



IBM Cúram Social Program Management

Cúram Provider Management Developers Guide

Version 6.0.4

Note

Before using this information and the product it supports, read the information in Notices at the back of this guide.

This edition applies to version 6.0.4 of IBM Cúram Social Program Management and all subsequent releases and modifications unless otherwise indicated in new editions.

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Chapter 1

Introduction

1.1 Purpose

The purpose of this guide is to describe the options for customizing the Cúram Provider Management™ (CPM) component. Its scope includes the customization of Strategy Patterns, Events, Workflows, Products, and Rule Sets. Customization can be distinguished from configuration in that customization allows developers to modify, extend, or replace source code to suit agency's requirements. Configuration allows administrators to manage the information that is displayed on application pages or to alter the behavior of the application in certain predefined ways.

This guide describes the customization or extension points provided with the CPM component. For further information on how to use these customization points, readers should consult the `Persistence Cookbook` where customization techniques are described in detail.

This guide does not cover generic extension points such as persistence events.

1.2 Audience

This guide is intended for developers responsible for customizing CPM.

1.3 Prerequisite Reading

- `Persistence Cookbook`
- `Cúram Workflow Reference Guide`

1.4 Further Reading

For more information about the classes, interfaces, business event interfaces and the standard infrastructural persistence events included in the CPM component, please consult the CPM JavaDoc.

1.5 Chapters in this Guide

Using Strategy Patterns to Customize CPM

This chapter provides a brief description of the types of customization points that are available in CPM and how agencies can use them in a supported manner.

Using Events to Add Custom Processing to CPM

This chapter describes the events that can be used by agencies to add functionality before and/or after a piece of functionality is executed.

CPM Workflow Process Definitions

This chapter lists and details CPM Workflows that can be customized by the agency

CPM Products and Rule Sets

This chapter describes CPM products and Rule Sets.

CPM Financials

This chapter describes CPM Financials.

CPM Taxonomy

This chapter describes CPM Taxonomy.

Compliance

This chapter describes compliance information that should be kept in mind before any customization.

Appendix

This chapter provides appendixes.

Chapter 2

Using Strategy Patterns to Customize CPM

2.1 Introduction

CPM provides a number of service layer interfaces that are specifically designed for customization. A new custom implementation can be provided for any of the interfaces listed below. It is worth noting that default implementations are provided for these interfaces. Please read the Persistence Cookbook on how to provide an implementation for a service layer interface. The default implementations of these interfaces can be replaced with a new custom implementation by creating a new Guice module class and adding a corresponding entry in the MODULE table. Chapter 5 - Creating a Google Guice Module - in the Persistence Cookbook explains this in detail.

2.2 Provider Implementations

Functionality	Interface	Description
Provider Enrollment Date	curam.provider.impl.Provider	This interface allows agencies to enroll a Provider or Provider Group in CPM with an enrollment date which is in the past. This allows the agency to use the original date of enrollment while enrolling providers. The default implementation is to use the current date.
Provider Reference Number	curam.provider.impl.ProviderReferenceNumber	This interface allows agencies to generate

Functionality	Interface	Description
	Strategy	Provider Reference Numbers according to their preferred format.
Provider Group Reference Number	curam.provider.impl.ProviderGroupReferenceNumberGenerator	This interface allows agencies to generate Provider Group Reference Numbers according to their preferred format.
Provider Enquiry Reference Number	curam.provider.impl.ProviderEnquiryReferenceNumberGenerator	This interface allows agencies to generate Provider Enquiry Reference Numbers according to their preferred format.
License Reference Number Generation	curam.provider.impl.LicenseNumberGenerator	This interface allows agencies to generate License Reference Numbers according to their preferred format.
Home Study Recommendation Approval	curam.provider.impl.ProviderSecurity	This interface allows agencies to designate a specific user or a group of users (an organization unit, users in a particular position or with a particular job, etc.) who can approve or reject a home study recommendation.
Provider Offering Approval Criteria	curam.providerservice.impl.ProviderOfferingApprovalCriteria	This interface allows agencies to specify criteria which need to be met in order to approve a service offered by a provider.
Service Offering Validation	curam.serviceoffering.impl.ServiceOfferingValidation	A ServiceOfferingValidation class is used for managing the validations for a service. The default implementation of this interface is provided by ServiceOfferingValidation-Impl. A new implement-

Functionality	Interface	Description
		<p>ation of this interface is required to change the mechanism used to manage the validations for a service. This interface allows agencies to backdate the start date of a service offering. This may be useful when an agency is unable to add all provider services at the time of enrolment. This interface allows the agency to add a service at a later stage, and indicate that it has always been offered by the provider. The default date can be overridden on case-by-case basis.</p>
External User Password	<code>curam.externaluseraccess.impl.ExternalUserPasswordStrategy</code>	<p>This interface allows agencies to implement a particular strategy for allocating passwords, at the point at which they generate the initial password for a new external user account, or generate a replacement password for a user who has forgotten password and needs to re-establish credentials with the agency.</p>
Provider Member Offering Training Criteria	<code>curam.provider.impl.ProviderMemberOfferingTrainingCriteria</code>	<p>This interface allows agencies to change the default functionality when a provider offering with training requirements is approved. For example, the agency may wish to prevent the approval of a provider offering, if the training requirements for the ser-</p>

Functionality	Interface	Description
		vice are neither 'Complete' nor 'Waived', rather than sending a notification.

Table 2.1 Provider Implementations

2.3 Placement and Contract Implementations

Functionality	Interface	Description
Placement Payment	curam.place.impl.PlacementPaymentStrategy	A PlacementPaymentStrategy class is used for determining if a placement is paid on the basis of an invoice or placement. The default implementation of this interface is provided by PlacementPaymentStrategyImpl. A new implementation of this interface is required to change the mechanism used to determine if a placement is paid on the basis of an invoice or placement. For example, an agency may indicate that all placement services should be paid through the receipt of invoices, or it may indicate that only services in a specific service group or services provided by specific providers can be paid through the receipt of invoices.
Flat Rate Contract Cover Pattern	curam.contracts.impl.FlatRateContractCoverPatternStrategy	A FlatRateContractCoverPatternStrategy class is used for determining the cover period pattern for a provider flat rate

Functionality	Interface	Description
		contract payment. The default implementation of this interface is provided by FlatRateContractCoverPatternStrategyImpl. A new implementation of this interface is required to change the mechanism used to determine the cover period pattern for a provider flat rate contract payment. A cover period pattern specifies how payments or bills are issued, e.g., in advance, in arrears, once-off, etc.
Contract Reference Number Generation	curam.contracts.impl.ReferenceNumberGenerator	A ReferenceNumberGenerator class is used for generating a reference number for a contract. The default implementation of this interface is provided by UniqueNumberGeneratorImpl. A new implementation of this interface is required to change the strategy to generate a reference number.

Table 2.2 Placement and Contract Implementations

2.4 Training Implementations

Functionality	Interface	Description
Approve License Based on Training	curam.provider.impl.LicenseApprovalCriteria	This interface allows agencies to change the default functionality for when a license with training requirements is approved. CPM sup-

Functionality	Interface	Description
		ports notification to a user where training requirements for one or more services are neither 'Complete' nor 'Waived' for provider members. However, some Agencies may wish to prevent license approval if this validation is not satisfied. This interface is useful in such a scenario.
Approve Person Training	curam.training.impl.ApprovePersonTrainingProgramStrategy	This interface allows agencies to define their approval strategy for person training. The purpose of this interface is the same as that for the approval of provider member training, as described above.
Approve Provider Group Member Training	curam.training.impl.ApproveProviderGroupMemberTrainingProgramStrategy	This interface allows agencies to define their approval strategy for provider group member training. The purpose of this interface is the same as that for the approval of provider member training, as described above.
Approve Provider Member Training	curam.training.impl.ApproveProviderMemberTrainingProgramStrategy	This interface allows agencies to define their approval strategy for provider member training. CPM by default allows the resource manager or the resource manager supervisor to approve training.

Table 2.3 Training Implementations

The curam.training.impl.ApproveProviderMemberTrainingProgramStrategy interface can be used to facilitate functional scenarios such as the following:

- Agencies may choose to have another user or a group of users (an organization unit, users in a particular position or with a particular job) who can approve the training request.
- Agencies may wish to inhibit authorization of training based on some other additional or alternative approval criterion.
- CPM does not send any notification on approval of a training program. However, an agency may want to send a notification to the provider of the training, the provider the provider member works for, or the provider member themselves.

2.5 Service Invoice Implementations

Functionality	Interface	Description
Service Invoice Line Item	curam.financial.impl.ServiceInvoiceLineItemValidationStrategy	A ServiceInvoiceLineItemValidationStrategy class is used for validating the number of units of a service invoice line item. The default implementation of this interface is provided by ServiceInvoiceLineItemValidationStrategyImpl. A new implementation of this interface is required to change the mechanism used to validate the number of units of a service invoice line item.
Service Invoice Payment	curam.financial.impl.ServiceInvoicePaymentStrategy	A ServiceInvoicePaymentStrategy class is used for managing service invoice payment strategy. The default implementation of this interface is provided by ServiceInvoicePaymentStrategyImpl. A new implementation of this interface is required to change the mechanism used to manage service invoice payment strategy. This may be

Functionality	Interface	Description
		useful where an agency wishes to re-direct these payments to an individual or a group other than the provider. For example, if the provider is specified as the payee on a service invoice line item but is an active member of a provider group, the agency may re-direct payments to the provider group instead.
Service Invoice Line Item Validation	curam.financial.impl.ServiceInvoiceLineItemValidator	A ServiceInvoiceLineItemValidator class is used for validating the service invoice line item. The default implementation of this interface is provided by ServiceInvoiceLineItemValidatorImpl. A new implementation of this interface is required to change the mechanism used to validate the service invoice line item. For example, some agencies may not want to allow a service invoice line item to be added to a service invoice if the status of the service invoice is 'In Progress'. This interface will allow them to implement this validation.

Table 2.4 Service Invoice Implementations

2.6 Custom Rates and Reassessment

Functionality	Interface	Description
Applicable Rate Listener	curam.financial.impl.ApplicableRateListener	<p>This business interface is used for re-assessment of payments for a given period for a service authorization line item/place-ment/service invoice line item/provider roster line item. There are two APIs present in ApplicableRateListener having same name as "reAssess" but with different input types.</p> <ol style="list-style-type: none"> 1. reassess API having inputs as Service Authorization Line Item and date range is used when no detailed product information is available and only Service Authorization Line Item is known. It searches to retrieve matching Service Invoice Line items, Place-ments and Provider Roster Line Items for the given Service Authorization Line Item and then it calls the suitable API present in ApplicableRateProcessor API to process the change of rate for any given input(placement / SILI/PRLI) and reassess the payment. 2. reassess API having inputs as Delivery Evidence Information of the product and date range is used when more product level information is available and the type of service is known. Depending on

Functionality	Interface	Description
		<p>the product type it calls the suitable API present in ApplicableRateProcessor API to process the change of rate for any given input (placement / SILI/PRLI) and reassess the payment.</p>
<p>Applicable Rate Processor</p>	<p>curam.financial.impl.ApplicableRateProcessor</p>	<p>An ApplicableRateProcessor class is used for reassessment of payments triggered by the change in rates. The default implementation of this interface is provided by ApplicableRateProcessorImpl. A new implementation of this interface is required to change the mechanism used to calculate the reassessed payment amount, due to the change in rates for the reassessment period. This interface allows agencies to process the change of rate for any given input (placement/SILI/PRLI) and reassess the payment. There are three APIs present in ApplicableRateProcessor named processRateChangeForPlacement, processRateChangeForPRLI and processRateChangeForSILI respectively. All these APIs are having inputs as type of service (Placement, SILI, PRLI) and the reassessment period. It processes the change of</p>

Functionality	Interface	Description
		rate for any given input(placement / SILI/PRLI) and reassess the payment.
Service Delivery Rate Determination	curam.financial.impl.RateDetermination	A RateDetermination class is used for retrieving the rates for the given period and product delivery. The default implementation of this interface is provided by RateDeterminationImpl. A new implementation of this interface is required to change the strategy to determine the rates for a given delivery type (placement, invoice, or attendance) for a given period of time. For example, the applicable rates for a service can be determined using a custom rate calculation logic which may reference variables that do not reside within CPM, such as the number of children in a family.

Table 2.5 Custom Rates and Reassessment Implementations

2.7 Roster Implementations

Functionality	Interface	Description
Generate Rosters	curam.attendance.impl.DetermineRosterSubmissionDueDate	A DetermineRosterSubmissionDueDate class is used for determination of submission due date for a roster. The default implementation of this interface is provided by DetermineRosterSub-

Functionality	Interface	Description
		<p>missionDueDateImpl. A new implementation of this interface is required to change the way the grace period is used to determine the submission due date. For instance, an agency may wish to consider only the business days to calculate a submission due date.</p>
<p>Match Provider Roster Line Item</p>	<p>curam.attendance.impl.MatchProviderRosterLineItem</p>	<p>A MatchProviderRosterLineItem class is used for performing validations during matching a provider roster line item details with the existing details. The default implementation of this interface is provided by MatchProviderRosterLineItemImpl. A new implementation of this interface is required to change the mechanism used to match the details of a provider roster line item with the existing details. It is used for performing an agency's own program-specific validations during matching a provider roster line item.</p>
<p>Match Provider Roster Line Item</p>	<p>curam.attendance.impl.VoucherValidator</p>	<p>A VoucherValidator class is used for matching and validating the voucher details. The default implementation of this interface is provided by VoucherValidatorImpl. A new implementation of this interface is required to</p>

Functionality	Interface	Description
		change the mechanism used to match and validate the voucher details of the provider roster line item. For example, the agency might have its own program-specific validations to match and validate the voucher details.
Determine Attendance Based Payment Amount	curam.attendance.impl.AttendancePaymentDeterminationProcessing	An AttendancePaymentDeterminationProcessing class is used for the determination of an attendance-based payment amount. The default implementation of this interface is provided by AttendancePaymentDeterminationProcessingImpl. A new implementation of this interface is required to change the mechanism used to calculate the attendance-based payment rate. For example, the provider service rate valid either on the end date of the roster line item or the end date of the matching service authorization line item could be used to determine the attendance-based payment amount.
Allocate Units	curam.attendance.impl.PRLIUnitsAllocationProcessing	A PRLIUnitsAllocationProcessing class is used for managing the allocation of units from roster line items to matching service authorization line items. The default implementation of this interface is provided by PRLIUnitsAllocation-

Functionality	Interface	Description
		ProcessingImpl. A new implementation of this interface is required to change the mechanism used to allocate units to the matching service authorization line items. For example, units could be allocated evenly to all service authorization line items rather than starting with the earliest one.

Table 2.6 Roster Implementations

2.8 Taxonomy Search Implementations

Functionality	Interface	Description
Taxonomy term search based on different criterias	curam.taxonomy.sl.search.impl.TaxonomySearch	This business interface retrieves the taxonomy terms associated with provider service. This interface allows agencies to search the taxonomy terms based on different search criterias like term name, term code, indexed provider services etc. The default implementation uses the Generic Search Server (GSS) to fetch the search results.

Table 2.7 Taxonomy Search Implementations

2.9 Performance Measure Implementations

Functionality	Interface	Description
Retrieve Performance Measures	curam.performancemeasure.impl.RetrieveAllPerformanceMeasuresForProvider	A RetrieveAllPerformanceMeasuresForProvider

Functionality	Interface	Description
	<p>formanceMeasuresFor-ProviderOffering</p>	<p>derOffering class is used for retrieving the performance measure's details for a provider service. The default implementation of this interface is provided by RetrieveAllPerformanceMeasuresForProviderOfferingImpl. A new implementation of this interface is required to change the mechanism used to determine the performance measure details of a provider service. Performance measure is the criteria by which the performance can be measured. For example, percentage of clients remaining in employment 1 year following the delivery of job search training.</p>
<p>Retrieve Performance Measures</p>	<p>curam.performancemeasure.impl.RetrieveAllPerformanceMeasuresForProvider</p>	<p>A RetrieveAllPerformanceMeasuresForProvider class is used for retrieving the performance measure's details for a provider. The default implementation of this interface is provided by RetrieveAllPerformanceMeasuresForProviderImpl. A new implementation of this interface is required to change the mechanism used to determine the performance measure details of a provider. Performance measure is the criteria by which the performance of a provider can be measured. For ex-</p>

Functionality	Interface	Description
		<p>ample, percentage of clients remaining in employment 1 year following the delivery of job search training.</p>
<p>Retrieve Contract Performance Measure Value</p>	<p>curam.performancemeasure.impl.RetrieveAllContractPerformanceMeasures</p>	<p>A RetrieveAllContractPerformanceMeasures class is used for retrieving the performance measure's details associated with a contract. The default implementation of this interface is provided by RetrieveAllContractPerformanceMeasuresImpl. A new implementation of this interface is required to change the mechanism used to determine the value for performance measure associated with the contract.</p>

Table 2.8 Performance Measure Implementations

Chapter 3

Using Events to Add Custom Processing to CPM

3.1 Introduction

The sections below detail the events that are raised by CPM which allow developers to add custom functionality. Business events are raised at all extension points. These events can be used by agencies to add functionality before and/or after the action is executed.

3.2 Provider Customization Points

The following sections list the available customization points for Providers.

3.2.1 Provider Events

The following events are located in the `curam.provider.impl.Provider` interface.

Event Class	Description	Event is raised before and after
<code>ProviderSuspendEvents</code>	Raised when a Provider is suspended.	<code>curam.provider.impl.Provider.suspend()</code>
<code>ProviderCloseEvents</code>	Raised when a Provider is closed.	<code>curam.provider.impl.Provider.close()</code>
<code>ProviderRejectEvents</code>	Raised when a Provider seeking approval is rejected.	<code>curam.provider.impl.Provider.reject()</code>
<code>ProviderApproveEvents</code>	Raised when a Provider is approved.	<code>curam.provider.impl.Provider.approve()</code>
<code>ProviderReopenEvents</code>	Raised when a closed Provider is reopened.	<code>curam.provider.impl.Provider.activate()</code>

Event Class	Description	Event is raised before and after
ProviderEnrollEvents	Raised when a Provider is enrolled.	curam.provider.impl.Provider.enroll()
ProviderGetAvailablePlacesInDateRangeEvents	Raised when available Places in the given date range are retrieved.	curam.provider.impl.Provider.getAvailablePlacesInDateRange()
ProviderGetServiceOfferingsEvents	Raised when Service Offerings for a Provider are retrieved.	curam.provider.impl.Provider.getServiceOfferings()
ProviderGetCommonApprovedProviderServiceOfferingsEvents	Raised when approved Service Offerings for a Provider are retrieved.	curam.provider.impl.Provider.getCommonApprovedProviderServiceOfferings()

Table 3.1 Provider Event Details

The following events are located in the curam.provider.impl.ProviderApprovalCheck interface.

Event Class	Description	Event is raised before and after
ProviderApprovalCheckCreateProviderApprovalCheckEvents	Raised when an approval check for the Provider is created.	curam.provider.impl.ProviderApprovalCheck.createProviderApprovalCheck()
ProviderApprovalCheckModifyProviderApprovalCheckEvents	Raised when an approval check for the Provider is modified.	curam.provider.impl.ProviderApprovalCheck.modifyProviderApprovalCheck()
ProviderApprovalCheckCancelProviderApprovalCheckEvents	Raised when an approval check for the Provider is canceled.	curam.provider.impl.ProviderApprovalCheck.cancelProviderApprovalCheck()

Table 3.2 Provider Event Details

3.2.2 Provider Enquiry Events

The following events are located in the curam.provider.impl.ProviderEnquiry interface.

Event Class	Description	Event is raised before and after
ProviderEnquiryC-	Raised when a Provider	curam.provider.impl.Pro

Event Class	Description	Event is raised before and after
loseEvents	Enquiry is closed.	viderEnquiry.close()
ProviderEnquiryTransferEnquiryToProviderEvents	Raised when a Provider is enrolled from an enquiry.	curam.provider.impl.ProviderEnquiry.transferEnquiryToProvider()
ProviderEnquirySetProviderEnquiryDetailsEvents	Raised when an enquiry is created.	curam.provider.impl.ProviderEnquiry.setProviderEnquiryDetails()
ProviderEnquirySetProviderEnquiryUpdateDetailsEvents	Raised when an enquiry is updated.	curam.provider.impl.ProviderEnquiry.setProviderEnquiryUpdateDetails()

Table 3.3 Provider Enquiry Event Details

3.2.3 Licence Events

The following Events are located in the curam.provider.impl.License interface.

Event Class	Description	Event is raised before and after
LicenseSuspendEvents	Raised when a License is suspended.	curam.provider.impl.License.suspend()
LicenseRejectEvents	Raised when a License is rejected.	curam.provider.impl.License.reject()
LicenseApproveEvents	Raised when a License approved.	curam.provider.impl.License.approve()

Table 3.4 Licence Event Details

3.2.4 Home Study Events

The following Events are located in the curam.homestudy.impl.HomeStudy interface.

Event Class	Description	Event is raised before and after
HomeStudyApproveEvents	Raised when a Home Study recommendation for a provider is ap-	curam.homestudy.impl.HomeStudy.approve()

Event Class	Description	Event is raised before and after
	proved.	
HomeStudySubmitEvents	Raised when a Home Study is submitted.	curam.homestudy.impl.HomeStudy.submit()
HomeStudyRejectEvents	Raised when a Home Study recommendation is rejected.	curam.homestudy.impl.HomeStudy.reject()

Table 3.5 Home Study Event Details

3.2.5 Compartment Events

The following Events are located in the curam.place.impl.Compartment interface.

Event Class	Description	Event is raised before and after
CompartmentCloseEvents	Raised when a Compartment is closed.	curam.place.impl.Compartment.close()

Table 3.6 Compartment Event Details

3.2.6 Place Events

The following events are located in the curam.place.impl.Place interface.

Event Class	Description	Event is raised before and after
PlaceCloseEvents	Raised when a Place is closed.	curam.place.impl.Place.activate()
PlaceMarkOutOfUseEvents	Raised when a Place is marked out of use.	curam.place.impl.Place.markOutOfUse()
PlaceOccupiedEvents	Raised when a Place is occupied.	curam.place.impl.Place.occupied()
PlaceMarkInUseEvents	Raised when a Place is marked in use.	curam.place.impl.Place.markInUse()
PlaceGetLocationForPlaceEvents	Raised when the location of a Place is retrieved.	curam.place.impl.Place.getLocationForPlace()

Table 3.7 Place Event Details

3.2.7 Request Events

The following events are located in the `curam.externaluseraccess.impl.Request` interface.

Event Class	Description	Event is raised before and after
<code>RequestAcceptEvents</code>	Raised when a Request created by an external provider is accepted.	<code>curam.externaluseraccess.impl.Request.accept()</code>
<code>RequestSubmitEvents</code>	Raised when Request created by an external provider is submitted.	<code>curam.externaluseraccess.impl.Request.submit()</code>
<code>RequestRejectEvents</code>	Raised when Request created by an external provider is rejected.	<code>curam.externaluseraccess.impl.Request.reject()</code>

Table 3.8 Request Event Details

3.2.8 Member Certification Events

The following events are located in the `curam.provider.impl.MemberCertification` interface.

Event Class	Description	Event is raised before and after
<code>MemberCertification-ModifyCertificationEvents</code>	Raised when a provider member Certification is updated.	<code>curam.provider.impl.MemberCertification.modifyCertification()</code>
<code>MemberCertification-GetDerivedStstusEvents</code>	Raised when the status of a provider member Certification is retrieved.	<code>curam.provider.impl.MemberCertification.getDerivedStstus()</code>

Table 3.9 Member Certification Event Details

3.2.9 Provider Deduction Events

The following events are located in the `curam.provider.impl.ProviderDeduction` interface.

Event Class	Description	Event is raised before and after
<code>ProviderDeductionAc-</code>	Raised when Deduc-	<code>curam.provider.impl.Pro</code>

Event Class	Description	Event is raised before and after
ivateProviderDeductionEvents	tions associated to a Provider are activated.	viderDeduction.activateProviderDeduction()
ProviderDeduction-DeactivateProviderDeductionEvents	Raised when Deductions associated to a Provider are deactivated.	curam.provider.impl.ProviderDeduction.deactivateProviderDeduction()
ProviderDeductionCreateDeductionForExistingCasesEvents	Raised when a Deduction is created for existing cases.	curam.provider.impl.ProviderDeduction.createDeductionForExistingCases()
ProviderDeductionCreateVariableDeductionForModifiedPaymentTypeEvents	Raised when Variable Deductions are created based on Payment Type.	curam.provider.impl.ProviderDeduction.createVariableDeductionForModifiedPaymentType()
ProviderDeductionCancelVariableDeductionForModifiedPaymentTypeEvents	Raised when Variable Deductions are Cancelled.	curam.provider.impl.ProviderDeduction.cancelVariableDeductionForModifiedPaymentType()

Table 3.10 Provider Deduction Event Details

3.2.10 Provider Offering Events

The following events are located in the curam.providerservice.impl.ProviderOffering interface.

Event Class	Description	Event is raised before and after
ProviderOfferingApproveEvents	Raised when a Provider Offering is approved.	curam.providerservice.impl.ProviderOffering.approve()
ProviderOffering-DenyEvents	Raised when a Provider Offering is denied.	curam.providerservice.impl.ProviderOffering.deny()
ProviderOfferingCheckApprovalCriteriaEvents	Raised when approval criteria are checked for a Provider Offering.	curam.providerservice.impl.ProviderOffering.checkApprovalCriteria()
ProviderOfferingGetContractsEvents	Raised when Contracts are retrieved for a Provider Offering.	curam.providerservice.impl.ProviderOffering.getContracts()

Table 3.11 Provider Offering Event Details

The following events are located in the `curam.citizenactivity.impl.ProviderOfferingUtil` interface.

Event Class	Description	Event is raised before and after
<code>ProviderOfferingUtil-GetByServiceOfferAnd-ProviderEvents</code>	Raised when a Provider Offering is retrieved based on the Service Offering and Provider.	<code>curam.citizenactivity.impl.ProviderOfferingUtil.getByServiceOfferingAndProvider()</code>

Table 3.12 Provider Offering Event Details

3.2.11 Provider Offering Rate Events

The following events are located in the `curam.providerservice.impl.ProviderOfferingRate` interface.

Event Class	Description	Event is raised before and after
<code>ProviderOfferingRate-ModifyForContractEvents</code>	Raised when a Provider Offering Rate is modified.	<code>curam.providerservice.impl.ProviderOfferingRate.modifyForContract()</code>

Table 3.13 Provider Offering Rate Event Details

3.2.12 Performance Measure Events

The following events are located in the `curam.performancemeasure.impl.RetrievePerformanceMeasureForProvider` interface.

Event Class	Description	Event is raised before and after
<code>RetrievePerformanceMeasureForProvider-GetPerformanceMeasureForNoOfIncidents</code>	Raised when the Performance Measure on number of Incidents registered with the Provider is retrieved.	<code>curam.performancemeasure.impl.RetrievePerformanceMeasureForProvider.getPerformanceMeasureForNoOfIncidents()</code>
<code>RetrievePerformanceMeasureForProvider-GetPerformanceMeasureForNoOfInvestigations</code>	Raised when the Performance Measure on number of investigations registered with the	<code>curam.performancemeasure.impl.RetrievePerformanceMeasureForProvider.getPerformanceM</code>

Event Class	Description	Event is raised before and after
RetrievePerformanceMeasureForProviderGetPerformanceMeasureForNoOfIncidentsRequiringInvestigations	Provider is retrieved.	curam.performancemeasure.impl.RetrievePerformanceMeasureForProvider.getPerformanceMeasureForNoOfIncidentsRequiringInvestigations()
RetrievePerformanceMeasureForProviderGetPerformanceMeasureForCustom	Raised when the actual value for a custom Performance Measure for a Provider is retrieved.	curam.performancemeasure.impl.RetrievePerformanceMeasureForProvider.getPerformanceMeasureForCustom()

Table 3.14 Performance Measure Event Details

The following events are located in the curam.performancemeasure.impl.RetrievePerformanceMeasureForProviderOffering interface.

Event Class	Description	Event is raised before and after
RetrievePerformanceMeasureForProviderOfferingGetPerformanceMeasureForAvgCostPerUnitOfService	Raised when the Performance Measure on average cost per unit of service is retrieved.	curam.performancemeasure.impl.RetrievePerformanceMeasureForProviderOffering.getPerformanceMeasureForAvgCostPerUnitOfService()
RetrievePerformanceMeasureForProviderOfferingGetPerformanceMeasureForNoOfUnitsPerClient	Raised when the Performance Measure on number of units per client is retrieved.	curam.performancemeasure.impl.RetrievePerformanceMeasureForProviderOffering.getPerformanceMeasureForNoOfUnitsPerClient()
RetrievePerformanceMeasureForProviderOfferingGetPerformanceMeasureForCustom	Raised when an actual value for a custom Performance Measure for a Provider is retrieved.	curam.performancemeasure.impl.RetrievePerformanceMeasureForProviderOffering.getPerformanceMeasureForCustom()

Table 3.15 Performance Measure Event Details

3.3 Provider Group Customization Points

The following sections list the available customization points for Providers Groups.

3.3.1 Provider Group Events

The following events are located in the `curam.provider.impl.ProviderGroup` interface.

Event Class	Description	Event is raised before and after
<code>ProviderGroupCloseEvents</code>	Raised when a Provider Group is closed.	<code>curam.provider.impl.ProviderGroup.close()</code>
<code>ProviderGroupEnrollEvents</code>	Raised when a Provider Group is enrolled.	<code>curam.provider.impl.ProviderGroup.enroll()</code>
<code>ProviderGroupReopenEvents</code>	Raised when a closed Provider Group is reopened.	<code>curam.provider.impl.ProviderGroup.reopen()</code>
<code>ProviderGroupGetCommonApprovedProviderServiceOfferingsEvents</code>	Raised when approved Service Offerings of a Provider Group are retrieved.	<code>curam.provider.impl.ProviderGroup.getCommonApprovedProviderServiceOfferings()</code>

Table 3.16 Provider Group Event Details

3.3.2 Provider Group Associate Events

The following events are located in the `curam.provider.impl.ProviderGroupAssociate` interface.

Event Class	Description	Event is raised before and after
<code>ProviderGroupAssociateRemoveProviderFromProviderGroupEvents</code>	Raised when a Provider is removed from a Provider Group.	<code>curam.provider.impl.ProviderGroupAssociate.removeProviderFromProviderGroup()</code>

Table 3.17 Provider Group Associate Event Details

3.4 Service Offering Customization Points

The following sections list the available customization points for Service

Offerings.

3.4.1 Service Offering Events

The following events are located in the `curam.serviceoffering.impl.ServiceOffering` interface.

Event Class	Description	Event is raised before and after
<code>ServiceOfferingGetServiceRatesForPeriodEvents</code>	Raised when Service rates are retrieved for a particular period.	<code>curam.serviceoffering.impl.ServiceOffering.getServiceRatesForPeriod()</code>
<code>ServiceOfferingModifyDescriptionTextTranslationEvents</code>	Raised when the text translation details for the Service Offering description attribute is modified.	<code>curam.serviceoffering.impl.ServiceOffering.modifyDescriptionTextTranslation()</code>
<code>ServiceOfferingModifyNameTextTranslationEvents</code>	Raised when the text translation details for the Service Offering name attribute is modified.	<code>curam.serviceoffering.impl.ServiceOffering.modifyNameTextTranslation()</code>
<code>ServiceOfferingAddNameTextTranslationEvents</code>	Raised when the text translation is created for the Service Offering name attribute.	<code>curam.serviceoffering.impl.ServiceOffering.addNameTextTranslation()</code>
<code>ServiceOfferingAddDescriptionTextTranslationEvents</code>	Raised when the text translation is created for the Service Offering description attribute.	<code>curam.serviceoffering.impl.ServiceOffering.addDescriptionTextTranslation()</code>

Table 3.18 Service Offering Event Details

3.4.2 Service Group Events

The following events are located in the `curam.serviceoffering.impl.ServiceGroup` interface.

Event Class	Description	Event is raised before and after
<code>ServiceGroupAddServiceOfferingEvents</code>	Raised when a Service Offering is added to a Service Group.	<code>curam.serviceoffering.impl.ServiceGroup.addServiceOffering()</code>
<code>ServiceGroupRemoveServiceOfferingEvents</code>	Raised when a Service Offering is removed	<code>curam.serviceoffering.impl.ServiceGroup.removeServiceOffering()</code>

Event Class	Description	Event is raised before and after
ceOfferingEvents	from a Service Group.	veServiceOffering ()
ServiceGroupGetServiceOfferingsEvents	Raised when Service Offerings from a Service Group are retrieved.	curam.serviceoffering.impl.ServiceGroup.getServiceOfferings ()
ServiceGroupRetrieveServiceGroupByReferenceEvents	Raised when the details of a Service Group for a specified reference is retrieved.	curam.serviceoffering.impl.ServiceGroup.retrieveServiceGroupByReference()

Table 3.19 Service Group Event Details

3.5 Service Authorization Customization Points

The following sections list the available customization points for Service Authorizations.

3.5.1 Service Authorization Events

The following events are located in the curam.serviceauthorization.impl.ServiceAuthorization interface.

Event Class	Description	Event is raised before and after
ServiceAuthorizationFindLineItemByServiceProvisionDetailsEvents	Raised when Service Authorization Line Items for a particular Service are retrieved.	curam.serviceauthorization.impl.ServiceAuthorization.findLineItemByServiceProvisionDetails()
ServiceAuthorizationAddLineItemEvents	Raised when a line item is added to a Service Authorization.	curam.serviceauthorization.impl.ServiceAuthorization.addLineItem()
ServiceAuthorizationInsertServiceAuthorizationEvents	Raised when a Service Authorization is created.	curam.serviceauthorization.impl.ServiceAuthorization.insertServiceAuthorization()
ServiceAuthorizationAddVoucherToServiceAuthorizationEvents	Raised when a voucher is associated to a Service Authorization.	curam.serviceauthorization.impl.ServiceAuthorization.addVoucherToServiceAuthorization()
ServiceAuthorizationDeleteVoucherForServiceAuthorizationEvents	Raised when a voucher is disassociated with a Service Authorization.	curam.serviceauthorization.impl.ServiceAuthorization.deleteVoucherFor

Event Class	Description	Event is raised before and after
tionEvents		ServiceAuthorization()
ServiceAuthorization-GetDerivedStatusEvents	Raised when the status of a Service Authorization is retrieved.	curam.serviceauthorization.impl.ServiceAuthorization.getDerivedStatus()
ServiceAuthorizationAddLineItemEvents	Raised when a specified line item is added to the Service Authorization.	curam.serviceauthorization.impl.ServiceAuthorization.addLineItem()
ServiceAuthorization-AddLineItemEvents	Raised when a specified line item is added to the Service Authorization.	curam.serviceauthorization.impl.ServiceAuthorization.addLineItem()
ServiceAuthorization-AddSALIToSAUsingFrequencyAndAnchorDateEvents	Raised when a Service Authorization Line Items are generated and added to a Service Authorization based on the frequency pattern and date.	curam.serviceauthorization.impl.ServiceAuthorization.addSALIToSAUsingFrequencyAndAnchorDate()

Table 3.20 Service Authorization Event Details

3.5.2 Service Authorization Line Item Events

The following events are located in the curam.serviceauthorization.impl.ServiceAuthorizationLineItem interface.

Event Class	Description	Event is raised before and after
ServiceAuthorization-LineItemCloseEvents	Raised when a Service Authorization Line Item is closed.	curam.serviceauthorization.impl.ServiceAuthorizationLineItem.close()
ServiceAuthorization-LineItemInsertServiceAuthorization-LineItemEvents	Raised when a Service Authorization Line Item is inserted.	curam.serviceauthorization.impl.ServiceAuthorization-LineItem.insertServiceAuthorizationLineItem()
ServiceAuthorization-LineItemModifyServiceAuthorization-LineItemEvents	Raised when a Service Authorization Line Item is updated.	curam.serviceauthorization.impl.ServiceAuthorization-LineItem.modifyServiceAuthorizationLineItem()
ServiceAuthorization-LineItemCancelServiceAuthorization-	Raised when a Service Authorization Line Item is cancelled.	curam.serviceauthorization-

Event Class	Description	Event is raised before and after
LineItemEvents		LineItem.cancelServiceAuthorizationLineItem()
ServiceAuthorization-LineItemGetDerived-StatusEvents	Raised when the status of a Service Authorization is retrieved.	curam.serviceauthorization.impl.ServiceAuthorization-LineItem.getDerivedStatus()
ServiceAuthorization-LineItemGetRelated-RosterLineItemEvents	Raised when Roster Line Items related to a Service Authorization are retrieved.	curam.serviceauthorization.impl.ServiceAuthorization-LineItem.getRelatedRosterLineItem()

Table 3.21 Service Authorization Line Item Event Details

The following events are located in the curam.financial.impl.ProcessReassessmentForSALI interface.

Event Class	Description	Event is raised before and after
ProcessReassessment-ForSALIREAssessOn-CancellationEvents	Raised when the over payment for the Service Invoice Line Items or Provider Roster Line Items associated with the Service Authorization Line Item on cancellation of Service Authorization Line Item is processed.	curam.financial.impl.ProcessReassessment-ForSALI.reAssessOnCancellation()
ProcessReassessment-ForSALIREAssessOn-ClosureEvents	Raised when the over payment on closing the Service Authorization Line Item is processed.	curam.financial.impl.ProcessReassessment-ForSALI.reAssessOnClosure()
ProcessReassessment-ForSALIREAssessOn-CreationEvents	Raised when the reassessment on creation of new Service Authorization Line Item is triggered.	curam.financial.impl.ProcessReassessment-ForSALI.reAssessOnCreation()
ProcessReassessment-ForSALIREAssessOn-ModificationEvents	Raised when the reassessment on modification of new Service Authorization Line Item is triggered.	curam.financial.impl.ProcessReassessment-ForSALI.reAssessOnModification()

Table 3.22 Service Authorization Line Item Event Details

3.6 Placement Customization Points

The following sections list the available customization points for Placements.

3.6.1 Placement Events

The following events are located in the `curam.place.impl.Placement` interface.

Event Class	Description	Event is raised before and after
<code>PlacementTransferClientEvents</code>	Raised when a client is transferred to a new Place.	<code>curam.place.impl.Placement.transferClient()</code>
<code>PlacementTransferClientToReservationEvents</code>	Raised when a client is transferred to a new Place and a reservation is created for the new Place.	<code>curam.place.impl.Placement.transferClientToReservation()</code>
<code>PlacementGetOverlappingPlacementForClientEvents</code>	Raised when overlapping Placement details for a client are retrieved.	<code>curam.place.impl.Placement.getOverlappingPlacementForClient()</code>

Table 3.23 Placement Event Details

The following events are located in the `curam.place.impl.FacilityInformation` interface.

Event Class	Description	Event is raised before and after
<code>FacilityInformationRetrieveFacilityInformationEvents</code>	Raised when the the list of facility information for a Provider, service (or) provider type is retrieved.	<code>curam.place.impl.FacilityInformation.retrieveFacilityInformation()</code>

Table 3.24 Placement Event Details

The following events are located in the `curam.place.impl.PlaceSearch` interface.

Event Class	Description	Event is raised before and after
PlaceSearch-SearchAvailablePlacesEvents	Raised when an available Places in a Provider facility is searched.	curam.place.impl.PlaceSearch.searchAvailablePlaces()

Table 3.25 Placement Event Details

3.6.2 Reservation Events

The following events are located in the curam.reservation.impl.Reservation interface.

Event Class	Description	Event is raised before and after
ReservationExpireEvents	Raised when a reservation is expired.	curam.reservation.impl.Reservation.expire()
ReservationCreateReservationEvents	Raised when a reservation is created.	curam.reservation.impl.Reservation.createReservation ()
ReservationConfirmPlacementEvents	Raised when a placement is created from a reservation.	curam.reservation.impl.Reservation.confirmPlacement ()
ReservationUpdateReservationEvents	Raised when a reservation is updated.	curam.reservation.impl.Reservation.updateReservation ()
ReservationCancelOverlappingActiveReservationsEvents	Raised when overlapping active reservations are cancelled.	curam.reservation.impl.Reservation.cancelOverlappingActiveReservations ()
ReservationGetPlaceAvailableInDateRangeEvents	Raised when available placements in the given date range are retrieved.	curam.reservation.impl.Reservation.getPlaceAvailableInDateRange ()

Table 3.26 Reservation Event Details

3.7 Contract Customization Points

The following sections list the available customization points for Contracts.

3.7.1 Contract Version Events

The following events are located in the `curam.contracts.impl.ContractVersion` interface.

Event Class	Description	Event is raised before and after
<code>ContractVersionPrintContractEvents</code>	Raised when a Contract Version is printed.	<code>curam.contracts.impl.ContractVersion.printContract()</code>
<code>ContractVersionPreviewContractEvents</code>	Raised when a Contract Version is previewed.	<code>curam.contracts.impl.ContractVersion.previewContract()</code>
<code>ContractVersionValidateContractedProviderOfferingRatesEvents</code>	Raised when contracted Provider Offering rates are validated.	<code>curam.contracts.impl.ContractVersion.validateContractedProviderOfferingRates()</code>
<code>ContractVersionValidateContractedProviderOfferingPlaceLimitsEvents</code>	Raised when contracted Provider Offering Place Limits are validated.	<code>curam.contracts.impl.ContractVersion.validateContractedProviderOfferingPlaceLimits()</code>

Table 3.27 Contract Version Event Details

The following events are located in the `curam.contracts.impl.ContractVersionProviderOffering` interface.

Event Class	Description	Event is raised before and after
<code>ContractVerProvOfferCopyNonContractPORToContractEvents</code>	Raised when a non contracted provider offering rates are copied to contract.	<code>curam.contracts.impl.ContractVersionProviderOffering.copyNonContractedPORToContract()</code>
<code>ContractVerProvOfferCreateDefaultRateEvents</code>	Raised when a default Provider Offering Rate is created for the Provider.	<code>curam.contracts.impl.ContractVersionProviderOffering.createDefaultRate()</code>
<code>ContractVerPOCheckForDuplicatePOOnLiveContractEvents</code>	Raised when duplicate Provider Offering on live contract is checked.	<code>curam.contracts.impl.ContractVersionProviderOffering.checkForDuplicateProviderOfferingOnLiveContract()</code>
<code>ContractVerPOCreateContractedPORForPeriodEvents</code>	Raised when contracted Provider Offering Rate is created if the non	<code>curam.contracts.impl.ContractVersionProviderOffer-</code>

Event Class	Description	Event is raised before and after
	contracted Provider Offering Rate does not exist.	ing.createContractedPORForPeriod()

Table 3.28 Contract Version Event Details

3.7.2 Flat Rate Contract Events

The following events are located in the `curam.contracts.impl.FlatRateContract` interface.

Event Class	Description	Event is raised before and after
<code>FlatRateContractActivateEvents</code>	This event is raised during activation of a flat rate contract.	<code>curam.contracts.impl.FlatRateContract.activate()</code>
<code>curam.contracts.impl.FlatRateContract.FlatRateContractReEditEvents</code>	Raised when a Flat Rate Contract is edited.	<code>curam.contracts.impl.FlatRateContract.reEdit()</code>
<code>curam.contracts.impl.FlatRateContract.FlatRateContractGenerateEvents</code>	Raised when a Flat Rate Contract is generated.	<code>curam.contracts.impl.FlatRateContract.generate()</code>
<code>curam.contracts.impl.FlatRateContract.FlatRateContractTerminateEvents</code>	Raised when a Flat Rate Contract is terminated.	<code>curam.contracts.impl.FlatRateContract.terminate()</code>
<code>curam.contracts.impl.FlatRateContract.FlatRateContractRenewEvents</code>	Raised when a Flat Rate Contract is renewed.	<code>curam.contracts.impl.FlatRateContract.renew()</code>
<code>curam.contracts.impl.FlatRateContract.FlatRateContractCloneFlatRateContractEvents</code>	Raised when a Flat Rate Contract is cloned.	<code>curam.contracts.impl.FlatRateContract.cloneFlatRateContract()</code>

Table 3.29 Flat Rate Contract Event Details

3.7.3 Utilization Contract Events

The following events are located in the

curam.contracts.impl.UtilizationContract interface.

Event Class	Description	Event is raised before and after
UtilizationContractDeleteEvents	Raised when a Utilization Contract is deleted.	curam.contracts.impl.UtilizationContract.delete()
UtilizationContractGenerateEvents	Raised when a Utilization Contract is generated.	curam.contracts.impl.UtilizationContract.generate()
UtilizationContractActivateEvents	Raised when a Utilization Contract is activated	curam.contracts.impl.UtilizationContract.activate()
UtilizationContractTerminateEvents	Raised when a Utilization Contract is terminated.	curam.contracts.impl.UtilizationContract.terminate()
UtilizationContractRenewEvents	Raised when a Utilization Contract is renewed.	curam.contracts.impl.UtilizationContract.renew()
UtilizationContractReEditEvents	Raised when a Utilization Contract is edited.	curam.contracts.impl.UtilizationContract.reEdit()
UtilizationContractCloneUtilizationContractEvents	Raised when a Utilization Contract is cloned.	curam.contracts.impl.UtilizationContract.cloneUtilizationContract ()
UtilizationContractCloneUtilizationContractForRenewalEvents	Raised when a Utilization Contract is cloned for renewal.	curam.contracts.impl.UtilizationContract.cloneUtilizationContractForRenewal ()
UtilizationContractAmendEvents	Raised when a Utilization Contract is amended	curam.contracts.impl.UtilizationContract.amend()

Table 3.30 Utilization Contract Event Details

3.7.4 Performance Measure Events

The following events are located in the curam.performancemeasure.impl.RetrievePerformanceMeasureForContract interface.

Event Class	Description	Event is raised before and after
RetrievePerformance-	Raised when the actual	curam.performancemeas

Event Class	Description	Event is raised before and after
MeasureForContract-GetActualValueForCustomPerformanceMeasure	value for custom Performance Measure is retrieved.	ure.impl.RetrievePerformanceMeasureForContract.getActualValueForCustomPerformanceMeasure()
RetrievePerformanceMeasureForContract-GetAverageCostPerSuccessfulOutcome	Raised when an average cost per successful Outcome is retrieved.	curam.performancemeasure.impl.RetrievePerformanceMeasureForContract.getAverageCostPerSuccessfulOutcome()
RetrievePerformanceMeasureForContract-GetPerformanceMeasureForAvgCostPerUnitOfService	Raised when the Performance Measure for an average cost per unit of service is retrieved.	curam.performancemeasure.impl.RetrievePerformanceMeasureForContract.getPerformanceMeasureForAvgCostPerUnitOfService()
RetrievePerformanceMeasureForContract-GetPerformanceMeasureForNoOfClientsServed	Raised when the Performance Measure on number of clients served are retrieved.	curam.performancemeasure.impl.RetrievePerformanceMeasureForContract.getPerformanceMeasureForNoOfClientsServed()
RetrievePerformanceMeasureForContract-GetPerformanceMeasureForNoOfUnitsDelivered	Raised when the Performance Measure for number of units delivered are retrieved.	curam.performancemeasure.impl.RetrievePerformanceMeasureForContract.getPerformanceMeasureForNoOfUnitsDelivered()
RetrievePerformanceMeasureForContract-GetPerformanceMeasureForRateOfAchievementOfSuccessfulOutcome	Raised when the Performance Measure for rate of achievement of successful outcome is retrieved.	curam.performancemeasure.impl.RetrievePerformanceMeasureForContract.getPerformanceMeasureForRateOfAchievementOfSuccessfulOutcome()
RetrievePerformanceMeasureForContractRetrievePerformanceMeasure	Raised when the actual Performance Measure value is retrieved.	curam.performancemeasure.impl.RetrievePerformanceMeasureForContract.retrievePerformanceMeasure()

Table 3.31 Performance Measure Event Details

3.8 Service Invoice Customization Points

The following sections list the available customization points for Service Invoices.

3.8.1 Service Invoice Events

The following events are located in the `curam.financial.impl.ServiceInvoice` interface.

Event Class	Description	Event is raised before and after
<code>ServiceInvoiceAddLineItemEvents</code>	Raised when a Service Invoice Line Item is added to a Service Invoice.	<code>curam.financial.impl.ServiceInvoice.addLineItem()</code>
<code>ServiceInvoiceBulkApproveEvents</code>	Raised when many Service Invoice Line Items are approved together in bulk.	<code>curam.financial.impl.ServiceInvoice.bulkApprove()</code>
<code>ServiceInvoiceGetServiceInvoiceDerivedStatusEvents</code>	Raised when a Service Invoice status is retrieved.	<code>curam.financial.impl.ServiceInvoice.getServiceInvoiceDerivedStatus()</code>

Table 3.32 Service Invoice Event Details

3.8.2 Service Invoice Line Item Events

The following events are located in the `curam.financial.impl.ServiceInvoiceLineItem` interface.

Event Class	Description	Event is raised before and after
<code>ServiceInvoiceLineItemApproveEvents</code>	Raised when a Service Invoice Line Item is approved.	<code>curam.financial.impl.ServiceInvoiceLineItem.approve()</code>
<code>ServiceInvoiceLineItemDenyEvents</code>	Raised when a Service Invoice Line Item is denied.	<code>curam.financial.impl.ServiceInvoiceLineItem.deny()</code>
<code>ServiceInvoiceLineItemSubmitEvents</code>	Raised when a Service Invoice Line Item is submitted.	<code>curam.financial.impl.ServiceInvoiceLineItem.submit()</code>

Event Class	Description	Event is raised before and after
ServiceInvoiceLineItemMatch-CaseEvents	Raised when a Case Reference in a Service Invoice Line Item is matched with a case participant.	curam.financial.impl.ServiceInvoiceLineItem.matchCase()
ServiceInvoiceLineItemMatch-PayeeEvents	Raised when payee details on a Service Invoice Line Item are matched with a provider/provider group.	curam.financial.impl.ServiceInvoiceLineItem.matchPayee()
ServiceInvoiceLineItemMatch-ProviderEvents	Raised when the details of the provider who is providing the service as taken from the Service Invoice Line Item, are matched with a registered provider.	curam.financial.impl.ServiceInvoiceLineItem.matchProvider()
ServiceInvoiceLineItemMatch-ClientEvents	Raised when client details are matched with the client who received the service.	curam.financial.impl.ServiceInvoiceLineItem.matchClient()
ServiceInvoiceLineItemResolveServiceAuthorizationLineItemFromKeyIdentifiersEvents	Raised when a Service Authorization Line Item is matched to a Service Invoice Line Item.	curam.financial.impl.ServiceInvoiceLineItem.resolveServiceAuthorizationLineItemFromKeyIdentifiers()
ServiceInvoiceLineItemValidateLineItemAgainstAuthorizationEvents	Raised when Service Authorization Line Item details are validated against Service Invoice Line Item details.	curam.financial.impl.ServiceInvoiceLineItem.validateLineItemAgainstAuthorization()
ServiceInvoiceLineItemGeneratePaymentEvents	Raised when a payment is processed for a Service Invoice Line Item.	curam.financial.impl.ServiceInvoiceLineItem.generatePayment()
ServiceInvoiceLineItemDeterminePaymentAmountFromEstablishedRatesEvents	Raised when the payment amount is determined from the established rates for the period specified in the Service Invoice Line Item.	curam.financial.impl.ServiceInvoiceLineItem.determinePaymentAmountFromEstablishedRates()
ServiceIn-	Raised when Case, Pro-	curam.financial.impl.Se

Event Class	Description	Event is raised before and after
voiceLineItem-MatchIdentifiersEvents	vider, Client details on a Service Invoice Line Item are matched.	erviceIn-voiceLineItem.matchIdentifiers()
ServiceInvoiceLineItemDeterminePaymentAmountFromEstablishedRatesForReassessmentEvents	Raised when a payment amount is determined from the established rates to reassess the payment made for Service Invoice Line Item.	curam.financial.impl.ServiceInvoiceLineItem.determinePaymentAmountFromEstablishedRatesForReassessment()
ServiceInvoiceLineItemMatchAgainstFlatRateContractEvents	Raised when Service Invoice Line Item details are matched with an existing Flat Rate Contract.	curam.financial.impl.ServiceInvoiceLineItem.matchAgainstFlatRateContract()
ServiceInvoiceLineItemRetrieveServiceAuthorizationEvents	Raised when Service Authorization details related to a Service Invoice Line Item are retrieved.	curam.financial.impl.ServiceInvoiceLineItem.retrieveServiceAuthorization()
ServiceInvoiceLineItemSubmitAndApproveSILIForCorrectionEvents	Raised when a Service Invoice Line Item Correction is submitted and approved.	curam.financial.impl.ServiceInvoiceLineItem.submitAndApproveSILIForCorrection()
ServiceInvoiceLineItemRetrieveSILIAmountPaidEvents	Raised when the amount paid against a Service Invoice Line Item is retrieved.	curam.financial.impl.ServiceInvoiceLineItem.retrieveSILIAmountPaid()
ServiceInvoiceLineItemListSOAttendanceConfigurationforSILIEvents	Raised when the Service Offering Attendance Configuration for the Service Offering related to a Service Invoice Line Item is retrieved.	curam.financial.impl.ServiceInvoiceLineItem.listSOAttendanceConfigurationforSILI()
ServiceInvoiceLineItemGetAmountPaidEvents	Raised when the amount paid/payable against a Service Invoice Line Item is retrieved.	curam.financial.impl.ServiceInvoiceLineItem.getAmountPaid()

Table 3.33 Service Invoice Line Item Event Details

The following events are located in the curam.financial.impl.DeterminePaymentAmount interface.

Event Class	Description	Event is raised before and after
DeterminePaymentAmountDeterminePaymentAmountForSILIEvents	Raised when the amount to be paid for the Service Invoice Line Item is determined.	curam.financial.impl.DeterminePaymentAmount.determinePaymentAmountForSILI()

Table 3.34 Service Invoice Line Item Event Details

The following events are located in the curam.financial.impl.PaymentOptionProcessor interface.

Event Class	Description	Event is raised before and after
PaymentOptionProcessorProcessServicePaymentOptionChangeForSILIEvents	Raised when the payments for a Service Offering made through invoices for the specified reassessment period is processed.	curam.financial.impl.PaymentOptionProcessor.processServicePaymentOptionChangeForSILI()
PaymentOptionProcessorProcessProviderPaymentOptionChangeForSILIEvents	Raised when the payments for a Provider made through invoices for the specified reassessment period is processed.	curam.financial.impl.PaymentOptionProcessor.processProviderPaymentOptionChangeForSILI()

Table 3.35 Service Invoice Line Item Event Details

The following events are located in the curam.financial.impl.ServiceInvoiceLineItemHelper interface.

Event Class	Description	Event is raised before and after
ServiceInvoiceLineItemHelperMatchClientEvents	Raised when the client details with the client who received the service is matched.	curam.financial.impl.ServiceInvoiceLineItemHelper.matchClient()
ServiceInvoiceLineItemHelperMatchProviderEvents	Raised when the Provider details with Provider/Provider Group who provided the service is matched.	curam.financial.impl.ServiceInvoiceLineItemHelper.matchProvider()
ServiceInvoiceLineItemHelper	Raised when the case reference in Service In-	curam.financial.impl.ServiceInvoiceLineItem-

Event Class	Description	Event is raised before and after
MatchCaseEvents	voice Line Item to the participant case is matched.	Helper.matchCase()
ServiceInvoiceLineItemHelperMatchPayeeEvents	Raised when the payee details with Provider/ Provider Group is matched.	curam.financial.impl.ServiceInvoiceLineItemHelper.matchPayee()

Table 3.36 Service Invoice Line Item Event Details

The following events are located in the curam.financial.impl.ServiceInvoiceLineItemTransactionHelper interface.

Event Class	Description	Event is raised before and after
ServiceInvoiceLineItemTransactionHelperCreateCancellationTransactionEvents	Raised when the Service Invoice Line Item transaction of type canceled is created.	curam.financial.impl.ServiceInvoiceLineItemTransactionHelper.createCancellationTransaction()
ServiceInvoiceLineItemTransactionHelperCreateDenialTransactionEvents	Raised when the Service Invoice Line Item transaction of type denied is created.	curam.financial.impl.ServiceInvoiceLineItemTransactionHelper.createDenialTransaction()
ServiceInvoiceLineItemTransactionHelperCreateInvoicedTransactionEvents	Raised when a new transaction with the type as Invoiced for a Service Invoice Line Item is created.	curam.financial.impl.ServiceInvoiceLineItemTransactionHelper.createInvoicedTransaction()
ServiceInvoiceLineItemTransactionHelperCreatePaymentTransactionEvents	Raised when a new transaction with the type as Payment for a Service Invoice Line Item is created.	curam.financial.impl.ServiceInvoiceLineItemTransactionHelper.createPaymentTransaction()

Table 3.37 Service Invoice Line Item Event Details

3.8.3 Service Invoice Line Item Correction Events

The following events are located in the `curam.financial.impl.ServiceInvoiceLineItemCorrection` interface.

Event Class	Description	Event is raised before and after
<code>ServiceInvoiceLineItemCorrectionApproveEvents</code>	Raised when a Service Invoice Line Item Correction is approved.	<code>curam.financial.impl.ServiceInvoiceLineItemCorrection.approve()</code>
<code>ServiceInvoiceLineItemCorrectionDenyEvents</code>	Raised when a Service Invoice Line Item Correction is denied.	<code>curam.financial.impl.ServiceInvoiceLineItemCorrection.deny()</code>
<code>ServiceInvoiceLineItemCorrectionSubmitEvents</code>	Raised when a Service Invoice Line Item Correction is submitted.	<code>curam.financial.impl.ServiceInvoiceLineItemCorrection.submit()</code>
<code>ServiceInvoiceLineItemCorrectionValidateLineItemAgainstAuthorizationEvents</code>	Raised when the details specified in Service Invoice Line Item is validated against the Service Authorization Line Item details.	<code>curam.financial.impl.ServiceInvoiceLineItemCorrection.validateLineItemAgainstAuthorization()</code>

Table 3.38 Service Invoice Line Item Correction Event Details

3.9 Attendance Customization Points

The following sections list the available customization points for Service Invoices.

3.9.1 Provider Roster Line Item Events

The following events are located in the `curam.attendance.impl.ProviderRosterLineItem` interface.

Event Class	Description	Event is raised before and after
<code>ProviderRosterLineItemModifyRosterLineItemOnModificationOfSALIEvents</code>	Raised when a Roster Line Item is modified on modification of a service authorization line item.	<code>curam.attendance.impl.ProviderRosterLineItem.modifyRosterLineItemOnModificationOfSALI ()</code>
<code>ProviderRosterLineItemModifyRosterLineItemEvents</code>	Raised when a Roster Line Item is modified.	<code>curam.attendance.impl.ProviderRosterLineItem.modifyRosterLineItem ()</code>
<code>ProviderRoster-</code>	Raised when a Roster	<code>curam.attendance.impl.</code>

Event Class	Description	Event is raised before and after
LineItemModify-ForDailyAttendanceEvents	Line Item is modified based on daily attendance.	ProviderRoster-LineItem.modifyForDailyAttendance()
ProviderRoster-LineItemApproveEvents	Raised when a Roster Line Item is approved.	curam.attendance.impl.ProviderRoster-LineItem.approve()
ProviderRoster-LineItemAddClientEvents	Raised when a Roster Line Item is created for a new client.	curam.attendance.impl.ProviderRoster-LineItem.addClient()
ProviderRoster-LineItemAddAbsencePeriodEvents	Raised when an absence period is added to a Roster Line Item.	curam.attendance.impl.ProviderRoster-LineItem.addAbsencePeriod()
ProviderRoster-LineItemSubmitEvents	Raised when a Roster Line Item is submitted.	curam.attendance.impl.ProviderRoster-LineItem.submit()
ProviderRoster-LineItemSubmitRoster-LineItemFromRosterEvents	Raised when a Roster Line Item from a Roster is submitted.	curam.attendance.impl.ProviderRoster-LineItem.submitRosterLineItemFromRoster()
ProviderRoster-LineItemDenyEvents	Raised when a Roster Line Item is denied.	curam.attendance.impl.ProviderRoster-LineItem.deny()
ProviderRoster-LineItemSubmitAndApprovePRLIForCorrectionEvents	Raised when a Roster Line Item correction is submitted for approval.	curam.attendance.impl.ProviderRoster-LineItem.submitAndApprovePRLIForCorrection()
ProviderRoster-LineItemAccommodateClientOnExistingRosterEvents	Raised when a client is accommodated on an existing Roster.	curam.attendance.impl.ProviderRoster-LineItem.accommodateClientOnExistingRoster()
ProviderRoster-LineItemCalculateExpectedUnitsEvents	Raised when expected units on a Provider Roster Line Item are calculated.	curam.attendance.impl.ProviderRoster-LineItem.calculateExpectedUnits()
ProviderRoster-LineItemUpdateExpectedUnitsOnNextRostersEvents	Raised when expected units for Roster Line Items on a Roster for a particular client are updated.	curam.attendance.impl.ProviderRoster-LineItem.updateExpectedUnitsOnNextRosters()
ProviderRoster-	Raised when the Service	curam.attendance.impl.

Event Class	Description	Event is raised before and after
LineItemListSOAttendanceConfigurationForRLIEvents	Offering Attendance Configuration list for a Roster Line Item is retrieved.	ProviderRoster-LineItem.listSOAttendanceConfigurationForRLI()
ProviderRoster-LineItemViewExceptionTaskEvents	Raised when an exception task is viewed for a Provider Roster Line Item.	curam.attendance.impl.ProviderRoster-LineItem.viewExceptionTask()
ProviderRoster-LineItemGetCorrectionIndEvents	Raised when the correction indicator for a Provider Roster Line Item is retrieved.	curam.attendance.impl.ProviderRoster-LineItem.getCorrectionInd()
ProviderRoster-LineItemGetCaseHeaderDetailsEvents	Raised when Case Header Details are retrieved.	curam.attendance.impl.ProviderRoster-LineItem.getCaseHeaderDetails()
ProviderRoster-LineItemGetPayBasedOnAttendanceIndForRLIEvents	Raised when the indicator for Pay Based on Attendance is retrieved.	curam.attendance.impl.ProviderRoster-LineItem.getPayBasedOnAttendanceIndForRLI()
ProviderRoster-LineItemGetAbsencePeriodEvents	Raised when the Absence period on a Provider Roster Line Item is retrieved.	curam.attendance.impl.ProviderRoster-LineItem.getAbsencePeriod()
ProviderRoster-LineItemGetDailyAttendancesEvents	Raised when Daily attendance is retrieved from a Provider Roster Line Item.	curam.attendance.impl.ProviderRoster-LineItem.getDailyAttendances()
ProviderRoster-LineItemGetOriginalDtlsEvents	Raised when Provider Roster Line Item details are retrieved.	curam.attendance.impl.ProviderRoster-LineItem.getOriginalDtls()

Table 3.39 Provider Roster Line Item Event Details

The following events are located in the curam.attendance.impl.AttendanceInformationProcessing interface.

Event Class	Description	Event is raised before and after
AttendanceInfoProcessingGetRosterLineItemsFor	Raised when Provider Roster Line Items for a	curam.attendance.impl.AttendanceInformation-

Event Class	Description	Event is raised before and after
CaseEvents	case is retrieved.	Processing.getRosterLineItemsForCase()
AttendanceInfoProcessing.GetRosterLineItemsForClientEvents	Raised when Provider Roster Line Items for a client is retrieved.	curam.attendance.impl.AttendanceInformationProcessing.getRosterLineItemsForClient()

Table 3.40 Provider Roster Line Item Event Details

The following events are located in the curam.attendance.impl.ProviderRosterLineItemHelper interface.

Event Class	Description	Event is raised before and after
ProviderRosterLineItemHelperMatchClientEvents	Raised when the client is matched based on client reference number, first name and last name and address.	curam.attendance.impl.ProviderRosterLineItemHelper.matchClient()
ProviderRosterLineItemHelperMatchCaseEvents	Raised when the case is matched by the case reference number.	curam.attendance.impl.ProviderRosterLineItemHelper.matchCase()
ProviderRosterLineItemHelperMatchVoucherEvents	Raised when the voucher is matched by number assigned to the voucher that has been issued to the client.	curam.attendance.impl.ProviderRosterLineItemHelper.matchVoucher()

Table 3.41 Provider Roster Line Item Event Details

The following events are located in the curam.attendance.impl.ProviderRosterLineItemTransactionHelper interface.

Event Class	Description	Event is raised before and after
ProviderRosterLineItemTransactionHelperCreateDenialTransactionEvents	Raised when a Service Invoice Line Item transaction of type denied is created.	curam.attendance.impl.ProviderRosterLineItemTransactionHelp-

Event Class	Description	Event is raised before and after
		er.createDenialTransaction()
ProviderRoster-LineItemTransactionHelperCreateCancellationTransactionEvents	Raised when a Service Invoice Line Item transaction of type canceled is created.	curam.attendance.impl.ProviderRoster-LineItemTransactionHelper.createCancellationTransaction()
ProviderRoster-LineItemTransactionHelperCreateProviderRosterLineItemTransactionsEvents	Raised when a Provider Roster Line Item transactions are created.	curam.attendance.impl.ProviderRoster-LineItemTransactionHelper.createProviderRosterLineItemTransactions()

Table 3.42 Provider Roster Line Item Event Details

3.9.2 Provider Roster Line Item Correction (PRLI Correction) Events

The following events are located in the curam.attendance.impl.PRLICorrection interface.

Event Class	Description	Event is raised before and after
PRLICorrectionApproveEvents	Raised when a Provider Roster Line Item Correction is approved.	curam.attendance.impl.PRLICorrection.approve()
PRLICorrectionDenyEvents	Raised when a Provider Roster Line Item Correction is denied.	curam.attendance.impl.PRLICorrection.deny()
PRLICorrectionSubmitEvents	Raised when a Provider Roster Line Item Correction is submitted.	curam.attendance.impl.PRLICorrection.submit()

Table 3.43 Provider Roster Line Item Correction (PRLI Correction) Event Details

3.9.3 Roster Events

The following events are located in the curam.attendance.impl.RosterProcessing interface.

Event Class	Description	Event is raised before and after
RosterProcessingGenerateRosterManuallyEvents	Raised when blank roster is generated manually.	curam.attendance.impl.RosterProcessing.generateRosterManually()
RosterProcessingGetApplicableRosterRangeEvents	Raised when the applicable roster range is retrieved.	curam.attendance.impl.RosterProcessing.getApplicableRosterRange()
RosterProcessingCreateRosterOverlappingDateEvents	Raised when roster for Service Authorization Line Item overlapping date is created.	curam.attendance.impl.RosterProcessing.createRosterOverlappingDate()
RosterProcessingCreateRosterEvents	Raised when roster for a Service Authorization Line Item is created.	curam.attendance.impl.RosterProcessing.createRoster()

Table 3.44 Roster Event Details

3.9.4 Attendance Payment Frequency Events

The following events are located in the curam.attendance.impl.AttendancePaymentFrequency interface.

Event Class	Description	Event is raised before and after
AttendancePaymentFrequencyGetDerivedStatusEvents	Raised when the status of an attendance payment configuration entry is retrieved.	curam.attendance.impl.AttendancePaymentFrequency.getDerivedStatus()

Table 3.45 Attendance Payment Frequency Event Details

3.9.5 Service Offering Attendance Configuration Events

The following events are located in the curam.attendance.impl.SOAttendanceConfiguration interface.

Event Class	Description	Event is raised before and after
SOAttendanceConfigur-	Raised when the status	curam.attendance.impl.

Event Class	Description	Event is raised before and after
SOAttendanceConfigurationGetDerivedStatusEvents	of a Service Offering Attendance Configuration is retrieved.	SOAttendanceConfiguration.getDerivedStatus()

Table 3.46 Service Offering Attendance Configuration Event Details

3.9.6 Service Offering Attendance Payment Events

The following events are located in the interface.

Event Class	Description	Event is raised before and after
SOAttendancePaymentGetDerivedStatusEvents	Raised when the status of a Service Offering Attendance Payment is retrieved.	curam.attendance.impl.SOAttendancePayment.getDerivedStatus()

Table 3.47 Service Offering Attendance Event Details

3.10 Financial Customization Points

The following sections list the available customization points for Financials.

3.10.1 Financial Events

The following events are located in the curam.financial.impl.FinancialAPI interface.

Event Class	Description	Event is raised before and after
FinancialAPIRetrieveServiceDeliverySummaryInformationEvents	Raised when the service delivery summary information is retrieved for a case, client and service.	curam.financial.impl.FinancialAPI.retrieveServiceDeliverySummaryInformation()
FinancialAPIRetrieveServiceDeliverySummaryInformationEvents	Raised when the service delivery summary information is retrieved for a service and case participant role.	curam.financial.impl.FinancialAPI.retrieveServiceDeliverySummaryInformation()
FinancialAPIListReasonsEvents	Raised when the reasons are retrieved.	curam.financial.impl.FinancialAPI.listReasons()

Event Class	Description	Event is raised before and after
assessmentResultsEvents	assessment results for all the product deliveries created to deliver the services for the given service authorization is retrieved.	financialAPI.listReassessmentResults()

Table 3.48 Financial Event Details

The following events are located in the curam.financial.impl.GenerateOverUnderPayment interface.

Event Class	Description	Event is raised before and after
GenerateOverUnderPaymentGenerateOverPaymentForPRLIEvents	Raised when the over payment for Provider Roster Line Item is generated.	curam.financial.impl.GenerateOverUnderPayment.generateOverPaymentForPRLI()
GenerateOverUnderPaymentGenerateOverPaymentForSILIEvents	Raised when the over payment for Service Invoice Line Item is generated.	curam.financial.impl.GenerateOverUnderPayment.generateOverPaymentForSILI()
GenerateOverUnderPaymentGenerateUnderPaymentForPRLIEvents	Raised when the under payment for Provider Roster Line Item is generated.	curam.financial.impl.GenerateOverUnderPayment.generateUnderPaymentForPRLI()
GenerateOverUnderPaymentGenerateUnderPaymentForSILIEvents	Raised when the under payment for Service Invoice Line Item is generated.	curam.financial.impl.GenerateOverUnderPayment.generateUnderPaymentForSILI()

Table 3.49 Financial Event Details

The following events are located in the curam.financial.impl.PaymentProcessing interface.

Event Class	Description	Event is raised before and after
PaymentProcessingProcessPaymentForSILIEvents	Raised when the payment for the Service Invoice Line Item is processed.	curam.financial.impl.PaymentProcessing.processPaymentForSILI()
PaymentProcessingPro-	Raised when the pay-	curam.financial.impl.Pa

Event Class	Description	Event is raised before and after
cessPaymentForReassessmentEvents	ment for reassessment is processed.	ymentProcessing.processPaymentForReassessment()
PaymentProcessingApproveAndActivateCPMCaseEvents	Raised when the cases for Provider is approved and activated.	curam.financial.impl.PaymentProcessing.approveAndActivateCPMCase()
PaymentProcessingSubmitForApprovalEvents	Raised when the case is submitted and approved.	curam.financial.impl.PaymentProcessing.submitForApproval()
PaymentProcessingDeterminePayeeDetailsEvents	Raised when the payee for a given Provider and given period is determined.	curam.financial.impl.PaymentProcessing.determinePayeeDetails()
PaymentProcessingDeterminePayeDetailsEvents	Raised when the payee for a given Provider and given period is determined.	curam.financial.impl.PaymentProcessing.determinePayeeDetails()

Table 3.50 Financial Event Details

The following events are located in the curam.financial.impl.ProcessCaseNominee interface.

Event Class	Description	Event is raised before and after
ProcessCaseNomineeCreateCaseNomineeEvents	Raised when the Provider Group is created as the case nominee for the given product delivery case of the Provider.	curam.financial.impl.ProcessCaseNominee.createCaseNominee()
ProcessCaseNomineeCreateCaseNomineeEvents	Raised when the payee is created as the case nominee for the given product delivery case of the Provider.	curam.financial.impl.ProcessCaseNominee.createCaseNominee()
ProcessCaseNomineeCreateCaseNomineeEvents	Raised when the Provider Group is created	curam.financial.impl.ProcessCaseNominee-

Event Class	Description	Event is raised before and after
eeForContractEvents	as the case nominee for the given product delivery case of the Provider and contract frequency.	ee.createCaseNomineeForContract()
ProcessCaseNomineeCreateNomineeForAllCasesEvents	Raised when the case nominees are created for all existing cases associated with the Provider for whom the Provider Group Associate Payment Configuration is created.	curam.financial.impl.ProcessCaseNominee.createNomineeForAllCases()
ProcessCaseNomineeReassignCaseNomineeObjectivesOnCancellationEvents	Raised when all the case nominee objectives associated with the Provider Group Associate Payment Configuration is reassigned on cancellation of payment configuration.	curam.financial.impl.ProcessCaseNominee.reassignCaseNomineeObjectivesOnCancellation()
ProcessCaseNomineeReassignCaseNomineeObjectivesOnModificationEvents	Raised when all the case nominee objectives associated with the Provider Group Associate Payment Configuration is reassigned on modification of Provider Group Associate.	curam.financial.impl.ProcessCaseNominee.reassignCaseNomineeObjectivesOnModification()
ProcessCaseNomineeReassignCaseNomineeObjectiveOnModificationEvents	Raised when all the case nominee objectives associated with the Provider Group Associate Payment Configuration is reassigned on modification of payment configuration.	curam.financial.impl.ProcessCaseNominee.reassignCaseNomineeObjectiveOnModification()
ProcessCaseNomineeReAssignCaseNomineeObjectiveOnPayeeModificationEvents	Raised when all the case nominee objectives associated with the old payee to the new payee for the given product delivery case is reassigned.	curam.financial.impl.ProcessCaseNominee.reAssignCaseNomineeObjectiveOnPayeeModification()

Table 3.51 Financial Event Details

The following events are located in the `curam.financial.impl.RateValidator` interface.

Event Class	Description	Event is raised before and after
<code>RateValidatorValidateRatesEvents</code>	Raised when there is any gap or overlapping in the period of the set of rates provided are validated.	<code>curam.financial.impl.RateValidator.validateRates()</code>

Table 3.52 Financial Event Details

3.11 Referral Customization Points

The following sections list the available customization points for Referrals.

3.11.1 Referral Events

The following events are located in the `curam.referral.impl.Referral` interface.

Event Class	Description	Event is raised before and after
<code>ReferralSendNotificationEvents</code>	Raised when a notification letter to the Concern Role is sent.	<code>curam.referral.impl.Referral.sendNotification()</code>
<code>ReferralCreateReferralRoleEvents</code>	Raised when a referral role record for a referral is created.	<code>curam.referral.impl.Referral.createReferralRole()</code>

Table 3.53 Referral Event Details

The following events are located in the `curam.referral.impl.ReferralNotification` interface.

Event Class	Description	Event is raised before and after
<code>ReferralNotificationGenerateNotificationDocumentEvents</code>	Raised when a notification document is generated.	<code>curam.referral.impl.ReferralNotification.generateNotificationDocument()</code>
<code>ReferralNotificationSendNotificationEvents</code>	Raised when a notification is sent to the Concern Role.	<code>curam.referral.impl.ReferralNotification.sendNotification()</code>

Table 3.54 Referral Event Details

3.12 Service Delivery Customization Points

The following sections list the available customization points for Service Deliveries.

3.12.1 Service Delivery Events

The following events are located in the `curam.servicedelivery.impl.ServiceDeliveryEstimatedCost` interface.

Event Class	Description	Event is raised before and after
<code>ServiceDeliveryEstimatedCostDetermineRateEvents</code>	Raised when the rate for the Service Offering is determined.	<code>curam.servicedelivery.impl.ServiceDeliveryEstimatedCost.determineRate()</code>
<code>ServiceDeliveryEstimatedCostDetermineRateWithFrequencyEvents</code>	Raised when the rate for the Service Offering is determined for each service occurrence date.	<code>curam.servicedelivery.impl.ServiceDeliveryEstimatedCost.determineRateWithFrequency()</code>

Table 3.55 Service Delivery Event Details

The following events are located in the `curam.servicedelivery.impl.ServiceDelivery` interface.

Event Class	Description	Event is raised before and after
<code>ServiceDeliverySubmitEvents</code>	Raised when the Service Delivery is submitted.	<code>curam.servicedelivery.impl.ServiceDelivery.submit()</code>

Table 3.56 Service Delivery Event Details

The following events are located in the `curam.servicedeliveryevaluation.impl.ServiceDeliveryEvaluation` interface.

Event Class	Description	Event is raised before and after
<code>ServiceDeliveryEvaluateOutcomeForServiceDeliveryEvaluationEvents</code>	Raised when the outcome for a Service Delivery Evaluation is calculated.	<code>curam.servicedeliveryevaluation.impl.ServiceDeliveryEvaluation.evaluateOutcomeForServiceDeliveryEvaluation()</code>

Event Class	Description	Event is raised before and after
		ation.calculateOutcomeForServiceDeliveryEvaluation()

Table 3.57 Service Delivery Event Details

3.13 Taxonomy Customization Points

The following sections list the available customization points for Taxonomy.

3.13.1 Taxonomy Events

The following events are located in the curam.taxonomy.impl.POTaxonomyInEditIndexProcessor interface.

Event Class	Description	Event is raised before and after
POTaxonomyInEditIndexProcessorPublishInEditIndexesEvents	Raised when the updated Provider Offering and Taxonomy indexing details are published.	curam.taxonomy.impl.POTaxonomyInEditIndexProcessor.publishInEditIndexes()
POTaxonomyInEditIndexProcessorAddInEditTermDataEvents	Raised when the updated term data to the Provider Offering and Taxonomy Term association details are added.	curam.taxonomy.impl.POTaxonomyInEditIndexProcessor.addInEditTermData()

Table 3.58 Taxonomy Event Details

The following events are located in the curam.taxonomy.impl.PublishTaxonomy interface.

Event Class	Description	Event is raised before and after
PublishTaxonomyPublishInEditTaxonomyDataEvents	Raised when the In Edit Taxonomy Terms and its associated data are published.	curam.taxonomy.impl.PublishTaxonomy.publishInEditTaxonomyData()
PublishTaxonomyPublishInEditTaxonomyTermEvents	Raised when the In Edit Taxonomy Terms are published.	curam.taxonomy.impl.PublishTaxonomy.publishInEditTa

Event Class	Description	Event is raised before and after
		onomyTerm()
PublishTaxonomyPublishTaxonomyEvents	Raised when the Taxonomy Version is published.	curam.taxonomy.impl.PublishTaxonomy.publishTaxonomy()
PublishTaxonomyRemoveTaxonomyVersionEvents	Raised when the Taxonomy Version is removed.	curam.taxonomy.impl.PublishTaxonomy.removeTaxonomyVersion()

Table 3.59 Taxonomy Event Details

The following events are located in the curam.taxonomy.impl.RelatedConceptWizState interface.

Event Class	Description	Event is raised before and after
RelatedConceptWizStateReadTaxonomyTerms	Raised when the Taxonomy Term list is retrieved from the wizard state.	curam.taxonomy.impl.RelatedConceptWizState.readTaxonomyTerms()
RelatedConceptWizStateRemoveInEditTerm	Raised when the In Edit Taxonomy Term is removed from the wizard state.	curam.taxonomy.impl.RelatedConceptWizState.removeInEditTerm()
RelatedConceptWizStateRemoveTaxonomyTerm	Raised when the Taxonomy Terms are removed from the wizard state.	curam.taxonomy.impl.RelatedConceptWizState.removeTaxonomyTerm()
RelatedConceptWizStateResetSearch	Raised when the search criteria and Taxonomy Terms stored in the wizard state is reset.	curam.taxonomy.impl.RelatedConceptWizState.resetSearch()
RelatedConceptWizStateSaveRelatedConcept	Raised when the Related Concept is added.	curam.taxonomy.impl.RelatedConceptWizState.saveRelatedConcept()
RelatedConceptWizStateSaveRelatedConceptElement	Raised when the In Edit Related Concept is added.	curam.taxonomy.impl.RelatedConceptWizState.saveRelatedConceptElement()
RelatedConceptWizStateStoreRelated-	Raised when the Related Concept details are	curam.taxonomy.impl.RelatedConceptWiz-

Event Class	Description	Event is raised before and after
Concept	stored in the wizard state.	State.storeRelatedConcept()
RelatedConceptWizardStateStoreTaxonomyTerm	Raised when the Taxonomy Terms are stored in the wizard state.	curam.taxonomy.impl.RelatedConceptWizardState.storeTaxonomyTerm()

Table 3.60 Taxonomy Event Details

The following events are located in the curam.taxonomy.impl.ReviewTaxonomy interface.

Event Class	Description	Event is raised before and after
ReviewTaxonomyAcceptModifiedTermEvents	Raised when the changes on the term based on review attribute selects are accepted.	curam.taxonomy.impl.ReviewTaxonomy.acceptModifiedTerm()
ReviewTaxonomyAcceptReplacedTermEvents	Raised when the new terms selected for the replacement are accepted.	curam.taxonomy.impl.ReviewTaxonomy.acceptReplacedTerm()
ReviewTaxonomyDeleteReplacedTermEvents	Raised when the term which is being replaced is deleted.	curam.taxonomy.impl.ReviewTaxonomy.deleteReplacedTerm()
ReviewTaxonomyRejectReplacedTermEvents	Raised when the new replacement terms are rejected.	curam.taxonomy.impl.ReviewTaxonomy.rejectReplacedTerm()
ReviewTaxonomyRejectModifiedTermEvents	Raised when the changes in the term is rejected.	curam.taxonomy.impl.ReviewTaxonomy.rejectModifiedTerm()
ReviewTaxonomyReviewDeletedTermsEvents	Raised when the deleted terms are reviewed.	curam.taxonomy.impl.ReviewTaxonomy.reviewDeletedTerms()
ReviewTaxonomyReviewAllDeletedTermsEvents	Raised when all the deleted terms are reviewed.	curam.taxonomy.impl.ReviewTaxonomy.reviewAllDeletedTerms()

Table 3.61 Taxonomy Event Details

The following events are located in the `curam.taxonomy.impl.TaxonomyInEditData` interface.

Event Class	Description	Event is raised before and after
<code>TaxonomyInEditDataAddTermNameTranslation</code>	Raised when the new translations are added to Taxonomy Term name attribute.	<code>curam.taxonomy.impl.TaxonomyInEditData.addTermNameTranslation()</code>
<code>TaxonomyInEditDataAddTermBibliographicRefTranslation</code>	Raised when the new translations are added to Taxonomy Term bibliographic reference attribute.	<code>curam.taxonomy.impl.TaxonomyInEditData.addTermBibliographicRefTranslation()</code>
<code>TaxonomyInEditDataAddTermCommentsTranslation</code>	Raised when the new translations are added to Taxonomy Term comments attribute.	<code>curam.taxonomy.impl.TaxonomyInEditData.addTermCommentsTranslation()</code>
<code>TaxonomyInEditDataAddTermDefinitionTranslation</code>	Raised when the new translations are added to Taxonomy Term definition attribute.	<code>curam.taxonomy.impl.TaxonomyInEditData.addTermDefinitionTranslation()</code>
<code>TaxonomyInEditDataAddUseReferenceTranslation</code>	Raised when the new translations are added to Use Reference.	<code>curam.taxonomy.impl.TaxonomyInEditData.addUseReferenceTranslation()</code>
<code>TaxonomyInEditDataAssociateTermWithRelatedConcept</code>	Raised when the term with Related Concepts are associated.	<code>curam.taxonomy.impl.TaxonomyInEditData.associateTermWithRelatedConcept()</code>
<code>TaxonomyInEditDataRemoveRelatedConceptAssociation</code>	Raised when the association between In Edit Taxonomy Term from the Related Concept is removed.	<code>curam.taxonomy.impl.TaxonomyInEditData.removeRelatedConceptAssociation()</code>

Table 3.62 Taxonomy Event Details

The following events are located in the `curam.taxonomy.impl.TaxonomyTermRelatedConcept` interface.

Event Class	Description	Event is raised before and after
<code>TaxonomyTermRelatedConceptInsertRelatedConceptsEvents</code>	Raised when the Related Concepts are added to a Taxonomy	<code>curam.taxonomy.impl.TaxonomyTermRelatedConcept.insertRelatedC</code>

Event Class	Description	Event is raised before and after
	Term.	oncepts()
TaxonomyTermRelated-ConceptInsertTaxonomyTermsEvents	Raised when the Taxonomy Terms are added to a Related Concept.	curam.taxonomy.impl.TaxonomyTermRelated-Concept.insertTaxonomyTerms()

Table 3.63 Taxonomy Event Details

The following events are located in the curam.taxonomy.impl.TaxonomyTermWizState interface.

Event Class	Description	Event is raised before and after
TaxonomyTermWiz-StateReadRelatedConcepts	Raised when the Related Concept list is retrieved from the wizard state.	curam.taxonomy.impl.TaxonomyTermWiz-State.readRelatedConcepts()
TaxonomyTermWiz-StateReadRelatedTerms	Raised when the related Taxonomy Term list is retrieved from the wizard state.	curam.taxonomy.impl.TaxonomyTermWiz-State.readRelatedTerms()
TaxonomyTermWiz-StateReadUseReferences	Raised when the Use Reference list is retrieved from the wizard state.	curam.taxonomy.impl.TaxonomyTermWiz-State.readUseReferences()
TaxonomyTermWiz-StateRemoveRelatedTerm	Raised when the related term is removed from the related term list in the wizard state.	curam.taxonomy.impl.TaxonomyTermWiz-State.removeRelatedTerm()
TaxonomyTermWiz-StateRemoveUseReference	Raised when an Use Reference is removed from the Use Reference list in the wizard state.	curam.taxonomy.impl.TaxonomyTermWiz-State.removeUseReference()
TaxonomyTermWiz-StateSaveAll	Raised when the Taxonomy Term and Use References are created from the details in the wizard state.	curam.taxonomy.impl.TaxonomyTermWiz-State.saveAll()
TaxonomyTermWiz-StateStoreRelated-Concept	Raised when the Related Concept is stored in the data store.	curam.taxonomy.impl.TaxonomyTermWiz-State.storeRelatedConcept()
TaxonomyTermWiz-	Raised when the related	curam.taxonomy.impl.T

Event Class	Description	Event is raised before and after
StateStoreRelatedTerm	terms are stored in the wizard state.	taxonomyTermWizState.storeRelatedTerm()
TaxonomyTermWizStateStoreTaxonomyTerm	Raised when the Taxonomy Term details are stored in the wizard state.	curam.taxonomy.impl.TaxonomyTermWizState.storeTaxonomyTerm()
TaxonomyTermWizStateStoreUseReference	Raised when the Use Reference is stored in the wizard state.	curam.taxonomy.impl.TaxonomyTermWizState.storeUseReference()

Table 3.64 Taxonomy Event Details

The following events are located in the `curam.taxonomy.sl.search.impl.POTaxonomyIndexSearch` interface.

Event Class	Description	Event is raised before and after
POTaxonomyIndexSearchIsProviderOfferingAlreadyIndexedEvents	Raised when the condition value which represents whether Provider Offering is indexed or not is retrieved.	curam.taxonomy.sl.search.impl.POTaxonomyIndexSearch.isProviderOfferingAlreadyIndexed()
POTaxonomyIndexSearchIsSameServiceAlreadyIndexedInOtherProviderEvents	Raised when the condition value whether the same service is already indexed in other Providers with different or same Taxonomy Terms is retrieved.	curam.taxonomy.sl.search.impl.POTaxonomyIndexSearch.isSameServiceAlreadyIndexedInOtherProvider()

Table 3.65 Taxonomy Event Details

Chapter 4

CPM Workflow Process Definitions

4.1 Introduction

CPM ships a number of workflow process definitions. Agencies can copy any of these workflow process definitions to a custom workflow directory and make modifications to them.



Note

Custom versions of workflows will always take precedence over OOTB workflows.

4.2 External Enquiry Workflow

4.2.1 Enacted from

This workflow is enacted when an external party uses CPM to enquire about the possibility of registering as a provider. For example, Mr and Mrs Smith use an external-facing system to enquire about fostering children. This workflow is enacted by `curam.cpm.eua.facade.impl.ExternalProviderEnquiry.createEnquiry`.

4.2.2 Source Location

`EJBServer/components/CPM/workflow/EXTERNALENQUIRYWORKFLOW_v1.xml`

4.2.3 Default Behavior

The workflow shipped with CPM creates a manual activity to assign the enquiry to a user for converting a provider enquiry into an enrolled provider. This manual activity is allocated using a function allocation strategy. The

default implementation of this operation allocates the activity to the provider enquiry work queue. The reviewer can choose to either transfer the enquiry to an enrolled provider or close the enquiry. Once this activity is completed the workflow also gets completed.

4.2.4 Event Details

The notation of the following event details is as follows:

Event Raised	Primary Event Data	Raised From
PROVIDEREN- QUIRY.TRANSFERENQUIRYTOPROVIDER	providerEnquiryID	curam.cpm.facade.impl.ProviderEnquiry.closeProviderEnquiry
PROVIDEREN- QUIRY.CLOSEENQUIRY	providerEnquiryID	curam.cpm.facade.impl.ProviderEnquiry.transferEnquiryToProvider

Table 4.1 External Enquiry Event Details

4.3 Home Study Approval Workflow

4.3.1 Enacted from

This workflow is enacted whenever a user submits a home study for approval. This workflow is enacted from `curam.cpm.workflowprocesses.homestudy.impl.HomeStudyImpl.submit`.

4.3.2 Source Location

EJBServer/components/CPM/workflow/HOMESTUDYAPPROVAL_v1.xml

4.3.3 Default Behavior

This workflow automatically creates a manual activity to assign a home study recommendation to a user for approval. The default implementation of this operation submits the home study recommendation to the supervisor of the user who submitted the request. Agencies may wish to alter this default behavior. For example, an agency may wish to route the approval request to a user other than the supervisor or to a group of users. The manual activity is allocated using a function allocation strategy. The reviewer can choose to either approve/reject the approval request. Once this activity is completed the workflow also gets completed.

4.3.4 Event Details

The notation of the following event details is as follows:

Event Raised	Primary Event Data	Raised From
PROVIDERMANAGEMENT.HOMESTUDYAPPROVED	homeStudyID	curam.homestudy.impl.approve
PROVIDERMANAGEMENT.HOMESTUDYRETURNED	homeStudyID	curam.homestudy.impl.reject

Table 4.2 Home Study Approval Event Details

4.4 New Invoice Created Workflow

4.4.1 Enacted from

This workflow is enacted whenever an external user submits an invoice for processing. This workflow is enacted from `curam.cpm.facade.impl.Request.createFinancialsTask`.

4.4.2 Source Location

`EJBServer/components/CPM/workflow/NEWINVOICECREATED_v1.xml`

4.4.3 Default Behavior

This workflow creates a manual activity to assign an invoice that has been submitted by an external user to another user for processing. The default implementation of this operation submits the invoice to a financial user. Agencies may wish to alter this default behavior. For example, an agency may wish to submit the invoice to a different user for processing. The manual activity is allocated using a function allocation strategy.

4.4.4 Event Details

The notation of the following event details is as follows:

Event Raised	Primary Event Data	Raised From
NEWINVOICECREATED.INVOICECANCELLED	serviceInvoiceID	curam.cpm.facade.impl.cancelServiceInvoice

Event Raised	Primary Event Data	Raised From
NEWINVOICECREATED.INVOICESUBMITTED	serviceInvoiceID	curam.cpm.facade.impl.submitSILIForProcessing

Table 4.3 New Invoice Created Event Details

4.5 Service Invoice Exception Processing Workflow

4.5.1 Enacted from

This workflow is enacted when there is insufficient correct data to match a service invoice line item against its corresponding service authorization. This workflow is called from `curam.financial.impl.ServiceInvoiceLineItemImpl.processInvoiceLineItem`.

4.5.2 Source Location

EJBServer/components/CPM/workflow/SERVICEINVOICEEXCEPTIONPROCESSING_v1.xml.

4.5.3 Default Behavior

This workflow creates a manual activity for a user to review service invoice details that do not correspond with the service authorization associated with the invoice. During invoice processing, certain details on a service invoice line item (SILI) must correspond to the details on the service authorization that is associated with the invoice otherwise the invoice will not be paid. The default implementation of this operation allocates the activity to the invoice exception processing work queue for a financial user to review. Agencies may wish to alter this default behavior, for example, by routing the activity to a different work queue. The reviewer can choose to make changes to the service invoice line item and submit for reevaluation or deny/cancel the SILI. Once this activity is completed, the workflow is also completed. This manual activity is allocated using a function allocation strategy. The modeled operation for this is: `curam.cpm.workflowprocesses.impl.WorkflowAllocationFunction.siliExceptionProcessingAllocationStrategy`.

4.5.4 Event Details

The notation of the following event details is as follows:

Event Raised	Primary Event Data	Raised From
PROVIDERMANAGE-	serviceIn-	curam.financial.impl.Se

Event Raised	Primary Event Data	Raised From
MENT.SILIPROCESSED	voiceLineItemID	rviceInvoiceLineItemImpl.submit
PROVIDERMANAGEMENT.SILICANCELLED	serviceIn-voiceLineItemID	curam.financial.impl.ServiceInvoiceLineItemImpl.cancel
PROVIDERMANAGEMENT.SILIDENIED	serviceIn-voiceLineItemID	curam.financial.impl.ServiceInvoiceLineItemImpl.deny

Table 4.4 Service Invoice Exception Processing Event Details

4.6 Service Invoice Line Item Approval Workflow

4.6.1 Enacted from

This workflow is enacted when a service invoice line item requires manual approval and has reached the "Pending Approval" status, after successful processing. This workflow is called from `curam.financial.impl.ServiceInvoiceLineItemImpl.enactSILApprovalWorkflow`.

4.6.2 Source Location

`EJBServer/components/CPM/workflow/SERVICEINVOICELINEITEMAPPROVAL_v1.xml`.

4.6.3 Default Behavior

The workflow creates a manual activity to review a service invoice line item and approve/deny it. The default implementation of this operation allocates the activity to the invoice exception processing work queue for a financial user to approve. Agencies may wish to alter this default behavior, for example, by routing the activity to a different work queue or to a different user. This manual activity is allocated using a function allocation strategy. The modeled operation for this is `curam.cpm.workflowprocesses.impl.WorkflowAllocationFunction.siliExceptionProcessingAllocationStrategy`.

The reviewer can choose to either approve or deny the service invoice line item. Once this activity is completed the workflow also gets completed.

4.6.4 Event Details

The notation of the following event details is as follows:

Event Raised	Primary Event Data	Raised From
PROVIDERMANAGEMENT.SILIAPPROVED	serviceInvoiceLineItemID	curam.financial.impl.ServiceInvoiceLineItemImpl.approve
PROVIDERMANAGEMENT.SILIDENIED	serviceInvoiceLineItemID	curam.financial.impl.ServiceInvoiceLineItemImpl.deny

Table 4.5 Service Invoice Line Item Event Details

4.7 Service Invoice Line Item Correction Approval Workflow

4.7.1 Enacted From

This workflow is enacted when a service invoice line item correction is submitted for approval. This workflow is called from `curam.financial.impl.ServiceInvoiceLineItemCorrectionImpl.enactCorrectionApprovalWorkflow`.

4.7.2 Source Location

EJBServer/components/
CPM/workflow/SERVICEINVOICELINEITEMCORRECTIONAPPROVAL_v1.xml

4.7.3 Default Behavior

This workflow automatically creates a manual activity to assign a service invoice line item correction to a user for approval. This manual activity is allocated using a function allocation strategy. The modeled operation for this `curam.cpm.workflowprocesses.impl.WorkflowAllocationFunction.siliExceptionProcessingAllocationStrategy`. The default implementation of this operation submits the service invoice line item correction to the supervisor of the user who submitted the request. Agencies may wish to alter this default behavior. For example, an agency may wish to route the approval request to a user other than the supervisor or to a group of users. The reviewer can choose to either approve or deny the service invoice line item correction. Once this activity is completed, the workflow is also completed.

4.7.4 Event Details

The notation of the following event details is as follows:

Event Raised	Primary Event Data	Raised From
<i>PROVIDERMANAGEMENT.SILICORRECTIONAPPROVED</i>	serviceInvoiceLineItemID	curam.financial.impl.ServiceInvoiceLineItemCorrectionImpl.approve
<i>PROVIDERMANAGEMENT.SILICORRECTIONDENIED</i>	serviceInvoiceLineItemID	curam.financial.impl.ServiceInvoiceLineItemCorrectionImpl.deny

Table 4.6 Service Invoice Line Item Correction Approval Event Details

4.8 Supervisor Request Decision Workflow

4.8.1 Enacted From

This workflow is enacted when a user submits a request to be set up with an external user account. This workflow is called from `curam.cpm.eua.facade.impl.ExternalRequests.submitRequest`.

4.8.2 Source Location

`EJBServer/components/CPM/workflow/SUPERVISORREQUESTDECISION_v1.xml`

4.8.3 Default Behavior

This workflow creates a manual activity that submits a request of an external user to an administrator user, who is set up as one of the following:

- A provider member
- A provider participant
- A provider group member
- A provider group associate

The default implementation submits the request to the external request work queue for an administrator to approve. Agencies may wish to alter this default behavior, for example, by routing the activity to a different work queue. The administrator can approve or reject the request of the external user. Once this activity is completed, the workflow is also completed.

4.8.4 Event Details

The notation of the following event details is as follows:

Event Raised	Primary Event Data	Raised From
REQUESTDECISION.REQUESTACCEPTED	requestID	curam.cpm.facade.impl.Request.raiseAcceptRequestEvent
REQUESTDECISION.REQUESTREJECTED	requestID	curam.cpm.facade.impl.Request.rejectRequest

Table 4.7 Supervisor Request Decision Event Details

4.9 Supervisor View New External User Task Notification Workflow

4.9.1 Enacted From

This workflow is enacted when an administrator user creates an external user account. This workflow is called from `curam.cpm.eua.facade.impl.ExternalUser.createExternalUser`.

4.9.2 Source Location

EJBServer/components/
CPM/workflow/SUPERVISORVIEWNEWEXTERNALUSERTASKNOTIFICATION_v1.xml

4.9.3 Default Behavior

This workflow creates a route activity to send a notification to the owner of an external user. When an administrator user sets up a new external user account, the owner of the new external user is sent a notification informing them that the account has been successfully created. The default implementation sends a notification to the resource manager who enrolled the external user. Agencies may wish to alter this default. For example, an agency may wish to send the notification to a different user. Once this activity is completed, the workflow is also completed.

4.9.4 Events Details

No Events are raised.

4.10 Roster Exception Processing Workflow

4.10.1 Enacted From

This workflow is enacted when there is insufficient correct data to match a roster line item against its corresponding service authorization. This workflow is called from `curam.attendance.impl.ProviderRosterLineItemImpl.processRosterLineItem`.

4.10.2 Source Location

EJBServer/components/CPM/workflow/ROSTEREXCEPTIONPROCESSING_v1.xml

4.10.3 Default Behavior

This workflow creates a manual activity for a user to review details of a provider roster line item that does not correspond to its associated service authorization. Certain details on a roster line item must match the details on the service authorization associated with the roster line item otherwise any attendance based payments related to the roster will not be paid.

The default implementation of this operation allocates this activity to the roster exception processing work queue for a user to review. Agencies may wish to alter this default behavior, for example, by routing the activity to a different work queue. This workflow creates a manual activity to review the provider roster line item in question. This manual activity is allocated using a function allocation strategy. The modeled operation for this activity is `curam.cpm.workflowprocesses.impl.WorkflowAllocationFunction.prliExceptionProcessingAllocationStrategy`. The reviewer can choose to make changes to the provider roster line item and submit it for reevaluation or deny/cancel the provider roster line item. Once this activity is completed, the workflow is also completed.

4.10.4 Event Details

The notation of the following event details is as follows:

Event Raised	Primary Event Data	Raised From
ROSTER.PRLI_PROCESSED	providerRoster-LineItemID	curam.attendance.impl.ProviderRosterLineItemImpl.submitRosterLineItemFromRoster
ROSTER.PRLI_CANC	providerRoster-	curam.financial.impl.Se

Event Raised	Primary Event Data	Raised From
ELED	LineItemID	ServiceInvoiceLineItemImpl.cancel
ROSTER.PRLI_DENIED	providerRosterLineItemID	curam.attendance.impl.ProviderRosterLineItemImpl.deny

Table 4.8 Roster Exception Processing Event Details

4.11 New Client Added to Roster Workflow

4.11.1 Enacted From

This workflow is enacted whenever a provider roster line item is created during creation or modification of a service authorization line item. This workflow is called from see `curam.serviceauthorization.impl.ServiceAuthorizationLineItemImpl.generateTaskForNewClientAdded`.

4.11.2 Source Location

EJBServer/components/CPM/workflow/NEWCLIENTADDEDTOROSTER_v1.xml

4.11.3 Default Behavior

This workflow creates an activity to send a notification to the owner of a provider roster line item when a client is added to a roster. This notification is sent only during the creation or modification of a service authorization line item which leads to creation of a roster line item.

If the roster line item is submitted or canceled or denied, the corresponding generated notification is removed from the user's task inbox.

4.11.4 Event Details

The notation of the following event details is as follows:

Event Raised	Primary Event Data	Raised From
ROSTER.PRLI_PROCESSED	providerRosterLineItemID	curam.attendance.impl.ProviderRosterLineItemImpl.submitRosterLineItemFromRoster
ROSTER.PRLI_CANCELED	provider-	curam.financial.impl.ServiceI

Event Raised	Primary Event Data	Raised From
D	Roster-LineItemID	nvoiceLineItemImpl.cancel
ROSTER.PRLI_DENIED	provider-Roster-LineItemID	curam.attendance.impl.ProviderRosterLineItemImpl.deny

Table 4.9 New Client Added to Roster Event Details

4.12 Roster Line Item Approval Workflow

4.12.1 Enacted From

This workflow is enacted when a provider roster line item requires manual approval and has reached the "Pending Approval" status. This workflow is called from `curam.attendance.impl.ProviderRosterLineItemImpl.approve`.

4.12.2 Source Location

EJBServer/components/CPM/workflow/ROSTERLINEITEMAPPROVAL_v1.xml

4.12.3 Default Behavior

This workflow creates a manual activity to review a provider roster line item and approve or deny it. The default implementation of this operation allocates the activity to the roster exception processing work queue. Agencies may wish to alter this default behavior, for example, by routing the activity to a different work queue. This manual activity is allocated using a function allocation strategy. The modeled operation for this is `curam.cpm.workflowprocesses.intf.WorkflowAllocationFunction.prliExceptionProcessingAllocationStrategy`.

The reviewer can choose to either approve/deny the provider roster line item. Once this activity is completed, the workflow also gets completed.

4.12.4 Event Details

The notation of the following event details is as follows:

Event Raised	Primary Event Data	Raised From
ROSTER.PRLI_APPROVE D	provider-Roster-	curam.attendance.impl.ProviderRosterLineItemIm-

Event Raised	Primary Event Data	Raised From
	LineItemID	pl.approve
ROSTER.PRLI_DENIED	provider-Roster-LineItemID	curam.attendance.impl.ProviderRosterLineItemImpl.deny

Table 4.10 Roster Line Item Approval Event Wait Activities Details

4.13 Roster Line Item Correction Approval Workflow

4.13.1 Enacted From

The workflow is enacted whenever a user approves a provider roster line item correction. This workflow is called from `curam.attendance.impl.PRLICorrectionImpl.approve`.

4.13.2 Source Location

EJBServer/components/
CPM/workflow/ROSTERLINEITEMCORRECTIONAPPROVAL_v1.xml

4.13.3 Default Behavior

This workflow contains the processing that is involved in approving a correction made to a provider roster line item. This workflow creates a manual activity to review a provider roster line item correction and approve/deny it. The default implementation of this operation allocates the activity to the roster exception processing work queue.

This manual activity is allocated using a function allocation strategy. The modeled operation for this is `curam.cpm.workflowprocesses.intf.WorkflowAllocationFunction.prliExceptionProcessingAllocationStrategy`. The reviewer can choose to either approve/deny the provider roster line item correction. Once this activity is completed, the workflow is also completed.

4.13.4 Event Details

The notation of the following event details is as follows:

Event Raised	Primary Event Data	Raised From
ROSTER.PRLIC_APPROVED	prliCorrectionID	curam.attendance.impl.PRLICorrectionImpl.approve
ROSTER.PRLIC_DENIED	prliCorrectionID	curam.attendance.impl.PRLICorrectionImpl.deny

Table 4.11 Roster Line Item Correction Approval Event Details

Chapter 5

CPM Products and Rule Sets

5.1 Overview

New financial processes have been built for CPM to enable payments to be made to providers. These new processes integrate with existing Cúram Enterprise Framework™ (CEF) financial processes. CPM uses Cúram Products and Rule sets for generating the payments for a service provider.

5.2 Products

CPM has following products:

- Provider Invoice
This product is used to generate the payments for the invoices furnished by the providers.
- Provider Placement
This product is used to generate the payments related to the placement services offered by the provider.
- Provider Contract
This product is used to generate the payments that are not dependent on the service utilization.
- Provider Attendance
This product is used to generate the payments based on the client attendance artifacts provided by the provider for a particular service.

These products are used as a means of getting to Cúram financials rather than them being real benefit products with which a user can interact. All the case processing for these products happens in the back ground on CPM

events such as invoice approval, placement of a client, on making a contract live or on provider roster line item approval. We consider the CPM Products has the designated extension point interfaces as the customization points available to an agency.

The DMX files used for the above products are:

- PRODUCT.dmx
- EVIDENCEMETADATA.dmx
- PRODUCTEVIDENCELINK.dmx
- PRODUCTRULESLINK.dmx
- TEMPORALEVIDENCEAPPROVALCHECK.dmx

No changes can be made to these as the generation of financials is dependent upon the product and evidence approval configurations.

5.3 Rule Sets

The list of Rule Sets in CPM is described below. The rule sets can be customized, as long as the customized rule set does not depend on new types of evidence.

Payment Type	Rule Set Source Location
Provider Invoice	EJBServer\components\CPM\rulesets\Product_51.xml
Provider Placement	EJBServer\components\CPM\rulesets\Product_52.xml
Flat-Rate Contract Payments	EJBServer\components\CPM\rulesets\Product_53.xml
Provider Attendance Payments	EJBServer\components\CPM\rulesets\Product_304.xml

Table 5.1 Payment Type and Rule Set Details

Chapter 6

CPM Financials

6.1 Introduction

CPM financials are developed using the Classic Assessment/reassessment framework, Temporal evidence functionality and the Classic Rules Engine.

CPM financials include several tasks such as

- maintenance (creation, approval and activation) of the Product Delivery cases (SILI, Attendance, Placement, Contract) for different types of payments;
- management of evidence using the Temporal Evidence functionality;
- execution of Classic Rule Sets;
- assessment/reassessment of financials;
- generation of payments etc.

CPM financials leverage CEF financial processing for assessments and payments.

CPM financial processing is responsible for

- creating and maintaining Evidence for different types of cases;
- creating and maintaining Financial Schedules and transactions associated with different case types;
- processing financial transactions associated with a Participant and/or a Case.

6.2 Payment Types

There are 4 types of Products configured for different payment types in

CPM financials

- Service Invoice;
- Placement;
- Flat Rate Contract;
- Attendance

6.2.1 Service Invoice

Service Invoice processing relies on the creation of a Service Authorization when services are allocated to the clients. The individual line items within a Service Authorization can be for a number of different services allocated to that client, which can be provided by different providers. After providing a service, the Provider submits an invoice to the SEM agency. The Provider gets paid once Service Invoice is approved. Service Invoice Line Item payment amounts are treated as evidence for the Service Invoice financial processing.

A product delivery case of type Provider Invoice is created the first time a service invoice line item for a provider is approved. Evidence is created on the case to correspond to the payment amount determined by CPM. The frequency of payment is set based on the established payment frequency for the provider, and leverages CEF functionality around due dates for financial components.

If there is a change in payee, a separate PD case will be created for the payee.

All payments due for the provider for the period will be rolled up and paid as a single payment.

6.2.2 Placement

Placement is a type of service, in which a client is physically placed with the Provider for a period of time. Once a placement service is authorized, a client can be placed with the provider and financials will be started from day one. The unit of measure for the placement will be always a number of days. These placement details will be considered as evidence for processing the placement related financials.

A product delivery case of type Provider Placement is created the first time a placement is made with a provider. The system creates one PD case for each Placement. When a client is transferred within a Provider facility (i.e. from one place to another), this also creates a new product delivery case.

The delivery pattern on the product delivery case is set to a value specified in the property administration section of CPM administration.

For example, if a placement is made for a provider for the first time on June 15th, for the period from June 1st till June 30th, and the frequency is set to

the first day of every month, the product delivery case is created on June 15th and the evidence data is set to June 1st till June 30th. The first payment due date is set to July 1st.

6.2.3 Flat rate contract

A Flat Rate Contract is a formal agreement between a Provider and the SEM agency which establishes terms under which services will be delivered. Each contract can cover single or multiple services. All the Contract details are treated as evidence for Flat Rate Contract financial processing.

A product delivery case of type Provider Contract is created the first time a flat rate contract is activated. The system creates one PD case for each Contract per Provider. It also creates a new PD case whenever an existing Contract is renewed.

The information specified in the contract is used to establish a payment schedule for the provider.

6.2.4 Attendance

Attendance rosters are used when services are delivered to the client which require that client attendance be tracked and reported through Attendance Tracking. Attendance is tracked either through a roster submitted by the provider and entered on to the system by an internal user, or by the provider accessing the system externally. Attendance Rosters can be generated automatically based on a configured frequency for a service. Rosters are submitted to the agency after capturing all attendance details. These attendance details are used as evidence for processing the financials.

A product delivery case of type Provider Attendance is created the first time a roster is approved for a provider. Evidence is created on the case to correspond to the payment amount determined by CPM.

The frequency of payment is set based on the established payment frequency for roster based payments. If set, this frequency applies across all providers on the system. If this frequency is not set, the frequency of payment is set based on the established payment frequency for the provider, and leverages CEF functionality around due dates for financial components.

All payments due for the provider for the period will be rolled up and paid as a single payment.

Chapter 7

Service Deliveries

7.1 Introduction

A service delivery is a type of service delivered to a client, which can be created and managed within an integrated case or an outcome plan. These services can be configured to use product delivery processing, Cúram Provider Management (CPM) processing, or a combination of both, depending on how the agency wishes the service to be delivered to the client.

Services which use product delivery processing can use standard product delivery functionality, e.g. eligibility determination for a service and the calculation of payments based on custom rates (a rate which can change over time and can change based on circumstances). Services which use CPM processing can use CPMs financial processing and rate hierarchy. For example, invoices submitted by a provider are matched to a service authorization, and payments are generated based on the provider offering rate, using an out of the box Provider Invoice product delivery case (one per provider). Services which use a combination of both CPM processing and product delivery processing can utilize some or all of the standard features of a product delivery while fully integrating with CPMs service authorization and invoice processing.

If a service offering is configured to use product delivery processing for any aspect of service delivery, a corresponding product must be configured. This chapter outlines the actions and extension points available in CPM to utilize these product delivery features. For general information on configuring a product to be delivered as a service, see Section 3.10 of the Cúram Integrated Case Management Configuration Guide. For information on the different delivery types available and the functionality offered by each, see Section 3.8 of the Cúram Provider Management Guide.

7.2 Product Design and Configuration

Where service deliveries are configured to use product delivery processing to determine eligibility or payment amounts, the underlying product needs to be associated with a CER rule set and rate tables appropriate to the SEM agency's requirements. For detailed instructions on configuring products and rule sets see the [Cúram How To Build a Product Guide](#).

7.3 Rule Set Creation

The rule set used to determine eligibility and calculate payment amounts in respect of the service must be configured to use a combination of client, case, service and invoice or attendance evidence values, depending on the requirements of the agency and the service delivery type. If product delivery processing is being used to determine both eligibility and the payment amount then the recommended approach is to use a separate objective to calculate each of these as follows:-

- The eligibility objective must be configured such that entitlement is determined by checking the value of the relevant attributes, for example, the client's date of birth or employment status. The valueType of the Objective Tag Type for this Objective must be a non money type such as Double to ensure an eligible decision does not result in the generation of financial components, as this is a non-financial objective.
- Entitlement to the payment objective should check for entitlement to the eligibility Objective as well as checking the value of attributes related to custom rates, invoice or attendance evidence. The valueType of the Objective Tag Type for this objective must be Money to ensure the generation of financial components, as this is a financial objective.

7.4 Evidence and Evidence Maintenance

The evidence entities used in the rule set calculations must be configured to use the appropriate propagator type. For example, InvoicePaymentEvidence must be configured to use the ActiveEvidenceRowRuleObjectPropagator, ServiceInvoiceLineItem should use the RuleObjectPropagator. For detailed instructions on how to configure propagation of different evidence types, see [The Inside Cúram Eligibility and Entitlement Using Cúram Express Rules Guide](#).

Evidence types that are used to determine eligibility and calculating payments in respect of services must be configured and associated with the product underlying the service during administration. Shared evidence is maintained at the integrated case level can also be used in rule set calculations.

Changes in evidence values used by the rule set will trigger the assessment engine to run the calculations again resulting in updated decision and payment information.

For detailed information on designing evidence, see the [Cúram Dynamic Evidence Configuration Guide](#).

7.5 Custom Rates

If custom rates are to be used to calculate payment amounts in respect of a service, then a rate table must be created and associated with the rule set. For more information on creating and associating rate tables with CER rule sets, see the [Inside Cúram Eligibility and Entitlement Using Cúram Express Rules Guide](#).

The value attribute of the Case Decision Objective must be populated in the rule set using values read from your rate tables. Otherwise an appropriate value from CPM such as the amount from an invoice or roster can be used. An attribute to calculate the Estimated Cost can also be included in the rule set where custom rates are used instead of using the default CPM calculation for this value.

7.6 Service Delivery Creation

On creation of a service delivery of type 'Product Delivery', 'Product Delivery with Invoicing' or 'Service Delivery with Eligibility', a product delivery case will be created by the system. This case is an instance of the product type that was configured on the underlying Service Offering. This product delivery is not visible to the user. The caseID of this product delivery is set as the `deliveryTypeRelatedID` on the service delivery record, and will also be associated with any invoice or attendance payment evidence records associated with the case (i.e., it will be set as the caseID on the associated Evidence Descriptor record). Service deliveries of type Service Delivery will continue to use the caseID of the associated integrated case or outcome plan to populate these fields.

For service deliveries that use product delivery processing to determine eligibility, a hook has been provided to listen for events raised by the Assessment Engine. A default implementation for the `postInsertExamineDecisions` method has been added in `curam.cpm.sl.impl.CPMAssessmentEngineEventListener`, which listens for the creation of new decisions. Where the new decision relates to a service delivery of type 'Product Delivery with Invoicing' or 'Service Delivery with Eligibility' and the decision result is 'Eligible', then a service authorization and any service authorization line items are automatically created for the service delivery. This default behaviour can be altered or enhanced as per agencies own requirements.

7.7 Display of Product Delivery Information

Any product delivery functionality that is related to eligibility and financial processing such as financial transactions, 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. Other product delivery functionality can also be configured for display if required. For example, certification and appeal details. However, some development effort is required to display this information. The display of this information must be configured through the use of client navigation files. For more information see Chapter 6 of the Cúram Web Client Reference Manual .

Chapter 8

CPM Taxonomy

8.1 Import Taxonomy File

The process of uploading an external taxonomy file and storing it in the database is called Taxonomy Import Process (TIP). During the process, a single XML file from the database is broken into small, manageable XML chunks. This is done based on the cardinality (one to one, one to many or many to many) of the XML elements defined in that file. These small chunks of XML files (henceforth, called as Cúram Taxonomy files) are created based on criteria like common data shared across various elements.

For example, in AIRS Taxonomy, the Related Concept term elements are shared across Taxonomy term elements. Hence, the TIP creates separate Cúram Taxonomy File for each Related Concept element. Similarly, it also creates separate Cúram Taxonomy Files for each Taxonomy term, Use Reference term (alias for taxonomy term name) etc. These files are stored in the database tables for further processing.

Refer to Appendix B for the structure of Cúram Taxonomy files.

Taxonomy Import Process uses the Java® -XML binding mechanism to create and publish Cúram Taxonomy Files. The start from Java and XML approach is used for marshaling and un-marshaling XML data from Java to XML and vice-versa, using a mapping XML file. This mapping XML file plays a key role in marshaling/un-marshaling. Published taxonomy is stored in the database. The naming convention for the taxonomy database tables is based on the XML elements defined in the AIRS XML file.

If you want to import your own taxonomy XML file (i.e. other than AIRs taxonomy file) and leverage existing CPM taxonomy subsystem, you should map your XML elements to appropriate elements of the AIRs taxonomy file using Mapping file (refer to Appendix A for TaxonomyMapping.xml) mentioned above . CPM Taxonomy customization can be done in different ways

- Replacing the AIRs XML elements with your XML elements in Tax-

onomyMapping.xml file

- Replacing your implementation with default implementation.

Note: Currently taxonomy system supports ASCII and UTF-8 encoding, provided encoding format of the database also same

8.1.1 Replacing the AIRs XML elements with your XML elements in TaxonomyTermMapping.xml file

Import process creates the Cúram Taxonomy files using TaxonomyMapping.xml file. Cúram Taxonomy files (Refer to the Appendix B for the structure of these XML files) are as follows:

- TaxonomyTerm.xml
- RelatedConcept.xml
- UseReference.xml
- ExternalTerm.xml

Currently TaxonomyMapping.xml contains the mapping information between AIRs taxonomy elements and Cúram Taxonomy files elements along with respective bonded java classes. If you want leverage the existing taxonomy functionality, you should map your elements to the respective elements defined in the TaxonomyMapping.xml file. Along with this mapping, you should also override the APPRESOURCE.dmx with your TaxonomyMapping.xml file location.

Following table provides the mapping of AIRs taxonomy elements with the respective Cúram Taxonomy files elements and their associated java classes in TaxonomyMapping.xml.

AIRS Taxonomy Element	Description	Cúram Taxonomy Element	Cúram Taxonomy File	Java Representation of the Element
taxonomy	Root element of taxonomy term	record	TaxonomyTerm.xml	curam.taxonomy.util.impl.Taxonomy
name	Name of the taxonomy term	name	TaxonomyTerm.xml	java.lang.String
definition	Definition of the taxonomy term	definition	TaxonomyTerm.xml	java.lang.String
facet	Facet of the taxonomy	facet	TaxonomyTerm.xml	java.lang.String

AIRS Taxonomy Element	Description	Cúram Taxonomy Element	Cúram Taxonomy File	Java Representation of the Element
	term			
comments	Detailed description of the taxonomy term	comments	TaxonomyTerm.xml	java.lang.String
bibliographicReference	Bibliographic Reference of the taxonomy element	bibliographicReference	TaxonomyTerm.xml	java.lang.String
createdDate	Creation date of the taxonomy term	createdDate	TaxonomyTerm.xml	java.lang.String
lastModifiedDate	Last modified date of the taxonomy term	lastModifiedDate	TaxonomyTerm.xml	java.lang.String
externalTerms	External System Classification terms associated with the taxonomy term	externalTerms	ExternalTerm.xml	curam.taxonomy.util.impl.ExternalTerm
relatedConcepts	Related Concepts associated with the taxonomy term	relatedConcepts	RelatedConcept.xml	curam.taxonomy.util.impl.RelatedConcept
useReferences	Alias names of the taxonomy term	useReferences	UseReference.xml	Alias names of the taxonomy term
relatedTerms	Related Terms of the taxonomy term	relatedTerms	TaxonomyTerm.xml	java.lang.String
oldCodes	Old codes associated with the taxonomy term	oldCodes	TaxonomyTerm.xml	java.lang.String

Table 8.1 AIRs and Curam Taxonomy Mapping Elements

Update the `TaxonomyMapping.xml` by replacing AIRS Taxonomy Elements with elements your Taxonomy xml file for creating Cúram Taxonomy files. These files will be used by Taxonomy-in-edit process to make changes to the content of xml files and Taxonomy Publish process to persist xml content to the relational tables.

Taxonomy Publish process uses the same mappings file for un-marshalling the XML content to java objects before persisting to the database. It persist the content of Cúram Taxonomy files to respective tables. Following table explains how content of different Cúram Taxonomy files is spawned across different tables:

Cúram Taxonomy file	Entities
TaxonomyTerm.xml	TaxonomyTerm, TaxonomyTermNameLink, LocalizableText, TextTranslation, TaxonomyTermOldCode, RelatedTermLink, TaxonomyTermRelatedConcept
ExternalTerm.xml	ExtSysClassification, ExtSysClassifnTermLink, LocalizableText, TextTranslation
RelatedConcept.xml	RelatedConcept, RelatedConceptNameLink, LocalizableText, TextTranslation
UseReference.xml	UseReference, LocalizableText, TextTranslation, UseReferenceNameLink

Table 8.2 Mapping between Curam Taxonomy File Data and Curam Relational Entities

8.1.2 Replacing your implementation with default implementation

If you want to add your own taxonomy elements other than elements defined in `TaxonomyMapping.xml`, you should follow the Replaceable Implementation approach. Current taxonomy system doesn't support hooking of partial implementation for processing your extra element. Since taxonomy system is developed based on Design by Contract principle, you can replace default implementation with custom implementation without violating the contract (i.e. strictly constrained to the interface APIs). Custom implementation is only required if the structure of the following Cúram Taxonomy files are changed, that is, adding new elements or deleting existing

elements

TaxonomyTerm.xml,RelatedConcept.xml,UseReference.xml,ExternalTerm.xml

You have to provide custom implementation to the following interfaces

- `curam.taxonomy.impl.ImportTaxonomy`
- `curam.taxonomy.impl.PublishTaxonomy`
- `curam.taxonomy.impl.TaxonomyInEditData`
- `curam.taxonomy.impl.TaxonomyInEditDataConverter`

8.2 Retrieve Indexes and Retrieve Taxonomy Terms By Keywords

Taxonomy Search functionality provides a number of service layer interfaces that are specifically designed for customization. A new custom implementation can be provided for any of the interfaces `curam.taxonomy.sl.search.impl.TaxonomySearch`. It is worth noting that default implementations which uses the Cúram Generic Search Server are provided for these interfaces. Please read chapter 2 (Using Strategy Patterns to Customize CPM) for more details

Chapter 9

Compliance

9.1 CPM Sample

CPM contains a sample component that is primarily added with following purposes:

- to help the testing team test CPM APIs
- to help the development team test CPM extension points.

Since this component is added only with above purposes, use or customization of this component is not supported.

CPM Sample component has 3 packages which should not be used or customized.

- `curam.cpmsample.changecases.impl`:- This package is mainly used for testing of extension points in CPM.
- `curam.cpmsample.facade.impl`:- This package has façade classes and the associated client directory is `components/CPMSample`
- `curam.cpmsample.impl`:- This has Module class. It is again used for testing of extension points in CPM.

9.2 Miscellaneous Entities

CPM created following new entities in CPM component to add a new feature which supports multiple clients for provider roster line item. As this feature is not supported by the application currently, these entities may change in the future. It is highly recommended that these entities are not used.

- `PRLIClient`

- PRLIClientHistory
- PRLICorrectionClient

Chapter 10

Appendix

10.1 Appendix A

The structure of the xml is based on the Castor v0.9.5.4 Mapping xml schema.

```
<?xml version="1.0" encoding="UTF-8"?>
  <mapping>
    <class auto-complete="false"
      name="curam.taxonomy.util.impl.Taxonomy">
      <map-to xml="taxonomy" />
      <field collection="arraylist" name="taxonomyTerms"
        type="curam.taxonomy.util.impl.TaxonomyTerm">
        <bind-xml name="record" />
      </field>
    </class>
    <class auto-complete="false"
      name="curam.taxonomy.util.impl.TaxonomyTerm">
      <map-to xml="record" />
      <field name="name" type="java.lang.String">
        <bind-xml name="name" node="element" />
      </field>
      <field name="code" type="java.lang.String">
        <bind-xml name="code" node="attribute" />
      </field>
      <field name="definition" type="java.lang.String">
        <bind-xml name="definition" node="element" />
      </field>
      <field name="facet" type="java.lang.String">
        <bind-xml name="facet" node="element" />
      </field>
      <field name="comments" type="java.lang.String">
        <bind-xml name="comments" node="element" />
      </field>
      <field name="bibliographicReference" type="java.lang.String">
        <bind-xml name="bibliographicReference" node="element" />
      </field>
      <field name="createdDate" type="java.lang.String">
        <bind-xml name="createdDate" node="element" />
      </field>
      <field name="lastModifiedDate" type="java.lang.String">
        <bind-xml name="lastModifiedDate" node="element" />
      </field>
      <field collection="arraylist" name="taxonomyTerms"
        type="curam.taxonomy.util.impl.TaxonomyTerm">
```



```

        <bind-xml name="record" />
    </field>
    <field collection="arraylist" name="externalTerms"
    type="curam.taxonomy.util.impl.ExternalTerm">
        <bind-xml name="externalTerm" />
    </field>
    <field collection="arraylist" name="relatedConcepts"
    type="curam.taxonomy.util.impl.RelatedConcept">
        <bind-xml name="relatedConcept" />
    </field>
    <field collection="arraylist" name="useReferences"
    type="java.lang.String">
        <bind-xml name="useReference" />
    </field>
    <field collection="arraylist" name="relatedTerms"
    type="java.lang.String">
        <bind-xml name="seeAlso" />
    </field>
    <field collection="arraylist" name="oldCodes"
    type="java.lang.String">
        <bind-xml name="oldCode" />
    </field>
</class>
<class auto-complete="false"
name="curam.taxonomy.util.impl.RelatedConcept">
    <map-to xml="relatedConcept" />
    <field name="code" type="java.lang.String">
        <bind-xml name="code" node="attribute" />
    </field>
    <field name="name" type="java.lang.String">
        <bind-xml node="text" />
    </field>
</class>
<class auto-complete="false"
name="curam.taxonomy.util.impl.ExternalTerm">
    <map-to xml="externalTerm" />
    <field name="externalCode" type="java.lang.String">
        <bind-xml name="externalCode" node="element" />
    </field>
    <field name="name" type="java.lang.String">
        <bind-xml name="name" node="element" />
    </field>
    <field name="system" type="java.lang.String">
        <bind-xml name="system" node="element" />
    </field>
</class>
</mapping>

```

10.2 Appendix B: Schema definitions of the XML fragments created by Import process.

10.2.1 TaxonomyTerm.xsd

```

<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"
elementFormDefault="qualified">
    <xs:element name="record">
        <xs:complexType>
            <xs:sequence>
                <xs:element ref="name" />
                <xs:element ref="definition" />
                <xs:element ref="facet" />
                <xs:element ref="comments" />
                <xs:element ref="bibliographicReference" />
            </xs:sequence>
        </xs:complexType>
    </xs:element>

```

```

        <xs:element ref="createdDate" />
        <xs:element ref="lastModifiedDate" />
        <xs:element ref="relatedTerms" />
        <xs:element ref="oldCode" />
    </xs:sequence>
    <xs:attribute name="code" use="required"
        type="xs:string" />
</xs:complexType>
</xs:element>
<xs:element name="name">
    <xs:complexType mixed="true">
        <xs:attribute name="locale" use="required"
            type="xs:string" />
    </xs:complexType>
</xs:element>
<xs:element name="definition">
    <xs:complexType mixed="true">
        <xs:attribute name="locale" use="required"
            type="xs:string" />
    </xs:complexType>
</xs:element>
<xs:element name="facet" type="xs:string" />
<xs:element name="comments">
    <xs:complexType>
        <xs:attribute name="locale" use="required"
            type="xs:string" />
    </xs:complexType>
</xs:element>
<xs:element name="bibliographicReference">
    <xs:complexType>
        <xs:attribute name="locale" use="required"
            type="xs:string" />
    </xs:complexType>
</xs:element>
<xs:element name="relatedTerms">
    <xs:complexType>
        <xs:attribute name="locale" use="required"
            type="xs:string" />
    </xs:complexType>
</xs:element>
<xs:element name="oldCode" type="xs:string" />
<xs:element name="createdDate" type="xs:string" />
<xs:element name="lastModifiedDate" type="xs:string" />
</xs:schema>

```

10.2.2 UseReference.xsd

```

<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"
    elementFormDefault="qualified">
    <xs:element name="useReferences">
        <xs:complexType>
            <xs:sequence>
                <xs:element ref="useReference" />
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    <xs:element name="useReference">
        <xs:complexType>
            <xs:sequence>
                <xs:element ref="text" />
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    <xs:element name="text">
        <xs:complexType>
            <xs:simpleContent>

```

```

        <xs:extension base="xs:string">
          <xs:attribute name="locale" use="required"
            type="xs:string" />
        </xs:extension>
      </xs:simpleContent>
    </xs:complexType>
  </xs:element>
</xs:schema>

```

10.2.3 RelatedConcept.xsd

```

<?xml version="1.0" encoding="UTF-8"?>

  <xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"
    elementFormDefault="qualified">
    <xs:element name="relatedConcept">
      <xs:complexType>
        <xs:sequence>
          <xs:element ref="name" />
        </xs:sequence>
        <xs:attribute name="code" use="required"
          type="xs:NCName" />
      </xs:complexType>
    </xs:element>
    <xs:element name="name">
      <xs:complexType mixed="true">
        <xs:attribute name="locale" use="required"
          type="xs:string" />
      </xs:complexType>
    </xs:element>
  </xs:schema>

```

10.2.4 ExternalTerm.xsd

```

<?xml version="1.0" encoding="UTF-8"?>

  <xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"
    elementFormDefault="qualified">
    <xs:element name="externalTerm">
      <xs:complexType>
        <xs:sequence>
          <xs:element ref="name" />
          <xs:element ref="system" />
        </xs:sequence>
        <xs:attribute name="code" use="required"
          type="xs:string" />
      </xs:complexType>
    </xs:element>
    <xs:element name="name">
      <xs:complexType mixed="true">
        <xs:attribute name="locale" use="required"
          type="xs:string" />
      </xs:complexType>
    </xs:element>
    <xs:element name="system" type="xs:string" />
  </xs:schema>

```

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