IBM Cúram Social Program Management 8.0.2

Cúram Financial Adapter Technical Overview Guide

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Note

Before using this information and the product it supports, read the information in "Notices" on page 10

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Chapter 1. Cúram Financial Adapter Technical Overview Guide

The financial adapter integrates Cúram financials with financial processes in an external ERP financial system. Configuration of Cúram and the ERP system is required to provide the delivery structures that allow related data to be shared across the two systems.

Introduction

Purpose

The purpose of this guide is to provide a high-level overview of financial processing in the Financial Adapter. After reading this guide, the reader should have a basic understanding of the financial processes and how these processes are supported in an integrated environment.

In order to best understand these concepts, the guide should be read in full. The guide is not intended to be used as a training manual or user guide.

Audience

This guide is intended for business analysts employed by the organization.

Prerequisites

Readers of this guide should be familiar with the basic concepts of Social Enterprise Management (SEM). The application is designed to manage the needs of a social enterprise organization. In order to define the concepts of the application, this guide uses terms familiar to a social enterprise organization.

It is assumed that the reader is familiar with the financial building blocks and how these building blocks are used to process payments, liabilities, and payments received from persons and employers in the system. For information on these topics please refer to the `Cúram Financials Guide`.

Chapters in this Guide

The following list describes the chapters within this guide:

Financial Adapter Overview
This chapter provides an overview of the Financial Adapter and the integration points between the application and an ERP system.

Generating Payments and Liabilities
This chapter provides information on generating payments and liabilities.

Processing Deductions and Adjustments
This chapter provides information on processing deductions, tax adjustments, and surcharge adjustments.

Maintaining Payments and Liabilities
This chapter provides information on maintaining payments and liabilities. This includes information on canceling and regenerating payments, approving suspended payments, and reversing and writing off liabilities.

Processing and Maintaining Payments Received
This chapter provides information on processing and maintaining payments received. Payments received can be recorded and allocated toward outstanding liabilities.

Financial Settings
This appendix provides an overview of settings that affect financial processing in an environment where the Financial Adapter is integrated with an ERP system.

Financial Adapter Overview

Introduction

The Financial Adapter provides the ability to integrate the application financial processing with financial processes provided by an ERP financial system.

Integration Points

This section provides details of the data which must be synchronized on both systems to support the financial integration as well as information on the financial integration point between the application and an ERP financial system.
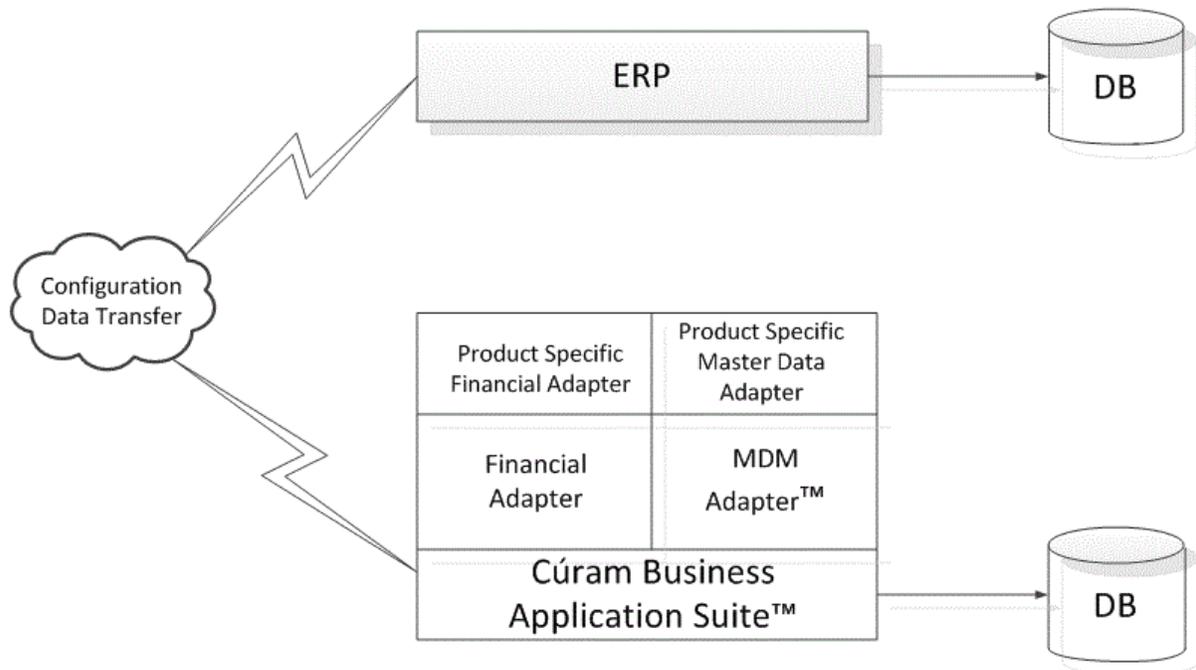
Figure 1. Generic deployment of an integrated environment

Master Data

In an integrated financial environment, before a financial transaction can be issued to a client, it is necessary for the ERP financial system to have access to the most up to date financial information for that client. That information is initially registered in the system and must be transferred to the ERP financial system in order to fully support the financial integration. This information includes details of the participant along with details of the addresses and bank accounts that the participant may use to receive financial transactions.

In addition to the participant specific information, some case related information must also be communicated between the two systems to support the financial integration. A case provides the delivery mechanism for providing the financial transactions to participants. The ERP financial system

must therefore provide the necessary delivery structures, equivalent to cases within the applicaiton, to enable delivery related data to be shared across the two systems.

This information, which is critical to the financial integration, is referred to as "Master Data".

Configuration Data

This covers administration data which needs to be synchronized between the application and the ERP financial systems to support the financial integration. For a full list of this data, please refer to the `Cúram Integrated ERP Operations Guide`. The configuration data includes:

- Address Formats
- Banks and Bank Branches
- Codetables
- Currencies
- Delivery Methods
- Organization Structure

This information, which is also critical to the financial integration, is referred to as configuration data. Once the master data and configuration data has been synchronized between both systems, the financial processes described in this guide can be initiated.

Financial Instruction Line Items

The financial integration point between the application and an ERP financial system is the instruction line item. A financial instruction line item (ILI) is the lowest level of financial detail within the application. At least one instruction line item is generated for every financial process that occurs.

Instruction line items for a case are created when financial components are processed. Whereas a financial component is a schedule to pay or bill, an instruction line item for a case is an instance of that schedule, i.e., a payment or bill.

Note that financial instruction line items can also be created outside of case processing. For example, financial instruction line items are created when a deduction is allocated toward a liability, when a manual payment is captured, when a liability is written off etc.

Instruction line items contain information on a credit or debit amount. This amount is applied to a participant or case account during a specific cover period. For example, an instruction line item might indicate that John Smith was paid $25 for the cover period from January 1st to January 7th. This means that on January 1st, his account was credited $25.

All instruction line items also have a status, i.e., unprocessed, transferred or processed, and an outstanding amount, i.e., the amount still available to be credited or debited. The outstanding amount of the instruction line item relates to its status. An unprocessed or transferred instruction line item has an outstanding amount equal to its full credit or debit amount. A processed instruction line item may have an unprocessed amount of zero. Note, however, that an instruction line item may not be processed all at once, so that its outstanding amount may also be greater than zero (but less than the total amount of the instruction line item).

The "Transferred" status is specific to an integrated financial environment. It denotes an instruction line item which has been sent to the ERP system for further processing.

Additionally, all instruction line items have a category and a type. The category and type can be used by the ERP system to group together instruction line items that are to be rolled up into one financial transaction, e.g., payment, liability.

A table listing all the instruction line item types is provided in the `Cúram Financials Guide`.

Issuing Payments and Liabilities

Introduction

This chapter provides information on how payments and liabilities are issued in an integrated financial environment.

Issuing Payments and Liabilities

In a non integrated environment, payments and liabilities due for active cases are automatically issued when the Financial Batch Suite is run. For more information, please refer to the `Cúram Financials Guide`.

In an integrated financial environment, a different sequence of batch processes are required to issue a payment or liability. The Determine Product Delivery Eligibility batch process is run first to generate financial components. Then, the Generate Instruction Line Items batch process is run to generate instruction line items. Following this, the Transfer Instruction Line Items batch process is run to copy the financial instruction line items from the application to the integrated ERP financial system for further processing.

When the ERP system has consolidated the instruction line items into payments or liabilities as appropriate, a document state message is returned to the application for each instruction line item processed. Each message contains information on the current state of the instruction line item in the ERP system. The following information is included:

- External ID - the cross system ID, used to uniquely identify this instruction line item across all systems.
- Status - the current status of the instruction line item in the ERP financial system.
- Unprocessed Amount - the remaining balance on this instruction line item.
- Payment Document ID - the identifier of the payment which contains this payment instruction line item.
- Invoice Document ID - the identifier of the invoice which contains this liability instruction line item.

Issuing Payments Online

Payments can be issued online for a single benefit case without running the Financial Batch Suite. This may be necessary if the primary client is in need of emergency assistance. Payments can only be issued online for active cases.

Issuing payments online follows a similar process to the Financial Batch Suite. The instruction line items are create by the application and then transferred to the ERP system for further processing. Once the ERP system has processed the instruction line items the relevant status update messages are returned to the application and the instruction line items held in the application are updated accordingly.

Processing Deductions and Adjustments

Introduction

This chapter provides information on how deductions and adjustments are processed in an integrated financial environment. Deductions and adjustments are processed when payments and liabilities are generated. Deductions and tax adjustments are applied to benefits; surcharge adjustments are applied to liabilities.

Deductions

Deductions allow the organization to allot part of a person's benefit payments to a specific purpose. This purpose is dependent on the category of deduction. There are three deduction categories within the application: applied deductions, un-applied deductions, and third party deductions.

For applied deductions, the amount is deducted from the benefit and applied toward any participant's outstanding liability.

For un-applied deductions, the amount is also deducted from the benefit. It is then saved on the system as an unprocessed instruction line item payable to the organization. Un-applied deductions are used to recoup monies previously paid out by the organization.

Third party deductions allow a portion of a person's benefit to be directed toward bills, charges, or debts owed to a third party. Third party payments can be made to any other participant registered on the system. For more information on deductions, please see the `Cúram Deductions Guide`.

In an integrated financial environment, the application is responsible for generating the deduction instruction line items and transferring them to the ERP system for further processing.

Generating Instruction Line Items for Deductions

Financial instruction line items are generated for all three deduction categories (applied, un-applied, third party) by the processing of the relevant deduction financial components. Deduction financial components are processed as part of the Generate Instruction Line Items batch process.

For each deduction that is processed, two line item records are created. The first of these is a "Deduction Item" and is a debit against the benefit. The second, a "Deduction Payment ", is applied toward a liability, stored on the system, or paid towards a third party, depending on the deduction category.

The "Deduction Item" and "Deduction Payment " instruction line items created are related to each other by a relationship record that is automatically created by the system. This allows for traceability back to the case nominee whose payment the deduction was made from.

Transferring Instruction Line Items for Deductions

In an integrated financial environment all deduction item instruction line items are transferred to the ERP system along with the instruction line items for the case from which they are made. However, the transfer of the deduction payment instruction line items may vary depending on the deduction category.

For example, applied and third party deduction payment instruction line items will always be transferred. Un-applied deduction payment instruction line items will not be transferred, given that they are payments back into the agency and can cause difficulties in balancing this account.

Tax Adjustments

Benefits can be adjusted to take relevant taxes into account. Tax adjustment processing is set up at the benefit product level. This means that taxes will be applied to all payments for this benefit.

In an integrated financial environment, the application is responsible for generating the tax instruction line items and transferring them to the ERP system for further processing.

Generating Instruction Line Items for a Tax Adjustment

When the Generate Instruction Line Items batch process is run, or when payments are generated online, the system determines whether or not taxes should be applied to the benefit. If taxes should be applied, the system creates two instruction line items. The first of these is known as a "Tax Deduction" and is a debit against the benefit. The second, known as a "Tax Payment", is used to pay the tax authority.

The two instruction line items created for a tax adjustment are related to each other by a relationship record. This allows for traceability back to the case nominee from whose payment the tax adjustment was made.

Transferring Instruction Line Items for a Tax Adjustment

In an integrated financial environment all tax deduction instruction line items are transferred to the ERP system along with the instruction line items for the case from which they are made. However, the transfer of the tax payment instruction line items is configurable via an administration property for more information. Please see Appendix A for more details.

For example, if an integrated financial environment is being used by a non-governmental agency (NGO) the tax authority may be a separate organization. In this case, tax will behave similarly to a third party deduction, i.e., the tax payment deduction will be transferred to the ERP financial system for further processing. If the integrated environment is being used by the same organization who are responsible for collecting the tax, then it should behave similarly to an un-applied deduction, i.e., the tax payment instruction line items will not be transferred.

Surcharge Adjustments

Surcharges are additional charges applied to liabilities that have not been processed within an appropriate time period. Like tax adjustment processing, surcharge adjustment processing is set up at the product level.

In an integrated financial environment, the application is responsible for generating the surcharge instruction line items and transferring them to the ERP system for further processing.

Generating Instruction Line Items for a Surcharge Adjustment

In an integrated financial environment, every time the Transfer Instruction Line Items batch process is run, the system searches for all existing instruction line items with outstanding amounts greater than zero. It then determines whether or not surcharge adjustment processing is required for each instruction line item and whether the instruction line item is due for surcharge processing. If these three factors are met, the system applies the surcharge rate to the unprocessed liability amount in order to determine the surcharge amount. An instruction line item is then created for the surcharge adjustment.

Transferring Instruction Line Items for a Surcharge Adjustment

The transfer of the surcharge instruction line items to the ERP financial system is also performed by the Transfer Instruction Line Items batch process.

Maintaining Payments and Liabilities

Introduction

This chapter provides information on maintaining payments and liabilities in an integrated financial environment. Maintenance functionality for payments includes the ability to capture manual payments, cancel and invalidate payments, regenerate payments, and approve suspended payments. Maintenance functionality for liabilities includes the ability to reverse and write-off instruction line items.

Capturing Manual Payments

A manual payment is a payment to a case nominee that is issued outside of the system, i.e. when the system is off-line. If for any reason the system is unavailable, and a payment is issued to a person, then information regarding that manual payment can be captured on the system.

In an integrated financial environment, capturing the manual payment calls processes that recreate all the elements of a payment up to the instruction line items. After the instruction line items have been created, they are then transferred to the ERP financial system for further processing.

Since these instruction line items represent a manual payment which has already been delivered to a client, it is important that these instruction line items are marked in such a way that the ERP financial system knows that they are not to be processed as a standard payment. To this end each manual payment instruction line item is marked as suspended and includes a manual payment reference number. This reference number will refer to the check or voucher number through which the manual payment was delivered and can be used by the ERP financial system to clear this instruction line item.

Canceling Payments

A payment issued in error can be canceled. Canceling a payment indicates that a payment has not been received. For example, a payment may be canceled if a participant reports that a check has been lost in the mail. When a payment is canceled all of the instruction line items which comprise the payment are also canceled and their status changes from "Processed" to "Canceled".

When a payment is canceled, the payment is negated rather than deleted from the system. This is for accountability and traceability purposes. A reversal instruction line item is created for every instruction line item that was included in the payment.

In an integrated financial environment, canceling a payment involves a number of steps coordinated across both systems. The cancellation is initiated in the system as normal. However, before it is decided whether or not it is valid to cancel this payment, a request for the current status of the instruction line items involved is made to the ERP financial system. This ensures that the most up to date information is available for the system to evaluate.

Once the instruction line item information has been synchronized and the cancellation is approved by the system, a payment cancellation request is sent to the ERP financial system for each instruction line item included in the payment.

As each cancellation request is successfully processed by the ERP financial system, a document state message is generated to indicate that the instruction line item concerned now has a status of "Canceled".

When these document state messages are returned to the application, the "Canceled" status indicates to the system that the cancellation process can now be completed on the application side. This involves updating the status of the instruction line item and creating the appropriate reversal instruction line item.

A new payment status of "Partially Canceled" has been introduced. This status is specific to an integrated financial environment. It denotes a payment for which some, but not all, of the instruction line items comprising the payment have been successfully canceled on the ERP financial system. The first document state message returned from the ERP financial system with a canceled status causes the status of the payment to be updated to "Partially Canceled" by the application system. Only when all of the instruction line items comprising the payment have been confirmed as canceled is the payment status updated to "Canceled".

Reissuing Payments

Any payment that has been canceled can be reissued to the original nominee or to an alternative nominee. For example, a check payment that has been lost can be reissued to the original nominee.

In an integrated financial environment, when a payment is reissued, new instruction line items are created and transferred to the ERP financial system for further processing.

A payment can only be reissued once the payment has been canceled completely. It is not possible to reissue a payment which has been partially canceled.

Approving Suspended Payments

In an integrated financial environment, while a group of instruction line items are being transferred to the ERP financial system for further processing, they are evaluated as a group to check that they do not violate the payment suspension business rules. If the group of instruction line items being checked have been found to meet the suspension criteria those instruction line items are suspended.

Suspended instruction line items are still transferred to the ERP financial system but they will be explicitly marked as suspended. This indicates to the ERP financial system that they are not to be processed until such time as they are approved. Since the instruction line items were evaluated as a group this grouping information must be retained. Each instruction line item in the group is marked with the same grouping identifier. This allows the application system to present this set of instruction line items as a "virtual" payment and therefore present the "Approve" or "Cancel" options, the follow up actions required by a user after investigating a suspended payment.

The case nominee will not receive a suspended payment unless the payment is approved by the organization. Approving a suspended payment tells the ERP financial system that these suspended instruction line items are now available for further processing. Canceling a suspended payment follows the same process describe above for canceling a payment.

Reversing Liability Instruction Line Items

A liability instruction line item can be reversed so that the nominee is no longer responsible for the liability amount. For example, if an employer is billed incorrectly, the incorrect liability instruction line item can be reversed so that the employer no longer owes the liability amount.

When a liability is reversed, the liability amount is negated rather than deleted from the system. This is for accountability and traceability purposes. A reversal instruction line item is created for every instruction line item that was included in the liability.

In an integrated financial environment, canceling a liability follows the same process as described above for canceling a payment.

If any allocations have been made to the liability instruction line item before it was reversed, it is the responsibility of the ERP financial system to ensure that these allocations are once again made available to be applied toward other outstanding liabilities.

Writing Off Liability Instruction Line Items

All or a portion of a liability instruction line item can be written off so that the nominee is no longer responsible for the amount that has been written off. For example, if a person declares bankruptcy, all or a portion of that person's debt to the organization can be written off.

The amount of a write-off can be equal to or less than the outstanding amount of the liability instruction line item.

In an integrated financial environment, the ability to write off all or a portion of a client's liability is the responsibility of the ERP financial system.

Processing and Maintaining Payments Received

Introduction

This chapter provides information on processing and maintaining payments received. A payment received is an amount of money received by the organization and recorded on the system. Payments received are usually sent to the organization in response to a bill. That is, they are used to pay off liabilities. Unlike payments and liabilities, payments received are not generated as part of case processing (the Financial Batch Suite). Instead, they are recorded on the system by a user and are associated with a person or employer's financials.

In an integrated financial environment, the ERP system is responsible for managing all payments received. The following business processes should be provided by the ERP financial system:

- Recording Payments Received from a Person or Employer
- Recording Payments Received in a Suspense Account
- Transferring Payments Received from a Suspense Account
- Allocating Payments Received
- Liability Over Allocation
- Reversing Payments Received
- Writing Off Reversed Payments Received

Financial Settings

Introduction

This appendix provides an overview of settings that affect financial processing in an integrated financial environment.

Currency Settings

Currency exchange rates should be maintained in the ERP system in an integrated financial environment. Currency exchange rates are used in the application to indicate the applicable exchange rate for a financial transaction which is to be made in a foreign currency. It is the responsibility of the ERP system to convert the default currency amounts provided by the application to the appropriate foreign currency amount for the financial transaction.

Application Properties

This section describes additional application property settings of particular interest in an integrated financial environment.

External Tax Authority

This application property defines whether the tax payment instruction line items, i.e. the items posted to the tax authority's account, will be transferred from the application to the ERP financial system for further processing.

If an integrated financial environment is being used by a non-governmental agency (NGO), the tax authority may be a separate organization. In this case the tax payment instruction line items will be transferred to the ERP financial system for further processing. If the integrated environment is being used by the same organization who are responsible for collecting the tax, then tax payment instruction line items will not be transferred, given that they are payments back into the agency and may cause difficulties in balancing this account.

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