoicing, and incoming payments (as in Figure 5.75).

Clearing steps are created next for the clearing variants created. Clearing steps use the grouping and sorting fields defined for grouping the items and sorting them (as in Figure 5.76).

After the clearing variants are created and clearing steps are defined, the clearing variants are assigned to the clearing types. The clearing types are the processes through which clearing is triggered upon execution.

The assignment of the clearing variant to the clearing type is done under Contract Account Receivables & Payables - Basic Functions - Open Item Management - Clearing Control - Define Clearing Specifications for Clearing Types (as in Figure 5.77).

5.4 Reporting and Analytics

SAP provides several reporting options for the account postings performed in FI-CA. The reports provided are useful for extracting the details of the business partner/customer items based on their status—that is, whether items are cleared or open—using several parameters like dunning, document type, and so on. Reports can also be used to obtain the entries for the general ledger account postings in FI-CA. The reports obtained provide a view of the data and help in analysis. This section will cover several report options available in FI-CA.

5.4.1 FI-CA Items List: Open/All Items

SAP has provided Transaction FPO4 to obtain the details or a report of the receivable and payable items on an account. This report can be extracted based on the master data details and even the general ledger accounts.

These reports specifically can get the open items on a key date and extract the details of all items (as in Figure 5.78).
In the **Output Control** tab, the output of the report can be controlled and obtained on the desired format.

### 5.4.2 List of Open Items at Key Date

The FI-CA documents that are not cleared in the system by invoicing, account maintenance, reversal, or payments are called open items. Transaction FPO1P is used to obtain the list of open items on a key date.

This transaction can also be accessed through the SAP Easy Access menu: **Accounting • Financial Accounting • Contract Account Receivables & Payables • Periodic Processing • Closing Preparation** (as in Figure 5.79).

### 5.4.3 Reconciliation of Open Items and General Ledger

All FI-CA documents are posted under a reconciliation key. The reconciliation key at close of business hours for the day is then closed and transferred to SAP FI system. The reconciliation key transfer posts a finance document and updates the general ledger accounts with the accounting entries. To reconcile the accounting entries transferred to the Finance system and those that have yet to be transferred, SAP has provided a report. Transaction FPO2 is used for an individual run to obtain the details of the amounts present in the general ledger accounts, the amount under the reconciliation key, and the total amount of open items (as in Figure 5.80). The report provides the data per reconciliation general ledger account. Transaction FPO2P is used for a mass run (as in Figure 5.81).
The report provides a status for the reconciliation. The red status indicates that the reconciliation has a difference. The yellow status indicates that there is no difference amount: the amounts in the general ledger accounts and the reconciliation key match with the open item balance, but the reconciliation key is not yet transferred. The green status indicates that the reconciliation keys are transferred and the reconciliation is successful.

### 5.4.4 List of Open Items for Business Partner on Key Date

The posting documents that are not cleared are called open items. A business partner can have several contract accounts, and each contract account can have multiple open items posted on the account. This report provides a list of all the open items on a key date for the business partner, extracting open items from all the contract accounts under the business partner.

Transaction FPO1_ACC is available to extract the details of the open items on a key date specific to the business partners (see Figure 5.82).

**Figure 5.80** FPO2 Reconciliation Report: Initial Screen

**Figure 5.81** FPO2 Reconciliation Report Data

In the **Selection Screen** tab, input is maintained for the data selection; the **Output Control** tab controls the output data display; and **Additional Output** controls the data format.

### 5.4.5 Customer Account Balance Display

All receivables, payables, payments, charges, interest, and several other transactions are posted on the contract accounts. The customer account balance display provides the detailed information about the various documents posted on the contract account, as well as the details of the amount of each posting and the total amount for the complete account.

Transaction FPL9 is available to display the customer account balance details. The output is controlled by the list type and line layout, discussed in Section 5.2.3. The items/documents—receivables, cleared items, open items, overdue items, statistical postings like installment plans, security deposit request, down payments, and so on—can be displayed here. The layout contains several fields that can be set up easily based on business needs.
The transaction can also be accessed via SAP Easy Access menu: Accounting • Financial Accounting • Contract Account Receivables & Payables • Account (as in Figure 5.83).

The account items can be obtained by master data like the business partner, contract account, and contract. Information like clearing documents, reversal documents, details related to a document, posting dates, and so on can be seen easily in a single place in the account balance display.

Figure 5.83  Account Balance Display Screen

5.5 Summary

This chapter has described in detail the various objects of FI-CA, the various configurations required for setting up the FI-CA processes, and the various reports available for data reconciliation and analysis.

You should now be able to configure your system to meet your business requirements and perform various FI-CA processes.
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