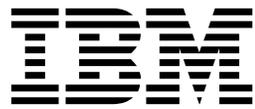


IBM Cúram Social Program Management
Version 7.0.0

*Cúram Integrated Case Management
Configuration Guide*



Note

Before using this information and the product it supports, read the information in "Notices" on page 49

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Configuring Integrated Case Management

You can configure Cúram Integrated Case Management. Case types, products, case evidence, rules, and other aspects of ongoing case management can be configured with application properties and rate tables.

Introduction

Purpose

The purpose of this guide is to describe the configuration options that are available for Cúram Integrated Case Management. This includes the options that are available for configuring case types, products, case evidence and rules, and aspects of ongoing case management.

These configuration options are managed by an administrator in the runtime administration application and the runtime system administration application.

Audience

This guide is intended for administrators responsible for configuring Cúram Integrated Case Management components. It is assumed that the administrators have worked with code tables, application properties, and system security as part of the system administration.

Prerequisites

It is assumed that the reader understands the business concepts of Cúram Integrated Case Management. The Cúram Integrated Case Management Guide is a reading prerequisite.

Related Reading

In addition to the prerequisite reading outlined above, there are several available documents that relate to the topics covered in this guide. Some of these documents provide helpful background information, others provide more detailed information on the topics covered in this guide. The following table provides a brief description of these documents:

Table 1. Description of Related Reading

Document Name	Description
Cúram Participant Guide	This defines the basic concepts of participants and participant types.
Cúram Evidence Guide	This provides a business overview of the main features of the evidence framework and how evidence is managed using this framework.
Cúram Person and Prospect Person Evidence Developers Guide	This provides a high level technical understanding of person/prospect person evidence and its components. It also outlines the available customization options and extension points.

Table 1. Description of Related Reading (continued)

Document Name	Description
Cúram Location Administration Guide	This provides a business overview of how location based security works.
Cúram Financials Guide	This provides a business overview of Cúram financial processing including payment and liability maintenance, deduction and adjustment processing, and a description of the different financial instruction types.
Inside the Cúram Financials Manager	This provides a technical business overview of the Cúram Financials Manager and includes descriptions of financial schedule creation and maintenance and the processing of financial transactions that are associated with different case types.
How to Build a Product Guide	This provides sample-based instructions on how to build a product. It starts off with a simple product sample, and builds upon complexity using varying product samples.
Cúram Dynamic Evidence Configuration Guide	This describes the configuration settings for Cúram Dynamic Evidence and includes instructions on how to use the Dynamic Evidence Editor to manage case evidence.
Cúram Express Rules Reference Manual	This describes the Cúram Express Rules language, development environment, and runtime features.
Working With Cúram Express Rules	This provides step by step instructions on how to create Cúram Express Rule rule sets and how to use the Cúram Express Rules Editor to add business and technical logic to a rule set.
Inside Cúram Eligibility and Entitlement Using Cúram Express Rules	This describes how the Cúram Eligibility and Entitlement Engine fits into case processing and includes technical descriptions of eligibility and entitlement processing, the financial scheduler, and correcting payments.
Cúram Milestone Developers Guide	This describes the configuration settings for milestones and provides instructions on the development tasks that must be completed in order for case milestones to be created at the case level.

Chapters in this Guide

The following list describes the chapters within this guide:

Configuring Case Types

This chapter describes the configuration options that are available for configuring case types. Integrated, product, screening, and assessment case types share a number of configuration options, each of which is described in this chapter. Integrated case type configuration settings fall under the banner of shared configuration options. Configuration options that are specific to assessment and screening case types are also described in this chapter.

Configuring Products

This chapter describes the configuration options that are specific to product configuration. Product configuration includes benefit and liability product configuration. Configuration options that control client eligibility and entitlement determination processing and financial processing are also described in this chapter. Product configuration also includes the configuration of absence reasons, bonus payments, time constraints, and appeals processes.

Configuring Evidence and Rules

This chapter describes the configuration options that are available for case evidence and rules. This includes evidence type configuration, associating evidence types with case types, the configuration of rule sets, rules design, and the assignment of rules to products.

Configuring Ongoing Case Management

This chapter describes the available configuration options that allow administrators to configure various aspects of ongoing case management. These options include the setting of application properties that control the case search facility, case approval, case reassessment, as well as case closure, and the number of entries to be displayed in the case transaction log. Case milestones can also be configured as part of ongoing case management.

Configuring Case Types

Introduction

This chapter describes the configuration options that are available for case types. In order for case workers to create cases at the case level, the following case types can be configured: the integrated case type and the product case type.

Note that the application supports the following case types: the screening case type and the assessment case type. Screening and assessment case types can be maintained by administrators and used in case management processing; however, screening functionality is provided by the Cúram Common Intake module and assessment functionality is provided by the Cúram Decision Assist and Cúram Outcome Management modules. Configuration for these areas is extensive and falls outside the scope of this guide. For information on configuring screening, see the Cúram Common Intake Configuration Guide . For information on configuring assessments, see the Cúram Decision Assist Guide and the Cúram Outcome Management Configuration Guide.

This chapter focuses on the configuration options that are common to more than one case type and also describes the options that are specific to screening and assessment case types. Note that most integrated case type configuration options are common to other case types. Therefore, integrated case configuration options are described in full in “Configuring Common Case Information”. Note also that product case type configuration is extensive, therefore product-specific configuration options are described in a separate chapter. For more information, see “Configuring Products” on page 8.

Configuring Common Case Information

This section describes the configuration options that are common to more than one case type. For example, case display configuration options are common to both

integrated case types and product case types. Note that most of the configuration options described below are also common to assessment and screening case types.

Defining the Name of the Case Type

A unique and easily identifiable name must be defined for each case type. This is the name that will appear everywhere the case is referenced throughout the application.

Note that when a name is defined for an integrated case type, system automatically makes that integrated case type available as a category to which products can be assigned when they are configured. For more information, see “Assigning Products to Categories” on page 11.

Note: A case type name is defined for all case types.

Defining the Case Home Page

A case home page must be configured for each case type in order for it to be created at the case level. This is the page that allows case workers to view case details for all cases based on this case type. The case home page setting defines the name of the *.jsp page that is used.

The application provides default home pages for each case type which can be overridden by agencies as required.

Note: A case home page is configured for all case types.

Date Settings

Date settings dictate the period during which the case details are effective. The following date settings are provided: the start date and the end date. If a start date is not specified, the system automatically sets the start date to be the current date.

If an end date is configured for a product, the end date does not prevent a case worker from creating a product delivery case for that product type. Even if the end date has been exceeded, a case worker can create a product delivery case within an integrated case.

For some solution case types, products can be withdrawn so that new applications cannot be created. However, an administrator cannot withdraw a product just by configuring the end date. Code changes are required to update the screening scripts, application scripts, eligibility rules, and so on.

Note: Date settings are common to screening, assessment, and product case types.

Grouping Related Case Types

The Type setting allows administrators to create associations between related types of cases. For example, an administrator may wish to group a set of related benefit products and make them available from a drop-down list at the case level. The application provides a Type setting that is used to make these associations. Existing types are available for association with a case type via the type drop-down list.

Product case types are associated with the ProductType code table. A new type can be dynamically added to this code table and published as part of system administration. Alternatively, a new type can be dynamically added when creating a product. If a new type is manually added, the system then displays it within the

Type drop-down list where it can be associated with other product case types as required. Manually added types are automatically added to the ProductType code table.

Note that a case can be grouped under multiple types. For example, a product case type can belong to a “rehabilitation” type as well as a “cash assistance” type.

Note: The Type setting is common to product case types and assessment case types.

Determining if a Translator is Required

The Determine Translator Required indicator dictates if a client's translation requirements are evaluated automatically by the system within each case in which the client is serving as a case member. If this indicator is set, a client's translation requirements are automatically evaluated based on his or her preferred language and the case owner's language skills.

If the case owner does not have a defined language skill that matches the preferred language of the client recorded during registration, the system automatically determines that translation services are required.

If the case owner has a defined language skill that is the same as the client's preferred language, the system automatically determines that translation services are not required. Note that the system also determines that translation services are not required if no preferred language is recorded for the client.

For information on defining language skills for users, see the Cúram Organization Administration Guide.

Note: The translation requirements setting is common to integrated case types and product case types.

Configuring the Display of Case Information

A number of settings are provided that dictate where a case type is displayed in the application. These settings are common to integrated case types and product case types.

The following table describes these settings:

Table 2. Case Display Configuration Settings

Configuration Setting	Description
Display in Participant Programs List	This setting dictates whether cases based on this type are displayed in the participant's list of programs. If this setting is indicated, cases based on this type are displayed in a participant's list of cases.

Table 2. Case Display Configuration Settings (continued)

Configuration Setting	Description
Display in Curam Universal Access	This setting dictates whether contact details for the case owner are displayed when a logged in citizen accesses his or her account information using the Curam Universal Access online application. Note that this setting works in conjunction with the Cúram Universal Access module. In order for case owner details to appear as part of a citizen's account information, the Curam Universal Access module must be installed. For more information on the Curam Universal Access module, see the Cúram Universal Access Guide .
Display in My Cases Filter	This setting dictates if this case type is to be available as a filter option on the My Cases page. If this setting is indicated, case workers can filter cases returned on the My Cases page by this case type when accessing their case load. By default, this setting is enabled.
Display in Case Search Filter	This setting dictates if this case type is to be available as a filter option on the Case Search page. If this setting is indicated, case workers can filter the case search by this case type. By default, this setting is enabled.

Configuring a Case Ownership Strategy

The application allows agencies to configure a strategy for assigning initial case ownership. A default case ownership strategy is provided OOTB that determines the initial case owner. This strategy can be overridden by administrators on a case by case basis using workflow. For a detailed description of how the default strategy works, see “Initial Case Ownership Strategy” on page 7.

Assigning Case Ownership Using Workflow: The Ownership Strategy setting allows administrators to configure a case ownership strategy for each case type using workflow. This setting defines how the initial case owner for the case is determined. For example, this setting allows ownership of a particular type of integrated case to be assigned to a specific work queue.

Note that when a case ownership strategy is defined for a case type, the system transitionally sets the initial owner of a newly created case to the 'Temporary Owner Assignment' work queue while the workflow process determines the initial case owner. Once the workflow process has completed, the case is then reassigned to the case owner determined by the workflow process. There are two system application properties that relate to this work queue.

- The application property, `curam.workflow.logtempownerworkqueueassignment` is used to dictate whether or not case transaction log events that relate to the temporary owner assignment are automatically recorded by the system. The default value is 'NO'. If this value is set to 'YES' , a 'User Role Canceled' case transaction log event is automatically recorded when the case is reassigned from the 'Temporary Owner Assignment' work queue.
- The application property, `curam.workflow.displayworkqueueasownerincaseuserrole` is used to dictate

whether or not the temporary assignment work queue will appear as a case owner on the User Roles page within a case. The default value is 'NO'.

Important: When assigning case ownership to a workflow, administrators must ensure that the case ownership can be resolved through the workflow process that is associated with the case type otherwise the case creation process will fail.

Initial Case Ownership Strategy: The section describes how the default strategy that determines initial case ownership works. This default strategy can be overridden by administrators using the Ownership Strategy setting described above.

For integrated cases, the system automatically determines the initial case owner as follows:

1. The administrator of the participant who is the primary client of the integrated case is set as the case owner.
2. If no administrator exists for the primary client, the currently logged in user is set as the case owner.
3. If the participant administrator has no active position within the organization structure, the system assigns case ownership to the currently logged in user.
4. If the currently logged in user has no active position within the organization structure, the user will receive a validation message stating that the case can not be created because no case owner can be identified.

For product delivery cases, the system automatically determines the initial case owner as follows:

1. The case owner of the integrated case to which the product delivery belongs is initially set as the case owner.
2. If no related integrated case exists, the administrator of the participant who is the primary client of the product delivery case is set as the case owner.
3. If no administrator exists for the primary client, the currently logged in user is set as the case owner.
4. If the user who registered the primary client has no active position within the organization structure, case ownership is assigned to the currently logged in user.
5. If the user who is the case owner of the related case has no active position within the organization structure, the supervisor of the related case is assigned case ownership.
6. If the supervisor has no active position or there is no supervisor assigned to the related case, case ownership is assigned to the organization unit to which the case owner of the related case belongs.

Configuring Concerning Participants for Contact Logs

The Members Only for Contact Log indicator is used to determine whether only case members should be available for selection as the concerning participant of a contact created within the contact log of an Integrated Case, or whether all case participants should be available. By default this setting is disabled to allow all case participants to be displayed.

Note: This setting is also available for screening case type.

Configuring Assessment Case Types

The application provides the ability to maintain assessment case type configurations. Note that new assessment case types cannot be added in the application administration. Assessment case type maintenance includes the maintenance of common assessment information, such as home page configuration, described in “Configuring Common Case Information” on page 3. Assessment configuration also includes the assignment of eligibility rules to an assessment. This rule set is applied to evidence in order to determine potential eligibility for products. Rule sets implemented using Cúram Rules are assigned to an assessment case type. The process begins with selecting the rule set. The rule set is searched for and selected from the list of existing rule sets.

At least one rule set must be assigned to an assessment as a prerequisite to eligibility determination. Information recorded for the rule set assignment includes the name of the eligibility rule set to be assigned to the assessment and the period during which the rule set is assigned to the assessment. This period cannot overlap with the periods of existing assessment rule set assignments. One or more rule sets can be assigned to an assessment; however, only one rule set can be active during any given time period.

Rule sets implemented using Cúram Rules are maintained using the Cúram Rules Editor. For information on maintaining these rule sets, see the Cúram Rules Editor Guide.

Configuring Screening Case Types

Screening case type configuration includes the configuration of common case information described in “Configuring Common Case Information” on page 3. Once a screening case type is defined, one or more assessments are assigned to it. These assessments are based on the assessment types described above.

At least one assessment must be assigned to a screening case type in order for the screening to be created. Assessment assignment information includes specifying the period during which the assessment is assigned to the screening case type. This period cannot overlap with the periods of existing assessment assignments.

Configuring Products

Introduction

This chapter describes the configuration options that are specific to products. A product can be a benefit that the agency provides to clients, a liability that the agency bills to clients or businesses, or a payment correction that the agency uses to correct over and underpayments issued to clients in respect of payments or bills. Product configuration includes the creation of benefit products and liability products.

Benefit and liability product configuration is extensive. To simplify the configuration process, the application provides a product wizard that allows administrators to easily create benefit and liability products. Each step in the wizard represents an important category of information that must be configured for each product. This chapter describes the configuration options that can be set for both benefit and liability products using the product wizard as well as specific settings that apply to benefit products only and liability products only.

Once products are configured, rules are assigned to them to determine eligibility and entitlement for the cases they govern. For more information on assigning rules to products, see “Assigning Rules to Products” on page 27. This chapter also describes payment correction product configuration, the configuration options available for bonus payments, product time constraints, and absence reasons, and the configuration of products which are used to deliver a service.

Configuring Benefit and Liability Products

The following sections describe the configuration options that are common to benefit and liability products.

Configuring General Product Details

General configuration options are available for each benefit and liability product. These options include settings that are applicable to multiple case types such as the case name, home page, and display settings. For more information on these settings, see “Configuring Common Case Information” on page 3. The following subsections describe additional configuration options that are specific to products.

Setting a Review Frequency: Case reviews can be manually created within a case, or automatically created by the system. The 'Review Frequency' setting is used to determine the frequency for cases based on this product. For example, a review frequency of the 15th day of every month can be configured for a product. If a review frequency is specified, when a case based on that product is approved, the system automatically inserts multiple case review events and associated case worker tasks between the case start date and the expected end date based on the frequency configured.

Indicating if Supplier Returns Are Accepted: The Supplier Returns Accepted setting indicates whether or not service supplier returns may be created for a product. A service supplier provides services or tasks that must be performed by a qualified individual or body, e.g., eye examinations, court translations. A service supplier return is a return filed by a service supplier in respect of the service that indicates the number of services provided for the agency.

Service supplier returns allow the agency to calculate the amount of money owed to a service supplier in return for services provided. For example, a registered doctor makes a return to the agency for the number of persons for whom the doctor provided eye examinations. Each individual service supplied by the doctor, i.e., each eye examination, appears as a line item in the overall return.

Configuring Eligibility Determination and Decisions

The application provides the following configuration options that allow administrators to configure eligibility determination processing and the display of eligibility decisions for cases that are based on this product. The following subsections describe these options.

Allowing Open Ended Cases: The Allow Open Ended Cases setting dictates if an expected end date must be defined for cases that are based on this product. If this setting is specified, an expected end date is not mandatory for the case and a user can manually enter or modify the expected end date as required. If no expected end date is specified, the latest eligibility decision within a determination created for the case will be open ended with no effective end date.

Open-ended case decisions allow for situations where a client may be receiving a benefit for an unknown period of time. For example, an administrator can specify that a product governing a pension benefit case allows for the case to be open

ended. This means that financials issued in respect of the case can pay indefinitely until such time as circumstances change on the case, or the expected end date is explicitly set on the case. Alternatively, an administrator can specify that a different product such as one governing a dependent child benefit case is not open-ended because child benefit is only to be paid up to a certain age of the child. In this situation, an end date must be explicitly specified. When the child reaches that age, financials issued in respect of the child benefit are automatically ceased.

If this setting is not specified, the system automatically sets the expected end date to be the case start date upon initial creation of the case and the expected end date is automatically updated as certification information is entered on the case.

Configuring a Determination Comparison Strategy:

The Determination Comparison Strategy setting is used during eligibility processing for products. When case reassessment is initiated, a determination is only stored if it is different to the previous determination.

Note:  The key decision factors feature is deprecated. For more information, see [Deprecated features](#).

This setting dictates how the system decides if a new determination result is different from the previous determination result. A determination comparison strategy must be configured for each product. A determination result can be considered different when any user-facing information changes, such as data that impacts eligibility and entitlement, data that can result in new key decision factors, and/or data that can result in new decision details display information. Alternatively, a determination can be considered different only when information changes that impacts eligibility and entitlement.

The determination comparison strategy values available are associated with the DeterminationCompStrategy code table. A new value can be added to this code table and published as part of system administration.

Configuring a Decision Summary Display Strategy: The Decision Summary Display Strategy setting determines the summary information that is displayed for each decision within a determination. For example, for eligibility decisions that include information about the client's entitlement amount, this setting can be used to determine the frequency at which this amount should be displayed. For example, even if a client's entitlement is calculated to be \$70 on a weekly basis, this setting can be used to display the client's entitlement amount in a daily or monthly format instead.

The available decision summary display strategy values are associated with the DetIntSummarizerStrategy code table. A new value can be added to this code table and published as part of system administration.

Configuring a Reassessment Strategy: The Reassessment Strategy setting determines whether or not reassessment should occur within closed cases. By default, the setting is set to not reassess closed cases. When there is a change in circumstance within an individual case, for example a change in evidence or a change in certification, the system will not reassess the case if it is closed and if the setting is set to not reassess closed cases. When a system wide change such as a change to a rate table or a change to a rule set is made that will potentially affect multiple cases, this setting is also used to determine whether or not closed cases should be reassessed when batch processes are executed to reassess all cases

affected by the change. The reassessment strategy values available are associated with the ProductReassessmentStrat code table.

Indicating Eligible Participant Types

Eligible participant type settings allow administrators to indicate the participant types that are eligible for cases based on this product. The following participant types can be associated with products: Person, Employer, Utility, Information Provider, Service Supplier, Product Provider. Usually, only person participants are eligible for benefit products. Therefore, only the Person setting is implemented fully. When this setting is enabled, product delivery cases that are based on this product type may be created for person participants so that their eligibility for the agency's products can be determined.

Note that the selection of any of the other eligible participant settings has no impact on application processing in a default application installation. If the agency wishes to extend the participant types that are eligible to receive a product to include employers, service suppliers, etc., development effort will be required to configure the application processing that implements these settings. For more information on participants, see the Cúram Participant Guide.

Assigning Products to Categories

Products must be assigned to at least one integrated case category in order for cases based on that product to be created from within an integrated case. These categories are used to group similar products. Examples of categories include social assistance, illness, and financial. Each category is used to define the subset of products that may be added to that particular type of integrated case. Products can be assigned to existing integrated case categories. Only products that belong to the selected integrated case category may then be added to that integrated case at the case level. For example, if an integrated case is assigned a category of social assistance, then only products that belong to the social assistance category can be added to that integrated case. Note that products can belong to multiple categories. This enables cases that are based on that product to be added to multiple types of integrated case.

Assigning a Delivery Pattern or Billing Pattern

A delivery pattern or a billing pattern must be assigned to each product on creation. Delivery patterns are defined for benefit products. Billing patterns are defined for liability products. A delivery pattern defines how and when a benefit product is delivered to a client in the form of a payment. A billing pattern defines how and when a liability product is delivered to a client in the form of a bill. All delivery and billing patterns include a delivery or billing method and a delivery or billing frequency. For example, a product is delivered to a client every two weeks on a Monday by EFT.

The following subsections describes the delivery and billing pattern information that can be defined. Note that an administrator can also set up new delivery patterns and billing patterns as part of administration.

Defining an Effective From Date: This date is the date from which the delivery or billing pattern is effective . *By default, the system automatically sets this date to the current date.*

Defining the Maximum Payment Amount: The Maximum Payment Amount setting dictates the maximum amount that a payment or bill issued by the delivery or billing pattern can be issued for. For example, \$500 is the maximum amount that a payment can be issued for. Note that this functionality is currently used for

benefit products only, there is no limit on bills issued. If the total value of a payment instruction is greater than the maximum amount, the payment will be suspended. The payment will not be issued until it is manually approved by a supervisor. The default value is \$0.00.

Defining the Default Pattern: The Default Pattern setting allows an administrator to set this delivery or billing pattern as the default delivery or billing pattern for the product. If a product delivery case is created automatically, the default product delivery or billing pattern is automatically assigned to the case nominee(s). For example, automatic overpayment case creation will assign the default delivery pattern for overpayment product to the case nominees. When a product delivery case is created manually, this default can be overridden on a case by case basis.

Setting the Cover Pattern: The Cover Pattern setting defines the cover period for the delivery of the payment or bill. A cover period dictates how payments or bills are issued, e.g., in advance, in arrears, once-off, etc. For example, the delivery pattern, weekly by check on Mondays in advance, indicates that each payment will be made on a Monday and will cover the week that starts on the Monday and continues to the next Sunday.

The available cover patterns are associated with the ProductCoverPeriod code table. The default cover pattern is 'Issue in Advance'. A new value can be added to this code table and published as part of system administration.

Defining the Delivery Method: A delivery method is a method by which financial transactions can be issued or received for a product. Delivery methods can apply to benefit products only, to liability products only, or to both. For example, the invoice delivery method is only applicable to liability products and can be configured to apply to liability products only. When creating a new product, administrators can select an existing delivery or billing method from the drop-down list of existing methods that have been configured within the administration application. This setting is mandatory. Note that administrators can set up new delivery methods as part of application administration. Each newly created delivery method will be automatically available for selection when a new product is created.

Defining an Offset for the Delivery Method: Each delivery or billing method can have an offset. This is the number of days prior to the due date by which a financial component needs to be processed to ensure that the benefit or liability reaches the nominee on time. For example, delivery and billing methods for benefits include cash, check, EFT, and vouchers. The check delivery method can be configured with an offset of three days in advance to allow for bank clearing. This offset ensures that funds are available to the participant on the due date. The default offset for a delivery method is '0'.

Defining the Delivery Pattern Frequency: The Delivery Pattern Frequency setting dictates the frequency by which the payments or bills issued in respect of a product are issued to eligible participants. For example, a delivery pattern may be 'Recur every one week(s) on Monday' or 'Day 1 of every 1 month(s)'. This setting is mandatory.

Defining Product Provisions

Product provisions are the product providers that deliver the actual products delivered to case recipients. Product provision details must be associated with each product on creation. Product provision definition involves recording the details of the provider who provides the product. The Product Provider setting allows an

administrator to search for a product provider from the product providers that are registered as part of Participant Management. Note that the product provider can be the agency itself or a different product provider.

Start Date and End Date settings dictate the period during which the product provision is effective. By default, the system automatically sets the start date to be the current date.

The Currency setting allows the agency to select the preferred currency for payment for the provision. The currencies that are available for selection are associated with the Currency code table. A new value can be added to this code table and published as part of system administration.

The Estimated Cost setting allows the agency to estimate the amount that the agency spends on a particular product provision, i.e., the cost of a product that is offered by a particular provider. The default value is '0'. An administrator can change this value as required.

The Payment setting determines the preferred method of payment for the provision, e.g., cash. The default value is 'Cash'.

The Payment Frequency setting dictates the payment frequency for the provision, e.g., the first day of every month.

Note that a product cannot be deleted if it has an active product provision. Similarly, a product provision location cannot be deleted if there are active cases assigned to that location.

Associating a Location with a Product Provision

Each product provision has an associated location. The Location setting is used to search for the location from which the product provision is delivered. Administrators can select a location from existing locations recorded for the organization.

Start Date and End Date settings dictate the period during which the product is offered by a product provider at the location. By default, the system automatically sets the start date to be the current date.

The Cost setting is used to specify the cost of the provision at the location. The default value is '0'. An administrator can change this value as required.

Configuring Financial Processing for Products

The following sections describe the available configuration options that impact financial processing for cases based on this product.

These options include adjustment settings and case reassessment settings. Case reassessment is used to re-evaluate payments or bills when there is a change in circumstance on the product delivery case. Examples of changes in circumstance include changes in evidence or certification.

Reassessment and financial processing are complex and will require further reading. For further information on reassessment and over and underpayments, see the *Inside Cúram Eligibility and Entitlement Using Cúram Express Rules* guide. For information on financial processing, see the *Cúram Financials Guide* and the *Inside the Cúram Financials Manager Guide*.

Indicating If Adjustment is Required For a Product: The Adjustment Required setting indicates whether adjustments are required for a product. If this setting is turned on for a benefit product, taxes will be applied to all payments issued in respect of the product. The adjustment rate for taxes can be maintained as part of rate table administration. The same rate will be applied to all payments. For example, a tax of 5 percent may be applied to all payments for a benefit product. If the Adjustment Required setting is turned on for a liability product, surcharges will be automatically applied to bills if they remain outstanding for one month. If a bill is not cleared within one month, it is surcharged at the adjustment frequency configured for the product. The adjustment rate for surcharges is set at a fixed rate. For example, the agency may specify that liabilities left unpaid for one month will be surcharged at five percent.

Indicating the Adjustment Frequency: The Adjustment Frequency setting is used to dictate the timeframe after which surcharges are applied to any outstanding liabilities that have not been paid. For example, if an agency is billed monthly for a service, and the adjustment frequency of that service is set to one month, then the agency will have one month to send in payments toward the bill. If the agency does not send in payments within the month, surcharges will be applied to the outstanding bill.

Configuring Underpayment Case Creation: If an underpayment is discovered during reassessment, a new case for the underpayment can be created in order to resolve the underpayment amount. This case can either be an underpayment case or a payment correction case. The Automatic Underpayment Case Creation setting is used to indicate whether an underpayment case is automatically created when an underpayment is discovered by the system on reassessment. This setting works in conjunction with the Use Rolled Up Reassessments setting described in “Using Rolled Up Reassessment” on page 17. For information on payment corrections, see “Configuring Payment Corrections” on page 20.

If underpayment or payment correction case creation is not set to be automatic, an underpayment financial component is created on the original benefit or liability case. For benefits, both the original benefit case and underpayment or payment correction case can be used. For liabilities, only the underpayment case type can be used to pay a case recipient. Underpayments for liabilities are used to pay case recipients when they have been over charged. This financial component is once-off in the amount of the underpayment.

Note that additional functionality is provided for benefit underpayment processing. Benefit underpayment processing can be configured so that underpayment cases will only be created for a case recipient with outstanding liabilities. To achieve this, an application property is available within system administration. The application property `curam.miscapp.checkforliveabilities` is used to support the allocation of an underpayment toward an outstanding liability. This property determines whether a check is performed by the system to establish the existence of live liabilities for a client before an underpayment case is created for that client. The default value of this property is YES.

Configuring Overpayment Case Processing: If an overpayment is discovered during reassessment, an overpayment case or payment correction case can be created in order to resolve the overpayment amount. For benefits, both an overpayment case and payment correction case can be used to bill a case recipient for the amount he or she has been overpaid. For liabilities, only the overpayment case type can be used to bill a case recipient. Overpayments for liabilities are to bill

case recipients when they have not been billed sufficiently. For information on payment corrections, see “Configuring Payment Corrections” on page 20.

The Overpayment Case Processing setting is used to dictate how the system manages the discovery of an overpayment during reassessment. For benefits, the setting works in conjunction with the Use Rolled Up Reassessments setting described in “Using Rolled Up Reassessment” on page 17 and can be configured in one of three ways. The first option allows an administrator to specify that a case be created automatically when an overpayment is discovered during case reassessment in order to resolve the overpayment. The case can be an overpayment case or a payment correction case depending on the value that is specified for the Use Rolled Up Reassessments setting. Once the case is created, users must manually approve, activate, and generate the liability financials required to correct the overpayment.

The second option allows an administrator to specify that a case be automatically created and approved, activated, and liability financials generated without the intervention of a caseworker. Note that this option is only available for benefit products for which the Use Rolled Up Reassessments setting is set to 'No'.

The third option instructs the system not to automatically create a case to correct the overpayment. Instead, a task is generated to alert the caseworker of the overpayment. The caseworker can then manually create and manage an overpayment case to correct the overpayment.

When a benefit product is initially created the value for this setting is defaulted to 'Create Overpayment Case'. This value can be changed by an administrator. For liability products, the Overpayment Case Processing setting can only be set to 'Yes' or 'No'. Yes indicates that an overpayment case will be created automatically when an overpayment is discovered during case reassessment in order to resolve the overpayment. Once the case is created, users must manually approve, activate, and generate the liability financials required to correct the overpayment. A setting of 'No' instructs the system not to automatically create a case to correct the overpayment. Instead, a task is generated to alert the case worker to the overpayment. The case worker can then manually create and manage an overpayment case to correct the overpayment. When a liability product is initially created the value for this setting is defaulted to 'No'. This value can be changed by an administrator.

Date List and Re-rate Frequency: Two case reassessment settings are available that are only applicable to products configured for Cúram Rules.

The 'Date List' setting determines the type of date list that is used by the assessment engine to create case decisions.

There are two types of date lists: the event date list and the pattern date list. The event date list is a list of dates that is built into a product when the product is created. These dates include core dates that are implemented in a default application installation (e.g., the case creation date, the certification start date, the date after the certification end date, the effective date of the product rule set, etc.) as well as any custom dates that may be specific to individual products. These custom dates must be added to the list of the product's significant dates by a software developer during the initial design of a product.

The pattern date list is a list of dates that is dynamically created by the assessment engine. The assessment engine creates this date list based on the re-rate frequency for the product and the delivery pattern for the case nominee.

The 'Re-rate Frequency' setting is used by the assessment engine to compile the list of dates on which the rules engine is called in order to create case decisions. When using a pattern date list, the assessment engine compares each case decision to the case decision that follows it. If a difference is found between these two decisions, the assessment engine examines every date between the two decisions in order to determine the exact date when case circumstances change.

Configuring Certification Requirements

The following subsections describe the available configuration options that relate to certification requirements.

Indicating if Certification is Required: Certification is the process of certifying that a participant is eligible to receive a benefit. For example, a disability benefit product might require that a doctor certify a participant's inability to work once a year, in order to ensure that the participant still meets the eligibility criteria for the disability benefit. The Certification Required setting can be used to indicate whether or not the product requires some form of certification for eligibility determination. For products that are configured to be non-certifiable, no certifications may be recorded within cases based on the product. This setting is not directly used in any eligibility determination processing OOTB; however, it can be used, for example, within a customized rule set for determining client eligibility. If the Certification Required setting is enabled, a Certification Frequency must be specified.

Setting a Certification Frequency: The Certification Frequency setting indicates the frequency at which a participant is expected to provide certification to verify eligibility. The system automatically compares case certifications to the certification frequency and displays an informational message when the certification period does not align with the certification frequency. For example, if the certification frequency is set to 'Day 1 of every 1 month(s)' and the certification period entered only covers a two week period, an informational message will be displayed to alert the caseworker that the period of the certification is different to the certification frequency.

Setting a Certification Grace Period: The Certification Grace Period setting can be used to allow a participant to retain eligibility for a specified number of days after certification expires. Note that this setting is also not directly used in any eligibility determination processing OOTB, but could be used, for example, within a rule set when determining a client's eligibility.

Product Access Security Settings

Product access security is used to restrict users' ability to read, create, modify, or approve cases that are based on that product. User security profiles are defined by a hierarchy of security elements called security identifiers (SIDs). These SIDs are the building blocks of application security.

Products can be associated with specific SIDs. In order for a user to access a particular product, that user's security profile must contain the SID that is associated with that product. For instance, if a product is associated with a particular SID, then a user cannot access a case based on that product unless that SID is contained in the user's security profile. Note that if no SID is entered for a

product, then all users have access to that product. However, if at least one SID is entered for a product, then users without that SID in their profile will not have access to that product.

The following list describes the rights that can be secured for each product:

Approve

Any user whose security role contains an approve SID has the security privileges to approve (or reject), read, and maintain cases based on this product.

Create Any user whose security role contains a create SID has the security privileges to create and read case information for cases based on this product.

Maintain

Any user whose security role contains a maintain SID has the security privileges to maintain and read case information for cases based on this product. Maintain rights for product security includes rights to manage case evidence, manage case certification, and check case eligibility.

Read Any user whose security role contains a read SID has the security privileges to read case information for cases based on this product. For product security, a user with read rights can view case details. Note that any users with maintain, create, and/or approve rights can also read case details. Thus, when setting up product based security, the read rights are there to be assigned to users who can only view case details.

Location Based Security: Location based security is may also be used to restrict a user's case and client access based on a combination of the location security set up for the organization and the product access security set up for the product. Security can be applied on a location only basis or using a combination of location and product security settings. A user can only access cases in his or her location or sub-locations. However, if product access security is set up for the product governing the case, the user may be further restricted when accessing the case. For example, if a user does not have the relevant product access security as part of his or her security profile to view a case, the user will be denied access to the case. For more information on location based security, see the *Cúram Location Administration Guide*.

Configuring Benefit Products

A number of settings are available that are specific to benefit products. These settings are used to specify how over and underpayments are created upon reassessment and how deductions are made from cases that are based on that benefit product. Deduction specific settings apply to both third party deductions (deductions made from a participant's benefits in order to make payments to a third party such as a utility company) and standard deductions (any other deduction from a participant's benefit payment). These settings allow limits to be set on the total deduction amount that can be deducted from payments issued for the benefit product.

Using Rolled Up Reassessment

The Use Rolled Up Reassessments setting is used to determine whether over and underpayment amounts should be broken down and displayed by case component for a nominee or rolled up into one amount that combines the amounts over and underpaid for each case component. If the Use Rolled Up Reassessments setting is enabled, upon case reassessment, either an overpayment case or an underpayment case will be created. The overpayment case or underpayment case will contain one

benefit overpayment or benefit underpayment component for the rolled up amount. For example, if reassessment occurs due to a change in circumstance that results in an overpayment of an income support component in the amount of \$50 and an underpayment of a medical allowance component in the amount of \$20, then an overpayment case is created to represent an overpayment of \$30. When the overpayment liability is created within the payment correction case, one liability line item is created and displayed for the consolidated overpayment amount of \$30.

If this setting is not enabled, a payment correction case is created upon case reassessment. A payment correction case can represent either an underpayment or an overpayment and allows users to see the over and underpayment amounts broken down by case component for a nominee. Whether the payment correction represents an underpayment or an overpayment is dictated by whether the total balance of the payment correction case amount is an overpayment or underpayment. For example, if reassessment occurs due to a change in circumstance that results in an overpayment of an income support component in the amount of \$50 and an underpayment of a medical allowance component in the amount of \$20, then a payment correction case is created to represent an overpayment of \$30. When the overpayment liability is created within the payment correction case, two liability line items are created and displayed, one for an overpayment of \$50 for the income support component and one for an underpayment of \$30 for the medical allowance component. For more information on payment corrections, see “Configuring Payment Corrections” on page 20.

Maximum Deduction Rate

The Maximum Deduction Rate setting is used to determine the maximum percentage of a benefit payment that can be deducted from the total payment amount. For example, if the maximum deduction rate is set to 50 for a benefit product, then the total amount of all deductions for a case based on that product cannot exceed 50% of the benefit payment amount. Deductions are processed in the order that they are recorded on the system; the first deduction that causes the deduction percentage to go over the maximum deduction rate for the case will prevent any future deductions from being processed.

Minimum Deduction Amount

The Minimum Deduction Amount setting is used to determine the minimum amount of money that can be deducted from cases based on this product. Deductions are not processed if they fall below this minimum amount. For example, if the minimum deduction amount is \$10, then a deduction cannot be processed unless it is greater than \$10. The minimum deduction amount is intended to reduce the number of small payments received by utilities and other companies, who may prefer to receive multiple deductions rolled up into one payment in order to simplify financial processing.

Minimum Payment Amount

The Minimum Payment Amount setting is used to determine the minimum amount of money that a participant must receive after all deductions have been processed against the total benefit payment. For example, if the minimum payment amount is \$40 and a deduction is scheduled that will cause the total benefit payment to fall to \$30, the deduction will not be processed.

Deduction Application Properties

There are two system administration properties that relate to the creation of deductions at the case level:

- The application property, `curam.case.deduction.appliedDeductionParticipants` is used to dictate which participants can be searched across when a case worker searches for a participant whose liability an applied deduction will be allocated toward. The default value is Employer, External Party, Person, Utility meaning that employers, external parties, persons and utilities can be searched across when creating an applied deduction at the case level.
- The application property, `curam.case.deduction.thirdPartyDeductionParticipants` is used to dictate which participants can be searched across when a case worker searches for a third party participant who will receive a deduction amount. The default value is Employer, External Party, Person, Utility meaning that employers, external parties, persons and utilities can be searched across when creating a third party deduction at the case level.

Associating Deductions with Benefit Products

In addition to the deduction settings described above, both new and existing deduction types that exist on the system can be associated with a product. This allows deductions to be created at the case level for any cases that are based on that product. In addition to configuring details about the deduction type, each deduction can be assigned a priority which dictates the order in which it is processed when payments are generated for cases that are based on the product.

In addition to configuring details about the deduction type, each deduction can be assigned a priority which dictates the order in which it is processed when payments are generated for cases that are based on the product. If there is already a deduction associated to the product with the same priority as the new or updated deduction being associated to the product, the priority of the existing deduction will be automatically updated to have the next priority. The priority of any other existing deductions may also be impacted as a result. A sequencing function will automatically increase or decrease the priorities of any other deductions associated with the product. For example, if a deduction is added with a priority of 1, and there is already a deduction with a priority of 1, the new deduction will be stored with a priority of 1 and the existing deduction will be stored with a priority of 2.

Configuration is also available which provides the ability for the agency to define whether or not overlapping deductions are allowed. If a deduction is configured to prevent overlapping deductions, a validation will be displayed if a user tries to activate a deduction which already exists on the case for an overlapping time period. This can be configured for all categories of deductions (applied, unapplied and third party).

When a deduction type is associated with a benefit product, that deduction type is then automatically made available for selection at the case level. For more information on configuring deduction types, see the *Cúram Deductions Guide*.

Configuring Liability Products

A number of settings are available that are specific to liability product configuration. These settings trigger specific actions when liabilities are reassessed, depending on whether overpayments or underpayments are discovered during reassessment. The following subsections describe these settings.

Enabling Normal Reassessment

Normal reassessment creates an over or underpayment based solely on changing circumstances. The basic calculation for normal reassessment is [Actual - Reassessed].

If the 'Normal Reassessment' setting is indicated and a case is reassessed, the system does not attempt to reconcile any payments that have been received against the liability amounts.

If the normal reassessment setting is not enabled and a case is reassessed, the case undergoes a reconciled reassessment, the system creates an over or underpayment based on changing circumstances, related payments received, and over-allocation payments. The basic calculation for reconciled reassessment is [(Actual-Reassessed) - (Actual-Received)]. As part of reconciled reassessment, the assessment engine also allocates payments received and adjusts the unprocessed amounts on any over-allocation items. This processing does not occur as part of normal reassessment.

Enabling Over Allocation

An over allocation is the payment of an amount of money that is greater than the amount that was billed. If the Over Allocation setting is indicated for a liability product, amounts of money that are greater than the amounts billed to a participant can be allocated towards an outstanding liability. For example, if an employer is billed \$100 and a payment is received from that employer for \$120, the full \$120 is allocated toward the \$100, creating a \$20 over allocation.

If the over allocation setting is not indicated, then the allocation cannot exceed the liability amount. Over allocations are used for products where the liabilities are usually only an estimate of what should be billed. For example, employer contribution liabilities are usually an estimate, as the employer will tend to have more information than the agency regarding the number of its employees.

The Over Allocation setting is also used to determine how payments that are cancelled will be regenerated if the original payment included a deduction. If the setting is not enabled, when a payment is regenerated and the deduction made along with the original payment is more than the outstanding liability amount, an exact replica of the original payment will not be regenerated. The system will deduct only the outstanding liability amount. If the setting is enabled, when a payment is regenerated and the deduction made along with the original payment is more than the outstanding liability amount, the system will regenerate an exact replica of the original payment.

Configuring Payment Corrections

Payment corrections are configured in order to correct over or underpayments detected on case reassessment. A payment correction product is used to bill participants who have been overpaid or pay participants who have been underpaid. Unlike benefit and liability products that can be created in the administration application using the product wizard, the payment correction product is a pre-configured product provided specifically for use in over and underpayment processing that can only be maintained through the administration application in order to meet the underpayment and overpayment processing needs of the agency.

The configuration options that are available for the payment correction product are modeled on standard configuration options available for the benefit and liability product types. These options include all of the settings required to enable the payment correction case to serve as either an underpayment case or overpayment case such as the financial settings described in "Configuring Financial Processing for Products" on page 13, as well as the settings that are described in "Configuring Common Case Information" on page 3 that are applicable to multiple case types such as the case name, home page, and date settings.

An administrator can also restrict access on payment correction cases using the product security described in “Product Access Security Settings” on page 16, configure approval checks, delivery patterns, milestones, and time constraints, and associate deductions to the payment correction product for use when the payment correction case represents an underpayment.

Configuring Absence Reasons

Absence reasons can be configured for benefit and liability products. Absence reasons are used to define the acceptable absence reasons that are applicable to a particular program such as Food Stamps, for example, an absence reason of 'family bereavement' may be an acceptable reason for a client to be absent from a scheduled on-the-job training activity he or she is required to attend for one program, but not for another. The Acceptable setting is used to indicate if the absence reason is acceptable.

Settings are also available to indicate whether an absence reason is payable and/or deductible. Note that these settings are only applicable to CPM processing. For more information on these settings, see the Cúram Provider Management Guide.

Configuring Appeal Processes

A custom appeals process can be set up for the products that the agency provides. Appeal processes allow for the escalation of an appeal to a higher decision making body. There are three types of appeal: Hearing, Hearing Review, and Judicial Review. Appeals process configuration allows the agency to configure the order in which these types of appeal can be created when an appeal is created against a decision on a product delivery case. For more information on configuring appeal processes, see the Cúram Appeals Guide.

Configuring Bonus Payments

Bonus payments are once-off or non-standard payments issued to benefit recipients.

The options available in the Bonus Type drop-down list are associated with the BonusTypeCode code table. This is the type of bonus that is being paid. A new type can be dynamically added to this code table and published as part of system administration.

The Start Date and End Date settings are used to define the period of time during which the bonus is to be applied to cases based on this product.

The Bonus Amount setting is used to determine the bonus amount that will be paid to benefit recipients. For example, a bonus payment of \$50 may be paid to each participant over 65 to assist with fuel costs.

Configuring Time Constraints

Time constraints are the time limits applied to products. The Number of Days setting is used to determine the maximum period of time in days that applies to the time constraint type selected below. For example, if the maximum number of days is 30 and the time constraint type is 'first appeal', the system sets a timeframe of 30 days within which a participant can make a first appeal on a case decision. If the time limit does not exceed the maximum period of time, the appeal is timely. If the time limit exceeds the maximum period of time, the appeal is untimely.

The Constraint Type setting works in conjunction with the Number of Days setting. This is the time constraint type that relates to time limit functionality. When a type is selected, the system applies a time limit to the product that is governed by the number of days entered above. For example, if the 'first appeal' type is selected, the 'first appeal' time limit is applied.

The options available in the Constraint Type drop-down list are associated with the ConstraintType code table. A new value can be added to this code table and published as part of system administration. The default value is 'first appeal'. The From Date setting is used to define the date from which the product time constraint is effective.

Configuring Products to Deliver Services

A service can be configured to use product delivery processing to deliver the service. These types of services are a combination of the features of a standard product delivery and a standard service delivery. This allows case workers to utilize product delivery features such as, evidence management, eligibility determination and financial processing for the service along with functionality that is specific to service deliveries, such as provider selection and provider enquiries.

Services which use product delivery processing are configured in Cúram Provider Management (CPM) as service offerings. If an administrator specifies a service offering to use product delivery processing, a product must also be specified. The product that is specified must first be configured so that it is suitable to be delivered as a service.

Most configurations that relate to a standard product are also applicable to a product that is used to deliver a service. For example, case evidence, rules that determine eligibility, decision details, rate tables and financial processing can all be configured for a product that is used to deliver a service in the same manner that they are configured for a standard product delivery.

This section provides an overview of the configuration options that are specific to a product that is delivered as a service rather than as a standard product delivery. For detailed information on configuring service offerings and the different delivery types available for a service offering, see the Cúram Provider Management Guide.

Configuring the Display of Product Delivery Information

When a case worker creates a service for a client, a service delivery is created by the system and is displayed to the case worker. If the service uses product delivery processing, a product delivery is also created in the background by the system, to handle the eligibility and financial processing for the service. Any product delivery functionality that is related to the eligibility and financial processing such as financials, determinations, and evidence is automatically displayed at the service delivery level and can be viewed by a case worker in the context of that service delivery.

An administrator can enable or disable the display of the product delivery associated with the service in the case lists. To ensure that the product delivery is not returned in any search or case listing, the following product settings should be disabled:

- Display in Participant Programs List
- Display in Curam Universal Access
- Display in My Cases Filter
- Display in Case Search Filter

Assigning a Delivery Pattern

A default delivery pattern is assigned to every product on creation. The delivery pattern defines how and when the product is delivered in the form of a payment.

Services can either use product delivery nominee functionality or invoice nominee functionality. If a service uses product delivery nominee functionality, payments in respect of the service are made to the product delivery nominee according to the nominee's delivery pattern. If the nominee does not have a delivery pattern specified, then the product's delivery pattern will be used as the default. If a service uses invoice nominee functionality, CPM determines who the nominee will be, and the CPM nominee's default delivery pattern (rather than the product's delivery pattern) is used when payments are issued in respect of the service.

Configuring Open Ended Cases

The Allow Open Ended Cases setting dictates if an expected end date must be defined for services that are based on this product.

For services which are configured to use product delivery processing, if this setting is not specified for the product, then an end date must be explicitly specified when creating the service delivery. When the end date is reached, financials issued in respect of the product delivery are automatically ceased.

Configuring Deductions

Both new and existing deduction types that exist on the system can be associated with a product that is used to deliver a service. This allows deductions to be created for any nominees defined for services that are based on that product.

Deduction functionality for products is only available to services that use product delivery nominees. This is because the nominee for the service may be the client. Any deductions in respect of services that use product delivery nominees can be managed by case workers at the service delivery level. If a service does not use product delivery nominees, i.e. it uses invoice nominees, the nominee in most instances is a provider or provider group. Deductions in respect of these nominees are managed as part of CPM through provider financials and are not visible at the service delivery level.

Associating Products with Categories

An administrator can assign products to integrated case categories so that cases based on those products can be added to the integrated case. For products that are used to deliver services, there is no need to associate an integrated case type with the product. This is because the user adds a service, rather than a product to the integrated case. The product delivery is created in the background by the system, to handle the eligibility and financial processing for the service, and is not used as a product in its own right.

Configuring Case Evidence and Rules

Introduction

This chapter provides an overview of the available configuration options for case evidence and rules. Case evidence and rules are used to determine client eligibility and entitlement for the agency's products. Evidence is configured in administration as dynamic evidence types. Once configured, evidence types are associated with case types so that they can be captured at the case level. Evidence types are then linked to rules and rules are assigned to products to enable the system to

determine client eligibility and entitlement. This chapter also provides an overview of the available configuration options for the EvidenceFlow view.

Configuring Evidence Types

In general, an administrator creates a new dynamic evidence type by configuring its name, logical name, effective period, and a group name that is used to contain security identifiers for the evidence type.

Once created, the system automatically creates a new version of the evidence type. Administrators must then edit the metadata for the newly created version using the Dynamic Evidence Editor. The editor is used to create all of the evidence pages that relate to the new evidence type. This includes designing how the pages will appear in the evidence workspace. When each evidence type is configured and its metadata has been designed in the editor, it is activated in order to make it available for association with cases. For a detailed explanation of how to configure dynamic evidence types, see the *Cúram Dynamic Evidence Configuration Guide*.

Associating Evidence Types With Cases

Each evidence type is associated with an integrated case type or product delivery case type. If the evidence type is to be managed at the integrated case level, it is associated with an integrated case type where it can be captured on the integrated case at the case level and also reused by any product deliveries within that integrated case. Note that if the evidence type is to be managed from a standalone product delivery case, it is associated with the product governing that case.

The following table describes the available configuration options for associating a dynamic evidence type with an integrated case type or product delivery case type:

Table 3. Evidence Association Configuration Settings

Configuration Setting	Description
Evidence Type	This setting allows the administrator to select the pre-configured evidence type to be associated with the case type.

Table 3. Evidence Association Configuration Settings (continued)

Configuration Setting	Description
Category	<p>This setting allows the administrator to select an evidence category to which the evidence type belongs. For example, the 'Earned Income' evidence type belongs to the 'Income' evidence category. The evidence categories available for selection are associated with the EvidenceCategory code table. A new evidence category can be added to this code table and published as part of system administration. To provide flexibility, the same evidence type can belong to multiple categories. For example, the 'Earned Income' evidence type can belong to the 'Income' evidence category and the 'Household' evidence category. These evidence categories are displayed within the evidence workspace and are used to define the subset of evidence types that can be captured on a case. Each category is available as a filter option when a case worker captures new evidence for that evidence type within the evidence workspace. For example, when capturing new evidence, a case worker can filter the Category drop-down list by 'All'. The system automatically displays all evidence types that are associated with any category within administration.</p>
Sort Order	<p>This setting is used to dictate the order in which the evidence type is listed within the evidence workspace. For example, the sort order for the Pension Fund evidence type is set to 1 and the sort order for the 'Real Estate' evidence type is set to 2. When a case worker views the evidence types for a category in order to create new evidence within the evidence workspace, the Pension Fund evidence type is listed first and the Real Estate evidence type is listed second. If no sort order is specified, the evidence types are listed in alphabetical order. Note that by default, evidence types are listed in alphabetical order.</p>
Quick Link	<p>This setting is used to dictate if the evidence type is to be available as a 'Preferred' filter option in the evidence workspace. For example, if this setting is enabled for the 'Earned Income' evidence type, the 'Earned Income' evidence type is returned when a case worker selects the 'Preferred' category filter option when capturing new evidence.</p>

Enabling Evidence Sharing on Evidence Types

Evidence sharing allows evidence to be shared between agencies. Administrators can choose which evidence types should be shared and then to enable or disable each evidence type for sharing on each case type. For example, an integrated case

type may have several evidence types and only a few of these evidence types may be suitable for sharing, therefore only these types are enabled. Note that in order for evidence sharing to work at the case level, in addition to enabling evidence sharing on evidence types, agencies must also install Cúram Evidence Broker functionality. For more information, see the Cúram Evidence Broker Guide.

Configuring Evidence Approval Checks

An administrator configures evidence approval checks by specifying the percentage of evidence changes that require manual approval. All other evidence changes get automatically approved.

Evidence approval checks can also be configured at the organization and user level. The evidence approval check settings for a product are the “last step” in the system's evaluation of whether not evidence requires approval. In other words, when evidence is submitted for approval by a user, the system first checks the user's evidence approval check setting, then checks the evidence approval settings for the organization unit that the user belongs to. After checking these settings, the system checks the evidence approval setting at the product level. If at any point the system determines that the evidence requires approval, the case is assigned to a case supervisor for approval.

Configuring Rule Sets and Designing Rules

Before the system can make determinations regarding client eligibility and entitlement, rules that are applied to a client's real world data must be designed as rules classes using the Cúram Rules Editor. Rule sets are configured to contain these rules which must then be linked to the evidence types, non-evidence entities, and products for which eligibility will be determined. The following subsections provide an overview of the available configuration options that support the rule set configuration, rules design, and the assignment of rules to evidence types and products.

Configuring and Categorizing Rule Sets

Administrators can configure rule sets by creating new ones or modifying existing ones from the list of rule sets that are currently active on the system. As part of rule set creation, the rule set name and display name are specified. The rule set name is the technical name of the rule set and cannot be modified. The display name of the rule set can be modified and is the name of the rule set that is displayed to an administrator within the administration application.

Each new rule set may be associated with an existing rule category by selecting it from the existing categories set up on the system. Note that new rules categories can also be created as part of application administration. A name and description is added for each new rules category. To modify an existing rule set, administrators can search for the rule set by filtering it by category using the Category drop-down list. The required rule set can then be modified from the list of rule sets returned. Once a rule set is configured, the rules classes that are contained within the rule set and their corresponding attributes are defined or modified, typically by a rules designer, within the Cúram Express Rules Editor. Once defined, the rule set is validated and published.

For more detailed information on creating and editing rules using the CER Editor, see the Working with Cúram Express Rules Guide.

Linking Rules to Evidence Using Rules Data Configurations

Rules data configurations are used to link the data that is needed to ascertain eligibility and entitlement with the rules that are used to determine it. The application allows both evidence types and non evidence entities to be linked to rules sets through rules data configurations. A new rules data configuration can be added dynamically. For convenience, existing rules data configurations can also be copied and edited on the fly as required.

A name must be specified for each rules data configuration and data is then added in XML format. For example, a data configuration can be added that links income assistance data to the 'Income Assistance Product Eligibility and Entitlement' rule set.

Each new or in edit rules data configuration must then be published in order for it to become active on the system. Once published, the changes will be taken into account when case reassessment next occurs within any product delivery case based on a product that uses the rules data configuration that was changed, for example when reassessment is manually initiated within the case or financials are generated. The system also captures information about the fact that a change has occurred to a rules data configuration, which is then used by batch processes that can be initiated to reassess all cases affected by the change. For more detailed information on rules data configurations, see the *Cúram How to Build a Product guide*.

Assigning Rules to Products

In order for eligibility decisions to be created within product delivery cases based on the products, rules that are designed for determining eligibility and entitlement must be assigned to products. Note that the application facilitates the assignment of both *Cúram Express Rules* and *Cúram Rules* to benefit and liability products, depending upon whether the product is configured for use with *Cúram Express Rules* or *Cúram Rules*. The following four subsections describe the available configuration options for the assignment of *Cúram Express Rules* to products. For a description of how *Cúram Rules* are assigned to products, see “Assigning *Cúram Rules* to Products” on page 31.

Assigning a Product Period to a Product

Rules are assigned to products using product periods. Each product period defines the time frame over which rule sets are applicable to the product, for example, the 2011 calendar year. Therefore, each product must have a product period associated with it in order to determine client eligibility and entitlement. An administrator can create one or more product periods for a product.

Note:  The key decision factors feature is deprecated. For more information, see *Deprecated features*.

The following table describes the available product period configuration settings:

Table 4. Product Period Configuration Settings

Configuration Setting	Description
Name	The name of the product period. This field is mandatory.

Table 4. Product Period Configuration Settings (continued)

Configuration Setting	Description
Start Date	This setting is used to determine the date from which the product period is effective. This field is mandatory. The start date defaults to the current date on which the product period is created.
End Date	The date to which the product period is effective. Note that if no product periods assigned to a product have an effective date that covers the lifetime of the product delivery case, the system will only determine eligibility up to the end date specified by the latest product period. For example, a product delivery case has a case start date of January 1, 2011 and an expected end date of Dec 31, 2011, and its associated product has only one product period with an end date of November 1, 2011. The system will determine eligibility for the client up to November. From November 1, 2011, the following decision will be displayed at the case level: Eligibility Could Not Be Determined.
Product Structure Rule	This setting is used to assign the Product Structure rule set that defines what objectives and objective tags a client is potentially entitled to receive to the product. This field is mandatory. The administrator searches for the product structure rule by selecting the rule set to which it belongs from the Rule Set drop-down list. The product structure rule is selected from the list of rules displayed. Note that the rule sets that are available within the drop-down list must first be configured. For more information on configuring rule sets, see "Configuring Rule Sets and Designing Rules" on page 26.

Table 4. Product Period Configuration Settings (continued)

Configuration Setting	Description
Eligibility/Entitlement Rule	<p>The setting is used to assign the Eligibility/Entitlement rule set that is used to determine client eligibility and entitlement to the product. This setting is mandatory. An eligibility/entitlement rule set must be assigned to the product over a period of time that covers the lifetime of the product delivery case in order for client eligibility to be determined. For any periods of time for which there is no eligibility/entitlement rule set assigned, the following decision will be displayed at the case level: Eligibility Could Not Be Determined. The administrator must search for the eligibility/entitlement rule by selecting the rule set to which it belongs from the Rule Set drop-down list. The appropriate eligibility/entitlement rule is selected from the list of rules displayed. Note that the rule sets that are available within the drop-down list must first be configured. For more information on configuring rule sets see “Configuring Rule Sets and Designing Rules” on page 26.</p>
Key Decision Factors Rule	<p>This setting is used to assign the Key Decision Factors rule set that is used to extract information about the significant factors that were involved in determining a client's eligibility to the product. This setting is optional. These decision factors will be displayed in the graphical representation of the determination displayed at the case level. The administrator must search for the key decision factors rule by selecting the rule set to which it belongs from the Rule Set drop-down list. The appropriate key decision factors rule is selected from the list of rules displayed. Note that the rule sets that are available within the drop-down list must first be configured. For more information on configuring rule sets, see “Configuring Rule Sets and Designing Rules” on page 26.</p>

Assigning Decision Details Rules to a Product

In addition to assigning product structure rules, eligibility/entitlement rules, and key decision factors rules to products, an administrator can optionally assign one or more decision details rules to a product. Decision details rules are used to provide a user-friendly explanation of how eligibility and entitlement was determined, to assist the user in understanding the results of the execution of the eligibility and entitlement rule set. There are two steps to assigning decision details rules to products.

The first step is to configure the display categories for the product that specify how the information displayed to the user should be grouped and ordered when

viewing the details of how a particular decision was determined. For example, the explanation of determination results may be grouped into a summary category, a household income category, and a medical expense category so that the user can view summary information first on one page followed by detailed information about how household income and medical expenses impacted a decision on subsequent pages. Each product can have multiple display categories associated with it.

The following table describes the configuration options that are available when adding a new display category to a product:

Table 5. Display Category Configuration Settings

Configuration Setting	Description
Name	The name of the display category. This name determines the label to be used on the page that explains the eligibility results.
Display Order	This setting is used to specify the left to right order in which the page displaying the information for a category will appear. For example, if the Summary display category is set to 1, the page which displays Summary information for a decision will be displayed first.
Display Page	This setting is used to specify the name of the .jsp page that is displayed for the category.
Category Reference	The user entered reference number that represents this display category.

The second step is to associate appropriate decision details rule to the product period. For each decision details rule, this is done by selecting the display category page on which decision details will be displayed and then assigning the rules used to determine the information that is displayed for the category. An administrator must first select a display category from the drop-down list of categories associated with the product. The administrator must then search for the decision details rule by selecting the rule set to which it belongs from the Rule Set drop-down list. The appropriate decision details rule is selected from the list of rules displayed. Note that the rule sets that are available within the drop-down list must first be configured. For more information on configuring rule sets, see “Configuring Rule Sets and Designing Rules” on page 26.

Editing Eligibility Determination Details

As part of configuring rules for a product, an administrator can also edit the product configuration options that are used during eligibility and entitlement determination processing. See “Configuring Eligibility Determination and Decisions” on page 9 for a description of these options.

Publishing Rules For Products

When rules are initially assigned to products they are in an in-edit state and must therefore be published in order for the system to use them when determining eligibility and entitlement within a case. Once published, an administrator can then edit existing product rules by making a copy of the published rules for a product, and then editing the rules as required. Once finished, the changes may then be published or discarded. If the changes are published, a snapshot of the previous version of the rules is taken and a new version is saved.

Once published, the changes will be taken into account when case reassessment next occurs within any product delivery case based on the product, for example when reassessment is manually initiated within the case or financials are generated. The system also captures information about the fact that a change has occurred to a product configuration, which is then used by batch processes that can be initiated to reassess all cases affected by the change. For an overview of how system wide changes are applied to cases, see the *Cúram Integrated Case Management Guide*.

The administrator can also view a history of all versions of the rules that have been associated to the product over time.

Assigning Cúram Rules to Products

Rule sets that are implemented using Cúram Rules can be assigned to a product. The process begins with selecting the rule set. The rule set is searched for and selected from the list of existing rule sets.

At least one rule set must be assigned to a product as a prerequisite to eligibility determination. Information recorded for the rule set assignment includes the name of the eligibility rule set to be assigned to the product and the period during which the rule set is assigned to the product. This period cannot overlap with the periods of existing product rule set assignments. One or more rule sets can be assigned to a product; however, only one rule set can be active during any given time period.

Note that the rule sets that are implemented using Cúram Rules are maintained using the Cúram Rules Editor. For information on maintaining these rule sets, see the *Cúram Rules Editor Guide*.

(deprecated) Configuring the EvidenceFlow View



The following sections describe the available configuration options for the **EvidenceFlow** view.

(deprecated) Configuring the Default Evidence Type to Display In the EvidenceFlow View



When the **EvidenceFlow** view is first initialized by a caseworker, a default evidence type is displayed within the **EvidenceFlow**.

Note that this default evidence type is only displayed the first time the case worker accesses the EvidenceFlow view. The next time the case worker accesses the EvidenceFlow view, the last evidence type viewed by the case worker is automatically displayed so that the case worker does not need to navigate to it again. The following application property is available that determines the initial evidence type to be displayed in the EvidenceFlow view:

- `curam.evidenceflow.defaultevidence.casetypecode` is used to specify the default evidence type to be displayed in the EvidenceFlow on initialization. This property allows an administrator to select a default evidence type to be displayed when the EvidenceFlow is initially loaded by the system. This is achieved by setting the value of this property to be a code from the EvidenceType codetable. The default value is 'PET2', the code for the person details evidence type.

(deprecated) Configuring the EvidenceFlow View Cover Delay



The application property `curam.evidenceflow.coverdelay` is used to specify the length of time in milliseconds that the system takes to reload the bottom panel of the **EvidenceFlow** view each time a tile within the EvidenceFlow changes.

In the event that the agency finds that the reload time is too long or too short, administrators can use this property to adjust the length of time as required. The default value of this property is '500' meaning that the bottom panel will reload 500 milliseconds after a tile in the EvidenceFlow changes.

(deprecated) Enabling Logging for the EvidenceFlow View



Two system application properties are available that control logging for EvidenceFlow processes. If logging is enabled, the system adds additional information about the evidence processing being executed to the application server log file. This information can be used by developers to analyze and troubleshoot potential issues with evidence functionality.

- `curam.evidenceflow.defaultevidence.casetypecode.log.on` is used to enable logging when the system processes the EvidenceFlow default evidence type. The default value of this property is 'YES' meaning that logging is turned on when the system retrieves the default evidence type configuration described in section “(deprecated) Configuring the Default Evidence Type to Display In the EvidenceFlow View” on page 31. If issues occur when this configuration is retrieved, developers can consult the information added to the log file to analyze and troubleshoot the issues.
- `curam.evidenceflow.coverdelay.log.on` is used to enable logging when the system retrieves and processes the EvidenceFlow cover delay configuration described in section “(deprecated) Configuring the EvidenceFlow View Cover Delay” above. The default value of this property is 'YES' meaning that logging is turned on when the system retrieves the default evidence type configuration described in section “(deprecated) Configuring the Default Evidence Type to Display In the EvidenceFlow View” on page 31. If issues occur when this configuration is retrieved, developers can consult the information added to the log file to analyze and troubleshoot the issues.

(deprecated) Configuring the EvidenceFlow Polling Interval



The application property `curam.evidenceflow.polling.interval` is used to determine the interval of time in milliseconds that the **EvidenceFlow** waits between polls to the application server in order to determine if evidence has changed. The **EvidenceFlow** polls the server each time changes are made that result in issues, verifications, or reminders being added to or removed from evidence.

Polls to the server can be costly in terms of time and machine resources. For example, if the polling interval is set at too low a number, system performance can deteriorate. If the polling interval is set at too great a number, case workers may need to wait for too long a period of time before they can see changes that they have applied. For example, a case worker may resolve an issue with a piece of evidence, however if the polling interval is set to 10 seconds, the system will not

remove the issue from the evidence type for a least 10 seconds. The default value of this property is '2000' meaning that the system will poll the server every 2000 milliseconds to determine if evidence has changed.

(deprecated) Validating the EvidenceFlow Stack XML



Two application properties are available that are used to determine whether the **EvidenceFlow** stack XML that is sent and retrieved from the application database is validated against its schema.

The stack XML is a representation of the EvidenceFlow stack functionality and its contents in XML format. It includes the following information: the stack name, version, as well as the evidence types that are contained within the stack. The purpose of stack XML validation is to ensure that the XML stack that is retrieved by the system is in a format that is supported and understood by the EvidenceFlow view. If EvidenceFlow stack XML validation fails, the system automatically alerts the user to this effect via an error message.

- **curam.evidence.stack.validate.data.on.retrieval** is used to determine if the stack XML that is retrieved from the database is validated against its schema. The default value of this property is set to 'YES'. Administrators may wish to set this value to 'NO' to improve system performance when the system retrieves stacks from the database.
- **curam.evidence.stack.validate.data.on.set** is used to determine if the stack XML data that is sent to the database is validated against its schema. The default value of this property is set to 'YES'. Administrators may wish to set this value to 'NO' to improve system performance when the system sends stack XML data to the database.

Configuring Ongoing Case Management

Introduction

This chapter provides an overview of the configuration options that support ongoing case management in the application.

Configuring the Case Search

Note: The Generic Search Server is deprecated.

Two types of case search are available: the standard case search and the enhanced case search. By default, the standard case search is enabled. The enhanced case search can be enabled within system administration using application properties. Administrators can enable or disable the enhanced case search as required.

The following two application properties must be enabled in order for the enhanced case search to work:

- The application property, `curam.lucene.luceneEnhancedSearchEnabled` is used to enable the enhanced search functionality in the application. By default, this property is set to NO. An administrator can enable enhanced searching by setting this property to YES.
- The application property, `curam.lucene.luceneEnhancedCaseSearchEnabled` is used to enable the enhanced case search. By default, this property is set to NO. An administrator can enable the enhanced case search by setting this property to

YES. When this property is enabled, a client first and last name can be specified as search criteria on the case search page.

An additional application property is available that makes changes to searchable data available to the enhanced search:

- The application property, `curam.lucene.luceneOnlineSynchronizationEnabled` is used to enable an event publishing mechanism that recognises changes to searchable data. By default, this property is set to NO. This property must be set to YES in order for changes to searchable case information to be recognised and picked up by the search server.

Note that in addition to the enhanced case search, an enhanced search can also be enabled for other searches within the application such as person, employer, and information provider searches. Enhanced searches for these types of searches fall outside the scope of this guide. For more information on enhanced searches, see the (Deprecated) *Cúram Generic Search Server Developer Guide*.

Configuring Case Approval

Two configuration options are available that allow the agency to configure case approval. Note that case approval is applicable to product delivery cases only. The following subsections describe these options.

Configuring Case Approval Checks

Case approval check functionality allows an agency to configure case approval checks on all cases governed by a product. Setting case approval checks at the product level governs all cases delivering that product. The Percentage setting is used to specify the percentage of cases based on that product that need to be reviewed by a case supervisor. For example, 40% of cases require manual approval; the other 60% will be automatically approved.

The Estimated Cost setting is used to specify the estimated cost of the cases submitted for approval. All cases that cost more than the estimated cost specified on the configured case approval check will be sent to a case supervisor for approval. This setting works in conjunction with the Percentage setting described above. Any case at or below this estimated cost will only be checked for approval if it falls within the percentage of cases to be checked. For example, if a percentage of 20 is specified and an estimated cost of \$200 is specified, only 20% of submitted cases costing \$200 or less need to be manually checked for approval. Note, however, that all of a product's cases above the \$200 estimated cost would need to be checked for approval.

Case approval checks can also be set up at the organization unit and user level. At the organization unit and user levels, an administrator can specify if the case approval check applies to a single product or to all products. If all products are indicated, then all of the user's cases submitted for approval need to be checked by a case supervisor. If the case approval check applies to a single product, only cases governed by that product will require approval. The case approval check settings for a product are the "last step" in the system's evaluation of whether or not a case requires approval. When a case is submitted for approval by a user, the system first checks the user's case approval check setting, then checks the case approval settings for the organization unit that the user belongs to. After checking these settings, the system checks the case approval setting at the product level. If at any point the system determines that the case requires approval, the case is assigned to a case supervisor for approval.

Configuring Automatic Case Approval by User

The application property `curam.case.productdeliveryapproval.automaticSupervisorCaseApproval` is used to determine whether the system automatically approves product delivery cases that are submitted for approval by the user who is the case supervisor. By default, this property is set to YES. If this property is set to NO, the system does not automatically approve product delivery cases that are submitted for approval by the case supervisor. On submission, the case supervisor must manually approve each case in order to progress it to the next stage in its lifecycle.

Configuring the Delayed Processing Display

The application property `curam.custom.delayedprocessing.dpdisplayinstatushistory` is used to determine whether the 'Delayed Processing Pending' status is displayed in the Case Status History for a product delivery case. Delayed Processing Pending is a case status used by the system to indicate to the user that substantial system processing is happening when an on-line process is executed. Delayed processing prevents the user having to wait for a process to complete before continuing with other system actions. The default value of this property is YES meaning that a 'Delayed Processing Pending' status is displayed in the Case Status History every time an instance of delayed processing takes place.

Note that the 'Delayed Processing Pending' status is temporarily displayed on the Product Delivery Home page regardless of the value set for this property. This status is displayed until the processing is complete. The purpose of this is to let the user know that other system actions can be performed while the product delivery is in the delayed processing pending state.

Configuring Case Suspension and Case Closure

One system application property is available that controls case suspension processing:

- The application property, `curam.miscapp.payuptosuspendeddate` is used to determine whether payments should be issued up to the date of suspension when a case is suspended. The default value of this property is YES meaning that payments will be issued up to the date of suspension. If this property is set to NO, no payments will be issued after the case is suspended.

Three system application properties are available that control case closure processing:

- The application property, `curam.case.closeCaseWithTasks` is used to determine whether cases that have outstanding tasks associated with them can be closed. Note that this property is applicable to product delivery and integrated case closure. The default value of this property is YES meaning cases that have outstanding tasks associated with them can be closed. If this property is set to NO, cases cannot be closed until all outstanding tasks for those cases are closed.
- The application property, `curam.case.productdeliveryactivationeligibility.ineligibleautoclosecase` is used to determine whether ineligible cases are automatically closed. The default value of this property is NO meaning that an ineligible product delivery case will be activated in the same way as an eligible product delivery. This allows reassessment to occur if there are evidence changes on the ineligible case, which may result in an eligible decision.
- The application property, `curam.miscapp.payuptocloseddate` is used to determine whether payments should be issued up to the date of closure when a case is closed. The default value of this property is YES meaning that payments

will be issued up to the date of closure. If this property is set to NO, financial components will be closed and payments will no longer be issued.

Configuring Case Milestones

All case milestones are based on an associated milestone configuration which is configured as part of administration. To support the manual and automatic creation of milestones within a case, it is also necessary to set up an association between a milestone configuration and the case type (product delivery, integrated case, or screening type). Each milestone has an expected start and end date during which the important event is scheduled to start and complete and an actual start and end date.

A milestone waiver request can also be set up in that allow the milestone expected start and end dates to be changed for an automatically created milestone. Milestone waiver request approval checks can also be set up at the organization and user level, for all milestone types or for a milestone of a particular type.

OOTB Cúram Integrated Case Management provides functionality to set up milestones. Note, however, some development is also required. Setting up milestone configurations and developing milestones to work at the case level is described in full in the Cúram Milestone Developers Guide . For further information, see this guide.

Configuring Recent Case Actions

Three system application properties are available that control the number of days within which cases are displayed on a user's lists of recently assigned, viewed, and approved cases. The following properties are available:

- The application property, `curam.user.caserecentassigned` is used to determine the length of time (in days) within which the system determines cases to be recently assigned. For example, if this value is set to 7, any cases that were assigned to a user within the last 7 days are displayed on that user's list of recently assigned cases. The default value of this property is 7.
- The application property, `curam.user.caserecentviewed` is used to determine the length of time (in days) within which the system determines cases to be recently viewed. For example, if this value is set to 7, any cases that were viewed by a user within the last 7 days are displayed on that user's list of recently viewed cases. The default value of this property is 7.
- The application property, `curam.user.caserecentapproved` is used to determine the length of time (in days) within which the system determines cases to be recently approved. For example, if this value is set to 7, any cases that were approved for a user within the last 7 days are displayed on that user's list of recently approved cases. The default value of this property is 7.

Configuring the Case Transaction Log

The application property `curam.casetransactionlog.nooftransactions` is used to determine the maximum number of entries that are displayed on the case home page within the case transaction log. For example, the value of this property can be set to 15 such that 15 is the maximum number of entries that can be displayed as recent case transactions on the product delivery case home page. This property is set as part of system administration. Note that the value that is set for this property applies to both integrated case and product delivery case transaction logs. The default value is 10. An administrator can change this default value as required. Note that if the number of case transactions exceeds the maximum number set, only the most recent transactions are displayed in the transaction log.

Implementing Rate Tables

Introduction

This appendix describes the functionality provided by the application that allow the agency to implement rate tables. This appendix describes the rate table entities and the fields they contain. It also describes the rate table business processes and provides examples of how different types or rate table can be used. Rate tables are designed to store any given value or set of values that can vary over time. Rate tables can vary from the simple to the complex. A simple rate table may have a single column with a single row containing a value. Complex rate tables can consist of multiple columns, that may contain multiple sub-columns, and multiple rows. Each cell in addition to a value may contain a maximum and a minimum value. The interpretation of the values contained in a rate table is dependent upon the context within which they are used.

Rate Tables Overview

Rate table functionality allows for the following:

- Rates can vary over time.
- Rates are stored in table structures.
- It is possible to maintain rates independent from either rules or code.
- Rates are inherently effective date based. Rates are continually raised and lowered in line with budgetary changes. Each set of rates should be effective until a later set of effective dated rates is entered.
- Rate tables can be one or two dimensional with a type, minimum and maximum values associated with each entry (effectively resulting in three dimensional tables).
- Users can maintain rate tables through the application.
- Business processes access the rate table via code.

Examples of rate tables include:

- Age thresholds - for example under 65, over 18.
- Monetary limits - for example earnings must be at least \$4,000, capital must be less than \$10,000.
- Limits on the numbers of hours worked per week.
- Tax rates to be applied across a number of benefits.

Rate Table Entities

The following four entities form the design of rate table functionality:

- RateHeader
- RateColumn
- RateCell
- RateRow

The remainder of this section describes the entities listed above.

Rate Header

The rate header entity stores header information for a rate table. Each record on this table refers to a rate table with an effective date and a status. It contains the following fields:

Table 6. Summary of Rate Header Entity Fields

Entity Field	Description
Effective Date	This field is the date on which this record becomes effective.
Rate Table Type	This field is the type of the rate table. It is populated from the <i>RateTableType</i> code table. There should be one entry in this code table for each rate table in the system. This field is used to determine the set of temporal records that comprise the data for a given rate table.
Rate Status	This field is the status of this record. It is populated from the <i>RateStatus</i> code table. Where a second record has been cloned from a rate table the original record will have a rate status of superseded.
Comments	This field contains the comments about this record.

Rate Column

The rate column entity represents a column in a given rate table. Each column can contain one or more cells. It contains the following fields:

Table 7. Summary of Rate Column Entity Fields

Entity Field	Description
Rate Header ID	This field is the ID of the <i>RateHeader</i> with which this record is associated.
Parent Column ID	This field is the ID of the parent column of this column. This will only be populated for sub-columns. This field is optional.
Rate Column Key Min	This field is the minimum value for this column. This field is optional.
Rate Column Key Max	This field is the maximum value for this column. This field is optional.
Rate Column Key Value	This field is the value for this column. When there is only a single row in a table, this value is used. This field is optional.
Rate Column Type	This field is the type of the column. It is populated from the ' <i>Rate ColumnType</i> ' code table. There should be one entry in this code table for each rate column in the system.
Rate Column Index	This field is the index of the column within the rate table. If the column has no parent, this field refers to the index of the column within the table as a whole. If the column has a parent (making it a sub-column), then this field refers to the index of the column within the parent column.
Any Minimum Indicator	This field is used to indicate if any minimum value has been set for this column. If the value of this field is 'False', then no minimum value has been set for this column.

Table 7. Summary of Rate Column Entity Fields (continued)

Entity Field	Description
Any Maximum Indicator	This field is used to indicate if any maximum value has been set for this column. If the value of this field is 'False', then no maximum value has been set for this column.

Rate Row

The rate row entity represents a row in a rate table. Each rate row record can relate to one or more rate cell records. It contains the following fields:

Table 8. Summary of Rate Row Entity Fields

Entity Field	Description
Rate Header ID	This field is the ID of the related rate header record.
Rate Row Type	This field is the type for this row. This field is optional.
Rate Row Index	This field is the index of the row within the rate table

Rate Cell

The rate cell entity represents a cell in the rate table. It contains the following fields:

Table 9. Summary of Rate Cell Entity Fields

Entity Field	Description
Rate Column ID	This field is the ID of the RateColumn record with which the cell is associated.
Rate Cell Min	This field is minimum value for this cell. If a minimum value is entered, a maximum value must be entered. Also, the minimum value cannot be greater than the maximum value.
Rate Cell Max	This field is maximum value for this cell. If a maximum value is entered, a minimum value must be entered.
Rate Cell Value	This field is the value for this cell. This value is mandatory if no minimum and maximum value are entered.
Rate Cell Index	This field is the index (row) of the cell within the column.
Any Minimum Indicator	This field is used to indicate if any minimum value has been set for this cell. If the value of this field is 'True', then no minimum value has been set for this cell.
Any Maximum Indicator	This field is used to indicate if any maximum value has been set for this cell. If the value of this field is 'True', then no maximum value has been set for this cell.
Rate Row ID	This field is the ID of the RateRow record with which the cell is associated.

Table 9. Summary of Rate Cell Entity Fields (continued)

Entity Field	Description
Blank Cell Indicator	This field is used to indicate whether the rate <i>RateCell</i> has any value recorded.

Rate Table Business Processes

The rate table business process contains a number of methods that are used to maintain rate tables in the application. A separate business process, *ParseRates*, is used to parse rate table records into the XML format used to drive the display of rate tables.

Rate Table

This section lists the methods supplied by the *RateTable* class and a brief description of their purpose.

Clone Rate Table:

This method clones a rate table. The cloned rate table will have the type and effective date specified as parameters.

Create Rate Cell:

This method creates a rate cell. It adds a rate cell record to the database.

Create Rate Column:

This method creates a rate column. It adds a rate column record to the database.

Create Rate Table Header:

This method creates a rate table header. It adds a rate header record to the database.

Create SubColumn:

This method creates a rate column. It adds a rate column record to the database that relates via a *parentColumnID* to the parent column.

Create SubRow:

This method creates a sub-row. It adds a number of rate cell records to the database to represent this.

List Rate Table:

This method returns a list of available rate tables.

List Rate Table History:

This method returns a list of rate header records by rate table type (all), effective date or status.

Modify Rate Cell:

This method modifies rate cell data.

Modify Rate Column:

This method modifies rate column data.

Modify Rate Header:

This method modifies rate header data.

Modify Rate Row:

This method modifies rate row data.

Modify SubColumn:

This method modifies sub-column data.

Read Rate Cell Data:

This method reads the details of a rate cell.

Read Rate Column:

This method reads the details of a rate column.

Read Rate Header:

This method reads the details of a rate header.

Read Rate Row:

This method reads the details of a rate row.

Read Rate Table:

This method reads the details of the rate table from the database. It performs a Rate Header read and then invokes the *encodeRateTableData* method on the *ParseRates* class to get the remaining details.

Remove Rate Cell:

This method removes a cell from a rate table.

Remove Rate Column:

This method removes a column from a rate table.

Remove Rate Row:

This method removes a row from a rate table.

Remove SubColumn:

This method removes a sub-column from a rate table.

Remove SubRow:

This method removes a sub-row from a rate table.

Parse Rates

This section lists the methods supplied by the *ParseRates* class and a brief description of their purpose.

Encode Rate Table Data:

This method reads the rate data from the database and encodes it into the XML format. For further information on this format, see 'Rate Table XML Format' below.

Update Indexes For Rate Cell:

This method sets the *RateCell* record index following any Rate Table record modifications that require re-indexing for the cell.

Update Indexes For Rate Column:

This method sets the *RateColumn* record index following any Rate Table record modifications that require re-indexing for the column.

Update Indexes For Rate Row:

This method sets the *RateRow* record index following any Rate Table record modifications that require re-indexing for the row.

Update Indexes For Sub-Column:

This method sets the sub-column *RateColumn* record index following any Rate Table record modifications that require re-indexing for the sub-column.

Update Indexes For Sub-Row:

This method sets the *RateCell* record index following any Rate Table record modifications that require re-indexing for the sub-row.

Rate Table XML Format

This section describes the xml format of the rate table data. This is interpreted by the client in order to display the rate table.

<RATES_DATA>:

Each rate table description begins with this tag. This tag has a READ_ONLY attribute. It contains a number of columns.

<COLUMN>:

This tag has attributes INDEX, ID, and TYPE. Each column can contain a number of rows or sub-columns.

<ROW>:

This tag has attributes INDEX, ID, TYPE and NUM_SUB_ROWS. Each row can contain a number of cells:

<SUB_COLUMN>:

This tag has attributes INDEX, ID, MAXIMUM, MINIMUM and VALUE. Each column can contain a number of rows.

<CELL>:

This tag has attributes ID, VALUE, MAXIMUM, MINIMUM, and COLUMN_INDEX.

Examples of Rate Table Usages

The following examples provide a selection of the possible uses of rate tables.

Two Dimensional Rate Table

A two dimensional rate table consists of:

- Any number of columns, each with a type.
- Any number of rows, with corresponding number of cells.

An example of a rate table of this type is given below:

Table 10. Two Dimensional Rate Table

	New Employer (%)	Q Rate Employer (%)	G Rate Employer (%)	F Rate Employer (%)
Normal Rate	1	2	4	8
Subsidiary Rate	2	4	8	16
RESF Rate	0.075	0.075	0.075	0.075

The XML string for the whole of this rate table would look like this:

(CT1 implies New Employer %, RT1 implies Normal Rate, and so on)

```

<RATES_DATA>
<COLUMN INDEX=1 ID=1 TYPE=CT1>
<ROW INDEX=1 ID =2 TYPE=RT1>
<CELL ID=3 VALUE=1 COLUMN_INDEX=1/>
</ROW>
<ROW INDEX=2 ID =4 TYPE=RT2>
<CELL ID=5 VALUE=2 COLUMN_INDEX=2/>
</ROW>
<ROW INDEX=3 ID =6 TYPE=RT3>
<CELL ID=7 VALUE=0.075 COLUMN_INDEX=3/>
</ROW>
</COLUMN>
<COLUMN INDEX=2 ID=8 TYPE=CT2>
<ROW INDEX=1 ID =2 TYPE=RT1>
<CELL ID=10 VALUE=2 COLUMN_INDEX=1/>
</ROW>
<ROW INDEX=2 ID =4 TYPE=RT2>
<CELL ID=12 VALUE=4 COLUMN_INDEX=2/>
</ROW>
<ROW INDEX=3 ID =6 TYPE=RT3>
<CELL ID=14 VALUE=0.075 COLUMN_INDEX=3/>
</ROW>
</COLUMN>
<COLUMN INDEX=3 ID=15 TYPE=CT3>
<ROW INDEX=1 ID =2 TYPE=RT1>
<CELL ID=17 VALUE=8 COLUMN_INDEX=1/>
</ROW>
<ROW INDEX=2 ID =4 TYPE=RT2>
<CELL ID=19 VALUE=16 COLUMN_INDEX=2/>
</ROW>
<ROW INDEX=3 ID =6 TYPE=RT3>
<CELL ID=21 VALUE=0.075 COLUMN_INDEX=3/>
</ROW>
</COLUMN>
<COLUMN INDEX=4 ID=22 TYPE=CTS4>
<ROW INDEX=1 ID =2 TYPE=RT1>
<CELL ID=24 VALUE=4 COLUMN_INDEX=1/>
</ROW>
<ROW INDEX=2 ID =4 TYPE=RT2>
<CELL ID=26 VALUE=8 COLUMN_INDEX=2/>
</ROW>
<ROW INDEX=3 ID =6 TYPE=RT3>
<CELL ID=28 VALUE=0.075 COLUMN_INDEX=3/>
</ROW>
</COLUMN>
</RATES_DATA>

```

Two Dimensional Rate Table with Ranges

A two dimensional rate table with ranges consists of:

- Any number of columns, each with a type.
- Any number of rows, each with a type.
- Any number of cells, each with:
 - a minimum value
 - a maximum value
 - a value

An example of a rate table of this type is given below:

Table 11. Two Dimensional Rate Table with Ranges

	Account Percentage (%)	New Employer (%)	Q Rate Employer (%)	G Rate Employer (%)
Normal Rate	0 : 1.5	1	2	4
	1.6 : 3	1.5	2.1	4.1
	3	1.6	2.2	4.2
Subsidiary Rate	0 : 1.5	2	4	8
	1.6 : 3	2	4	8
	3	2	4	8
RESF Rate	0 : 100	0.075	0.075	0.075

The above example illustrates the format used by the Cúram Reference Application to display minimum and maximum values for a cell. The minimum and maximum values for a cell are separated using a colon (:), e.g. '0 : 1.5'. If in addition to a range, a value is also specified, the value is separated from the range using another colon character, e.g. '0 : 1.5 : 4'.

In the example above, the account percentage column is used to determine the rate appropriate for each different employer type, e.g. a Q Rate Employer with an account percentage value of 1.9%, will be charged 2.1% for the Normal Rate and 4% for the Subsidiary Rate.

The XML string for the whole of this rate table would look like this:

(CT1 implies Account Percentage %, RT1 implies Normal Rate, and so on)

```

<RATES_DATA>
<COLUMN INDEX=1 ID=1 TYPE=CT1>
<ROW INDEX=1 ID =2 TYPE=RT1 NUM_SUB_ROWS=3>
<CELL ID=3 MINIMUM=0.0 MAXIMUM=1.5 COLUMN_INDEX=1/>
<CELL ID=4 MINIMUM=1.6 MAXIMUM=3.0 COLUMN_INDEX=2/>
<CELL ID=5 VALUE=3.0 COLUMN_INDEX=3/>
</ROW>
<ROW INDEX=2 ID =6 TYPE=RT2 NUM_SUB_ROWS=3>
<CELL ID=7 MINIMUM=0.0 MAXIMUM=1.5 COLUMN_INDEX=1/>
<CELL ID=8 MINIMUM=1.6 MAXIMUM=3.0 COLUMN_INDEX=2/>
<CELL ID=9 VALUE=3.0 COLUMN_INDEX=3/>
</ROW>
<ROW INDEX=3 ID =10 TYPE=RT3>
<CELL ID=11 MINIMUM=0.0 MAXIMUM=100.0 COLUMN_INDEX=3/>
</ROW>
</COLUMN>
<COLUMN INDEX=2 ID=12 TYPE=CT2>
<ROW INDEX=1 ID =2 TYPE=RT1 NUM_SUB_ROWS=3>
<CELL ID=13 VALUE=1 COLUMN_INDEX=1/>
<CELL ID=14 VALUE=1.5 COLUMN_INDEX=2/>
<CELL ID=15 VALUE=1.6 COLUMN_INDEX=3/>
</ROW>
<ROW INDEX=2 ID =6 TYPE=RT2 NUM_SUB_ROWS=3>>
<CELL ID=16 VALUE=2 COLUMN_INDEX=1/>
<CELL ID=17 VALUE=2 COLUMN_INDEX=2/>
<CELL ID=18 VALUE=2 COLUMN_INDEX=3/>
</ROW>
<ROW INDEX=3 ID =10 TYPE=RT3>
<CELL ID=19 VALUE=0.075 COLUMN_INDEX=3/>
</ROW>
</COLUMN>
<COLUMN INDEX=3 ID=20 TYPE=CT3>
<ROW INDEX=1 ID =2 TYPE=RT1 NUM_SUB_ROWS=3>
<CELL ID=21 VALUE=2 COLUMN_INDEX=1/>
<CELL ID=22 VALUE=2.1 COLUMN_INDEX=2/>
<CELL ID=23 VALUE=2.2 COLUMN_INDEX=3/>
</ROW>
<ROW INDEX=2 ID =6 TYPE=RT2 NUM_SUB_ROWS=3>>
<CELL ID=24 VALUE=4 COLUMN_INDEX=1/>
<CELL ID=25 VALUE=4 COLUMN_INDEX=2/>
<CELL ID=26 VALUE=4 COLUMN_INDEX=3/>
</ROW>
<ROW INDEX=3 ID =10 TYPE=RT3>
<CELL ID=27 VALUE=0.075 COLUMN_INDEX=3/>
</ROW>
</COLUMN>
</COLUMN>
<COLUMN INDEX=4 ID=28 TYPE=CT4>
<ROW INDEX=1 ID =2 TYPE=RT1 NUM_SUB_ROWS=3>
<CELL ID=29 VALUE=4 COLUMN_INDEX=1/>
<CELL ID=30 VALUE=4.1 COLUMN_INDEX=2/>
<CELL ID=31 VALUE=4.2 COLUMN_INDEX=3/>
</ROW>
<ROW INDEX=2 ID =6 TYPE=RT2 NUM_SUB_ROWS=3>>
<CELL ID=32 VALUE=8 COLUMN_INDEX=1/>
<CELL ID=33 VALUE=8 COLUMN_INDEX=2/>
<CELL ID=34 VALUE=8 COLUMN_INDEX=3/>
</ROW>
<ROW INDEX=3 ID =10 TYPE=RT3>
<CELL ID=35 VALUE=0.075 COLUMN_INDEX=3/>
</ROW>
</COLUMN>
</RATES_DATA>

```

Two Dimensional Rate Table with Ranges And Sub-Columns

A two dimensional rate table with ranges and sub columns consists of:

- Any number of columns/sub-columns, each with:
 - a type
 - a minimum value
 - a maximum value
- Any number of rows each with:
 - a type
- Any number of cells each with:
 - a minimum value
 - a maximum value
 - a value

An example of a rate table of this type is displayed below:

Table 12. Two Dimensional Rate Table with Ranges and Sub-Columns

	Account Percentage	New Employer (%)	Q Rate (%)	G Rate Employer (%)
Size of Fund Index		0 : 1001 10000 20000	0 : 1001 10000 20000	0 : 1001 10000 20000
Normal Rate	0:1.5 1:6.3 3	1 1.1 1.5 1.6 1.6 1.7	2 2.1 2.1 2.2 2.2 2.3	2 4 2.1 4.1 2.2 4.2
Normal Rate	0:1.5 1:6.3 3	2 2.1 4 4.1 8 8.1	2 2.2 4.1 4.2 8.1 8.2	2.2 2.3 4.2 4.3 8.2 8.3
RESF Rate	0 : 100	0.075 0.075	0.075 0.075	0.075 0.075

In the example above, the size of fund index values are used in addition to the account percentage value to determine the rate for each employer type, e.g. a Q Rate Employer with an account percentage value of 1.9% and a fund index of 9000 will be charged 2.1% for the Normal Rate and 4.1% for the Subsidiary Rate.

The XML string for the whole of this rate table would look like this:

(CT1 implies Account Percentage %, RT1 implies Size of Fund Index, and so on)

```

<RATES_DATA>
<COLUMN INDEX=1 ID=1 TYPE=CT1>
<ROW
INDEX=1 ID =2 TYPE=RT1 NUM_SUB_ROWS=3>
<CELL
ID=3 MINIMUM=0.0 MAXIMUM=1.5 COLUMN_INDEX=1/>
<CELL
ID=4 MINIMUM=1.6 MAXIMUM=3.0 COLUMN_INDEX=2/>
<CELL
ID=5 VALUE=3.0 COLUMN_INDEX=3/>
</ROW>
<ROW INDEX=2 ID =6 TYPE=RT2 NUM_SUB_ROWS=3>
<CELL ID=7 MINIMUM=0.0 MAXIMUM=1.5 COLUMN_INDEX=1/>
<CELL ID=8 MINIMUM=1.6 MAXIMUM=3.0 COLUMN_INDEX=2/>
<CELL ID=9 VALUE=3.0 COLUMN_INDEX=3/>
</ROW>
<ROW INDEX=3 ID =10 TYPE=RT3>
<CELL ID=11
MINIMUM=0.0 MAXIMUM=100.0 COLUMN_INDEX=3/>
</ROW>
</COLUMN>
<COLUMN INDEX=2 ID=12
TYPE=CT2>
<SUB_COLUMN INDEX=1 ID=13 MAXIMUM=10000.0
MINIMUM=0.0>
<ROW INDEX=1 ID =2 TYPE=RT1 NUM_SUB_ROWS=3>
<CELL ID=14 VALUE=1 COLUMN_INDEX=1/>
<CELL ID=15
VALUE=1.5 COLUMN_INDEX=2/>
<CELL ID=16 VALUE=1.6
COLUMN_INDEX=3/>
</ROW>
<ROW
INDEX=2 ID =6 TYPE=RT2 NUM_SUB_ROWS=3>>
<CELL
ID=17 VALUE=2 COLUMN_INDEX=1/>
<CELL ID=18
VALUE=2.1 COLUMN_INDEX=2/>
<CELL ID=19 VALUE=2.2
COLUMN_INDEX=3/>
</ROW>
<ROW
INDEX=3 ID =10 TYPE=RT3>
<CELL ID=20 VALUE=0.075
COLUMN_INDEX=3/>
</ROW>
</SUBCOLUMN>
<SUB_COLUMN INDEX=2 ID=21 MAXIMUM=20000.0 MINIMUM=10001.0>
<ROW INDEX=1 ID =2 TYPE=RT1 NUM_SUB_ROWS=3>
<CELL ID=22 VALUE=1.1 COLUMN_INDEX=1/>
<CELL ID=23 VALUE=1.6 COLUMN_INDEX=2/>
<CELL
ID=24 VALUE=1.7 COLUMN_INDEX=3/>
</ROW>
<ROW INDEX=2 ID =6 TYPE=RT2 NUM_SUB_ROWS=3>>
<CELL ID=25 VALUE=2.1 COLUMN_INDEX=1/>
<CELL
ID=26 VALUE=2.2 COLUMN_INDEX=2/>
<CELL ID=27
VALUE=2.3 COLUMN_INDEX=3/>
</ROW>
<ROW INDEX=3 ID =10 TYPE=RT3>
<CELL
ID=28 VALUE=0.075 COLUMN_INDEX=3/>
</ROW>
</SUBCOLUMN>
</COLUMN>
<COLUMN INDEX=3 ID=29 TYPE=CT3>
<SUB_COLUMN
INDEX=1 ID=30 MAXIMUM=10000.0 MINIMUM=0.0>
<ROW
INDEX=1 ID =2 TYPE=RT1 NUM_SUB_ROWS=3>
<CELL ID=31

```

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