

IBM Cúram Social Program Management
8.0.2

Cúram Provider Management Guide



Note

Before using this information and the product it supports, read the information in [“Notices” on page 45](#)

Edition

This edition applies to IBM® Cúram Social Program Management 8.0.0, 8.0.1, and 8.0.2.

Licensed Materials - Property of IBM.

© **Copyright International Business Machines Corporation 2012, 2022.**

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

© .

Contents

Tables.....	V
Chapter 1. Provider Management Overview.....	1
Summary of Provider Lifecycle and Information Management.....	1
Provider Management Roles.....	2
Registering and Maintaining Service Offerings.....	2
Managing Service Offerings.....	2
Configuring Financial Settings.....	3
Configuring Attendance Tracking.....	4
Configuring Approval Criteria.....	5
(deprecated) Configuring Performance Measures.....	5
Setting Up Approval Checks.....	5
Configuring Service Deliveries.....	5
Configuring Evaluation Criteria for a Service Offering.....	9
Adding Training Requirements.....	9
Recording Absence Reasons for Service Offerings.....	9
Maintaining Providers and Provider Groups.....	9
Provider Lifecycle.....	9
Provider Group Lifecycle.....	11
Maintaining Provider Details.....	11
Maintaining Provider Services.....	12
Maintaining Provider Members and Participants.....	12
Maintaining Wait Lists.....	13
Maintaining Service Inquiries.....	13
Ensuring that Providers are Fit for Purpose.....	14
Maintaining Provider Accreditations and Licensing.....	14
Conducting Home Studies.....	14
Conducting Background Checks.....	15
Managing Placement Facilities and Client Placements.....	15
Managing Facilities.....	15
Managing Reservations and Placements.....	17
Managing Contracts.....	19
Contract Types.....	19
Contract Elements.....	19
Contract Lifecycle.....	21
Issuing and Activating Contracts.....	22
Amending Contracts.....	22
Renewing Contracts.....	22
Terminating Contracts.....	22
Managing Training and Certifications.....	22
Provider Member Training.....	23
Recording Client Attendance.....	24
Recording Attendance Rosters.....	24
Generating Rosters.....	25
Entering Attendance.....	26
Roster Processing.....	26
Correcting Errors.....	26
Managing Provider Incidents.....	26
Maintaining Incident Information.....	27
Closing Incidents.....	28

Managing Provider Investigations.....	28
Paying Providers.....	28
Service Authorizations.....	28
Paying through Service Invoices.....	30
Paying through Attendance Rosters.....	31
Paying through Placements.....	33
Paying through Flat-rate Contracts.....	33
Reassessing Payments.....	34
Managing Provider Deductions.....	35
(deprecated) Performance Monitoring.....	35
(deprecated) Performance Measurement.....	36
(deprecated) Configuration of Performance Measures.....	36
(deprecated) Performance Measures and Evaluation Criteria Configuration.....	37
(deprecated) Defining Performance Measures for a Provider.....	37
(deprecated) Measuring Provider Performance.....	37
(deprecated) Service Evaluation.....	38
(deprecated) Configuring Evaluation Criteria.....	38
(deprecated) The Services Taxonomy.....	39
(deprecated) Maintaining an AIRS Taxonomy.....	39
(deprecated) Maintaining a Custom Taxonomy.....	42
(deprecated) Indexing Provider Services.....	42
Using Provider Self-Service.....	43
Getting Started with Self-Service.....	44
Self-Service Functions.....	44
Notices.....	45
Privacy Policy considerations.....	46
Trademarks.....	46

Tables

1. Delivery Types and Their Usages..... 6

2. Configuration Parameters..... 7

3. Compartment Characteristics..... 16

4. Contract Lifecycle..... 21

5. Service Authorization Life Cycle..... 29

6. Service Authorization Line Item Life Cycle..... 29

7. Areas of Performance Measurement..... 36

8. Out of the Box Measures..... 36

9. 'Applicable To' Configuration..... 37

10. Scores..... 38

11. Scores..... 38

12. Taxonomy Status..... 40

13. Taxonomy Display Status..... 40

Chapter 1. Provider Management Overview

Providers are third-party organizations that provide services to clients. Facilities, staff, services, licenses, accreditations, and certifications can be maintained for providers. Information relating to the delivery of services to clients can also be managed.

Use the Cúram Provider Management™ (CPM) application module to offer services to clients through third-party providers. The following pages provide a business overview of CPM.

Key features

CPM is a comprehensive solution to manage provider interactions with the organization. The following provider management features are the most important:

- A centralized service registry is provided that allows the organization to store service-related information for providers.
- Functionality is available that allows the organization to manage a wide range of provider details, including credentials and contracts.
- Client placement processing is provided that enables the organization to match client requirements to provider placements by providing wait lists, reservation, and placement functionality that allows CPM to interact with outside case processing systems.
- Attendance tracking processing is available that allows client attendance in service offerings to be tracked and managed for providers.
- Incidents and investigations can be maintained for providers.
- Provider financials can be managed, including handling service invoices, attendance roster processing, and provider payment deductions.
- External access for providers is available that allows providers to manage their service offerings, submit rosters, and send inquiries to the organization.

Summary of Provider Lifecycle and Information Management

Cúram Provider Management (CPM) is essentially concerned with the management of the provider lifecycle, and information relating to that provider.

Managing the provider lifecycle and the information relating to that provider might include the following details:

- The facilities and services provided.
- Licenses, accreditations and certifications held.
- Staff and other people involved with the provider.
- Contracts with providers to deliver services.

In addition, CPM is concerned with information relating to the delivery of services by a provider, including:

- Tracking clients placed with providers.
- Processing requests for payment from providers.
- Recording details of any incidents or investigations involving clients and providers.
- Monitoring the effectiveness of services delivered.

The traditional focus of SEM organizations is to deliver primary benefits in order to meet the needs of their clients. An organization may then deliver secondary services to address the reasons why a client may have those needs, for example a client may require welfare as they are out of work. These services can take many forms, such as financial aid, training, medical supplies, or child support. SEM organizations themselves are not in a position to provide all the services required to their clients, as they do not have

the expertise or resources internally. They therefore engage third party providers to deliver the necessary services to clients on their behalf.

Organizations carry out a number of functions to manage their relationships and interactions with third party providers. CPM provides an organization with the capability to administer those functions.

Provider Management Roles

Several user roles are defined in CPM.

Administrator

The administrator is responsible for recording and maintaining service offerings, training courses and certain other configuration settings.

Resource Manager

The resource manager is the primary role in CPM. Users who are assigned to this role have full access rights to managing providers in CPM. The responsibilities of the resource manager include handling provider inquiries, enrolling providers and provider groups, and approving providers and their services.

Facility Manager

The facility manager is an internal user role similar to the resource manager, but with a smaller set of capabilities, as they usually manage only a single provider. The main responsibility of the facility manager is to manage information that is related to placements and placement facilities

Both resource managers and facility managers can view and maintain provider members and provider participants, the contact information for the providers they are responsible for, and incidents relating to providers.

Financial User

The financial user is responsible for creating service invoices from providers and processing them. Only a financial user can approve service invoices.

Provider

Providers can access their details via self service application and submit invoices/rosters online.

Registering and Maintaining Service Offerings

Services offered by an organization to its clients are registered as service offerings with the organization, and configured before the services are associated with providers. The administrator is responsible for this process. When a service offering is registered, it can be applied to providers by resource managers, where it can be further configured to suit the individual provider.

Managing Service Offerings

Administrators can manage service offerings in the services registry. After a service offering is added to the registry, a rate and unit of measure must be indicated.

Residential placement services must have a unit of measure of 'place'. The units of measure for non-placement service offerings include, but are not limited to, doses, treatments, sessions, and visits.

A set of similar services can be grouped as a service group. For example, all foster care services (traditional foster care, special needs foster care) may be in a group called foster care services.

The resource manager can search for service offerings based on the following search criteria.

Service offering name

The search returns all service offerings whose name includes the text entered. For example, if searching for child, all service offerings with 'child' in their name are returned.

Unit of measure

The search returns all service offerings matching the selected unit of measure. For example, if the place unit of measure is selected, all placement service offerings are returned.

Recording Evidence for a Service

Evidence can be added to a service to allow for additional information to be recorded if necessary.

Configuring Financial Settings

The following financial settings are available for a service offering.

Configuring Payment Methods

Paying providers for delivery of services can occur through one of several methods:

- Based on invoices
- Based on attendance information (rosters)
- Based on placement data
- Through a flat rate contract

Where payments are to be made based on attendance rosters, when creating the service the administrator must select the 'Pay based on attendance' indicator for the service. When a provider submits a roster, the system then compares the planned hours from a client service authorization with the actual hours attended, and makes the payment accordingly.

Where payments are to be made based on placement data, when creating the service the administrator must select the 'Pay based on placement' indicator for the service. When the provider is due for payment, a payment is made for the number of places occupied during the specified time period for the service.

Note that neither indicator can be updated after the service has been created. If a service needs to be paid differently or if the 'Pay based on attendance' or 'Pay based on placement' indicators were set by mistake, a new service with the correct payment configuration should be created. No configuration is required where services are to be paid based on invoices.

Configuring Rates

Service rates are the amounts the organization is willing to pay for service offering units, for example, the amount to be paid for a day of foster care, or for a training session. Default service rates can be configured for service offerings. These can be fixed amounts, or a range (a minimum rate, a maximum rate, or both). Where a range is used, the organization will pay out against any invoices which have a unit rate which falls within the range configured for the service.

A number of service rates can be maintained for a service offering, however, only one active service offering rate can be specified for a service offering for a given time period.

Setting Payment Options

Default payment options can be set by the resource manager for service offerings. These payment option settings are used to specify how to handle exceptional requests for payment, that is, where an invoiced rate falls outside the rate range defined for a service.

The following payment options can be set:

Fixed amount payment option

Where the billed amount doesn't equal the fixed service rate, the administrator must select whether to pay the rate invoiced, to pay the fixed amount configured for the service, or not to pay at all.

Minimum amount payment option

Where the billed amount is less than the service rate minimum amount, the administrator must select whether to pay the rate invoiced, to pay the minimum amount configured for the service, or not to pay at all.

Maximum amount payment option

Where the billed amount is more than the service rate maximum amount, the administrator must select whether to pay the maximum amount configured for the service, or not to pay at all.

For example, if the fixed amount for a service offering payment is \$100, but the actual amount billed by the provider for the service offering is \$110, then the payment option chosen for the service offering will dictate what the provider receives: \$100 for 'pay fixed amount', \$110 for 'pay as billed', or \$0 for 'don't pay'.

Preventing Incidental Authorization

The 'Prevent Authorization via Placement' setting prevents a service authorization being created when a placement is made for a service. This is required because some services will be authorized via other means, for example, service plans. This ensures that the authorization is not duplicated.

Configuring Attendance Tracking

CPM provides the ability to track and maintain client participation in provider services. This allows the organization to ensure that clients are receiving the services they have been allocated, and ensures that providers are paid promptly for the services that they provide.

Enabling Attendance Rosters

A roster generation frequency can be specified, to define the frequency at which attendance rosters must be submitted, for example weekly or monthly. Once the frequency is set, a roster for the service offering will be generated for each day specified in the roster generation frequency. The administrator also has the option to enable daily attendance reporting for a service. Where enabled, this allows providers to enter attendance information for each day that the client is authorized to receive services, as opposed to a total amount of attendance over the roster period.

Administrators can also specify whether attendance tracking is required in order for a provider to be paid for a service they are offering. This can be used in combination with invoices, to prevent any invoices being paid out until the provider has submitted all rosters due for that payment period.

Where an organization wishes to issue roster-based payments for a service at a different frequency to the payment frequency for each provider, an attendance payment frequency can be specified. Once configured, for every service offering for which client attendance has been recorded and that requires payment, a payment will be made to the provider on the date specified.

Whilst enabling attendance rosters, a reporting method must also be chosen. A description of the available methods is provided below.

Reporting on Utilization

Configuring a service offering roster reporting method to be 'Utilization' allows providers to report attendance in terms of units of service received. For this reason, utilization reporting must be used if the provider is to be paid based on attendance rosters.

Reporting on Attendance

Configuring a service offering roster reporting method to be 'Attendance' allows providers to report whether or not a client was present on a particular day. For that reason, the service must also be configured to support daily attendance tracking. The administrator can also choose to allow a provider to report a number of hours by selecting the 'Hours enabled' indicator.

Services configured to use attendance reporting can't be paid based on attendance information.

Configuring Approval Criteria

Configure approval criteria to define prerequisites for providers to provide a particular service.

When approving a service offering for a provider, informational messages are displayed to warn the resource manager that the necessary approval criteria have not been met. For example, if license and background checks are configured as approval criteria for a service offering, informational messages are displayed which detail the approval criteria that have not been met for provider license and background checks.

(deprecated) Configuring Performance Measures

Performance measures are added to a service offering in the **Administration** application. Measures that are marked as applicable only to a provider cannot be added to a service offering.

If the performance measure is to be determined based on service evaluation results, the criteria used for determining the measure are also configured. For more information, see [“\(deprecated\) Performance Measures and Evaluation Criteria Configuration” on page 37.](#)

Setting Up Approval Checks

Use approval check settings for a service offering to determine the percentage of service deliveries that need to be reviewed by the case supervisor.

For example, an approval check percentage can be set up for a service such that 40% of service deliveries will require manual approval; the other 60% will be automatically approved. The administrator can also set up service approval checks at the organization unit and user levels. For each level, approval checks can be defined for all services provided by a provider, or for an individual provider service.

Service approval checks can also be set up by the resource manager for a provider and provider offering.

Configuring Service Deliveries

CPM provides a set of configuration options on a service that you can use to control how the service is delivered and the processing to use.

Default values can be configured for these parameters, and these are automatically used when a caseworker creates a service delivery for the service.

The way a service is to be delivered often varies on a service-by-service basis. Some services, for example, are only delivered on a weekday. Some might be suitable for multiple clients to receive at the same time; some are only ever be delivered to a single client at a time. The way a service is paid for might even vary across services, for example payment for a service might be based on receipt of an invoice or attendance roster from a provider, whereas for other services payment might go directly to the client, rather than the provider.

An administrator can configure a mechanism for delivering a service by using one of four delivery types. The following table describes the available delivery types that determine how each service is delivered and paid for at the case level:

Table 1. Delivery Types and Their Usages

Delivery Type	Usage
Product Delivery	Used to deliver a service that is provided directly to a client by the organization and to issue payments in respect of the service to a client or other participant, e.g., a Mileage Reimbursement service. If this delivery type is selected, product delivery processing is used to determine eligibility for the service based on client evidence and to issue payments to the client or designated nominee. Note that as payments in respect of services based on this delivery type are usually issued to the client, CPM invoice and attendance roster processing are not used for this delivery type.
Service Delivery	Used to deliver a service where eligibility for the service does not need to be determined and payments in respect of the service are usually issued to a provider. If this delivery type is selected, CPM financial processing is used to issue payments to the provider or designated nominee. The caseworker can record details of the third-party provider, deliver the service to the client, and pay the provider or designated nominee by using one of the following methods: on receipt of invoices, on submission of attendance rosters, or through a flat rate contract.
Product Delivery with Invoicing	Used to deliver a service where eligibility for the service needs to be determined and payments in respect of the service are usually issued to a provider based on custom rates that can change over time due to changes in circumstances. If this delivery type is selected, product delivery processing is used to determine eligibility for the service and manage client evidence. All other aspects of product delivery financial and reassessment processing are also used, and the provider or designated nominee is paid based on receipt of invoice or attendance rosters.
Service Delivery with Eligibility	Used to deliver a service where eligibility for the service needs to be determined and payments in respect of the service are usually issued to a provider. If this delivery type is selected, product delivery processing is used to determine eligibility for the service and manage client evidence, and CPM financial processing is used to issue payments to the provider or designated nominee by using one of the following methods: on receipt of invoices, on submission of attendance rosters, or through a flat rate contract.

Note that if a service is configured to be delivered using one of the delivery types which use product delivery processing, the corresponding product must also be administratively configured. For more information on configuring a product to be delivered as a service, see [Configuring Products to Deliver Services](#).

The following table describes the other parameters that can be configured for a service delivery:

<p><i>Table 2. Configuration Parameters.</i></p> <p>This table describes the parameters that can be configured for a service delivery.</p>	
Parameter	Description
Product	If a service is configured to be delivered by one of the delivery types which use product delivery processing ('Product Delivery', 'Product Delivery with Invoicing' and 'Service Delivery with Eligibility'), a product must be selected.
Delivery Frequency	Frequency at which the service can be delivered to a client. For example, 'Weekly on a Saturday and Sunday' for a service called Infant Care - Weekends.
Allow Frequency Modification	<p>If a default delivery frequency has been configured for the service, this indicates whether it can be changed by the caseworker.</p> <p>If a default delivery frequency has not been configured, this indicates whether a frequency can be specified by the caseworker.</p>
Clients	Defines the number of clients who can receive the service delivery. This can be single or multiple.
Multiple Deliveries	Indicates whether a service delivery must be created per client when multiple clients are authorized. For example, if a service delivery of marriage counseling is defined and two people are specified (husband & wife), even though the service is defined for two people it is still a single service delivery.
Specify Authorized Rate	Indicates whether an authorized rate can be specified by the caseworker for the service delivery. If this is set, a caseworker can manually override the rate to be paid to a provider for providing the service. Note if a custom rate exists for the service, the custom rate is used in the calculation of the payment amount rather than the authorized rate.
Nominee to be Specified	Indicates whether a nominee can be specified by the caseworker for the service delivery. If specified, this is the default nominee for the service. If not specified, a default nominee is designated according to the delivery type and nominee functions that are defined for the service. Where product delivery nominee functions are used, the default nominee will be the primary client. Where invoice nominee functions are used, the default nominee will be whoever is specified as the payee in CPM.

Table 2. Configuration Parameters.

This table describes the parameters that can be configured for a service delivery.

(continued)

Parameter	Description
Delivery Participation	Indicates whether client participation information is visible to the caseworker on service deliveries for the service offering.
Specify Number of Units	Indicates whether a number of units must be specified by the caseworker for the service delivery.
Complete Manually	Indicates whether a service delivery for this service can be manually marked complete by the caseworker. If this indicator is set to false, the completion of the service delivery would be done automatically by the system on delivery of last unit of the service, via the receipt of an invoice or attendance roster.
Provider/Provider Type Selection	Defines whether the selection by a caseworker of a Provider or Provider Type is mandatory or optional, when creating the service delivery.
Owner to be Specified	Defines the owner of the service delivery.
Progress Applicable	Indicates whether progress can be recorded by a caseworker for a service delivery on an Outcome Plan.
Nominee Type	Used in conjunction with the delivery type of 'Product Delivery with Invoicing'. It defines what nominee functions will be used. This can be Product Delivery nominees or invoice nominees. If Product Delivery nominees are used, nominees can be maintained by using the product delivery nominee maintenance screens. If invoice nominees are used, the nominee is whoever is specified as the payee in CPM and can only be changed if the service allows for a nominee to be specified.
Provider and Client Referral Templates	Templates for communication to be sent to the provider and client when a referral is created.
Security Rights	User rights to create, maintain and approve the service delivery.
Pages	Page references that are defined for the service delivery display. A default set of pages will be configured by default.
Estimated Cost Rule Set	Allows Cúram Express Rules (CER) to be configured for a service to calculate the estimated cost, for display to the caseworker. Different rule sets can be configured over time to accommodate changes to the logic used to determine the cost.

Configuring Evaluation Criteria for a Service Offering

From the evaluation criteria configured, a subset of the criteria can be related to a service offering. The set of criteria that are related depends on the type of service offering. Responses for these criteria are recorded on the service delivery.

For more information about service deliveries, see the [Cúram Integrated Case Management](#).

Adding Training Requirements

If providers of a service must receive certain training before a service is delivered, then a training course can be added to a service offering as a training requirement.

If training requirements are specified for a service offering, then all training marked as required must be completed or waived for all active provider members before the service can be added to a provider. If this isn't the case, the resource manager will be warned.

Recording Absence Reasons for Service Offerings

When receiving services from providers, a client may be unable to attend the planned service.

In some cases, the provider may still need to be paid, and this can depend on the reason for the absence. Such absence reasons should be configured as 'payable'. For example, if a client misses a service because of a family bereavement, and that absence reason is configured as payable, the provider will be paid for that unit of the service.

Equally, in some cases the client may be entitled to reschedule the service, that is, the client doesn't 'lose' the units. Such absence reasons should be configured as 'deductible'. This means that if a client misses a unit of the service for that reason, the service authorization will be updated accordingly by deducting a single unit from the total units authorized.

Maintaining Providers and Provider Groups

Use this information to understand who providers are, how they operate, and what types of services they provide. Explanations of what providers can accomplish and how to interact with them are provided.

Providers are individuals or organizations that deliver services to clients on behalf of organizations. Provider groups are organizations that have one or many providers (provider group associates) working under them, but are not involved in delivering services directly.

Providers must be registered with the organization. After registration, they might need to go through various checks before they are approved to deliver services to the organization's clients.

Provider Lifecycle

Use this information to understand how providers are enrolled and approved, and how providers are managed and maintained within an organization.

Receiving Provider Inquiries

Provider inquiry can be the first step toward enrolling a provider with the organization. Individuals or organizations who are interested in delivering services on behalf of organizations send inquiries to the organization that detail the services they offer.

Cúram Provider Management (CPM) allows providers to inquire about delivering services either by contacting the organization directly, or by submitting the inquiry by way of the provider self-service application (see [“Using Provider Self-Service”](#) on page 43 for more information on submitting inquiries through the provider self-service application). The organization reviews these inquiries and can proceed towards registering the individual or organization as a provider, if it is found to be appropriate.

Enrolling Providers

Provider enrollment involves the registration of the provider into an organization's system, along with capture of certain necessary information such as name of the provider, their address, their preferred language, and their preferred communication and payment method.

Provider enrollment in Cúram Provider Management (CPM) is conducted by resource managers, who either register a provider directly, or through a provider inquiry. After enrolled, the resource manager then can capture further information about the provider, including their locations, staff, services that are delivered and accreditations achieved. Enrolled providers need to be approved before they can start delivering services.

Approving Providers

It often is necessary for an organization to make certain post-enrollment checks to ensure that a provider is fit to provide services to its clients. After these checks, which might be either informal or part of a formal approval process, are passed, the provider then can be approved to deliver services. Alternatively, the provider might be rejected if they fail the approval process.

Rejected providers can be approved later if they take any required action that results in them passing the approval process.

Approval criteria for a service are supported in Cúram Provider Management (CPM), but not for a provider.

Suspending Providers

Cúram Provider Management (CPM) provides functions that allow providers to be suspended after they are approved if the organization finds an appropriate reason to do so.

In certain situations, the organization might find it necessary to withdraw temporarily a provider's entitlement to provide services on its behalf. Some potential reasons might include the suspension of a professional license, or the receipt of a complaint against the provider. The suspension reason must be recorded. Suspended providers cannot be authorized to deliver services.

Closing Providers

A provider might choose to stop delivering services to the organization's clients. Equally, the organization might decide to terminate their association with a particular provider for some reason.

Cúram Provider Management (CPM) provides functions that allow the resource manager to close a provider so that no further clients can be authorized to receive services from that provider.

For example, Carrie's Day Care is a provider that offered services on behalf of the organization for five years. Due to staff shortages, Carrie's Day Care is forced to close and notifies the resource manager of the closing. The resource manager then closes the provider record for Carrie's Day Care.

Reopening Providers

Providers that are closed by the organization can be reopened so that they again can deliver services. After reopening, a provider again must go through the approval process before they are approved to deliver services.

For example, a few months after closing, Carrie's Day Care addresses the staffing shortage that prompted the closing. Carrie's Day Care informs the organization's resource manager that they again can provide child care services on behalf the organization. The resource manager reopens the provider and arranges to visit Carrie's to ensure that the facility is suitable to receive children before it is approved by the organization.

Provider Group Lifecycle

Use this information to understand how to manage provider groups as they relate to the organization.

Since provider groups are not involved directly in delivering services, they have a different lifecycle from the lifecycle of providers.

Enrolling Provider Groups

Unlike providers, no inquiry is created before a provider group is enrolled. A provider group can be directly enrolled by a resource manager, who captures all the basic information such as name of the provider group, their address, their preferred language, and their preferred communication and payment methods. After the provider is registered, providers can be added to the provider group as provider group associates.

Closing Provider Groups

Provider groups can be closed if they no longer deal with the organization.

Reopening Provider Groups

Provider groups can be closed if they no longer deal with the organization.

Maintaining Provider Details

Cúram Provider Management supports the maintenance of information about providers. As with all participants, basic information about a provider can be captured including phone numbers, addresses, payment details, and preferred communication method. In addition, the information that is contained in the links that follow can be recorded:

Maintaining Categories and Types

Use categories to differentiate providers based on the type of services they offer. For example, a provider who provides a foster care service can have a provider category of Foster Care Home. The type is a subcategorization of the category. For example, a category of Foster Care Home might have provider types of Traditional Foster Care Home, Treatment Foster Care Home, or Emergency Foster Care Home.

Maintaining Specialties

Provider specialties are areas in which a provider has particular experience or expertise. These specialties might include skills such as particular languages that are spoken and a specialization in treatment for children who are developmentally delayed. Specialties can be used with the services that are required to identify an appropriate provider when the organization authorizes or refers a client.

Maintaining Service Centers

Service centers are locations from where a provider can deliver non-placement services. For example, a physiotherapist might deliver the physiotherapy sessions at several clinics. One or many services can be delivered from a service center.

Maintaining Payment Options

Where there is a mismatch between the rate that a provider invoices the organization and the service rate for which is recorded on the system, a set of payment options are provided on the service offering, which dictate how the resulting payment should be handled (please refer to [“Registering and Maintaining Service Offerings”](#) on page 2 for more details on service offering payment options). The payment options configured for a service offering can be overridden for a given provider.

For example, if the fixed amount payment option for the Child Care service offering is configured to be 'Pay fixed amount', but the same payment option for the provider is configured to be 'Pay as billed', the provider is paid at the rate that is specified on the service invoice, where the invoiced rate differs from the applicable service rate.

Directing Payments to a Provider

A provider group is not directly involved in the service delivery so they are not paid by the organization for a service delivery. In some cases, a provider might want to direct all of its payments to the provider group that it belongs to. Whether the payments are directed to the provider group can be configured at the time of establishing the association between the provider and the provider group. While making payments against a service delivery, this configuration is taken into account and the appropriate party is paid.

A history of this configuration is also maintained to establish the nominee at any point between a provider and provider group. This information is also used in case of a reassessment of payments due to a change in evidence retrospectively, for example, service offering rate change.

Maintaining Provider Services

Providers can offer a range of services, which are selected from within the services registry.

Depending on the approval criteria set for the services by the organization, the services for a provider are approved only when those criteria are met. When a resource manager attempts to add a service to a provider that does not meet the approval criteria for the service, the user is informed.

The rates at which a provider offers a service can also be defined. As described elsewhere in this guide, this rate takes precedence over the rate defined for the service in the services registry.

For placement providers, a place limit can be defined for a particular service in the provider's facility. For example, a foster care provider has a total of four places of which two are for Traditional Foster Care and two are for Special Needs Foster Care.

Maintaining Provider Members and Participants

A provider or provider group might have people who are working for them, or associated with them. For example, a hospital can have medical and nursing staff to deliver medical services, and a legal consultant to deal with legal affairs.

Since these people are associated with the provider's business, the organization needs to record information about them. In some cases, the organization might need to contact them for specific reasons. For example, a provider's attorney might be the contact for a services contract. Cúram Provider Management (CPM) provides the ability to record and modify a provider's relationships with its staff, along with any additional information about them.

Maintaining Members

Provider or provider group members are individuals with significant internal relationships with the provider or provider group.

Since members are involved in service deliveries, organizations might want to maintain details about them, such as the services they deliver, training and certifications they completed, other employment they held, and details of any background checks conducted for them. Members can be recorded for a provider or provider group, along with the role they play in the organization and the period for which they are associated to them.

Maintaining Participants

Provider or provider group participants are any persons or groups who have external relationships with the provider or provider group. For example, they might be involved in maintaining provider accounts with the organization, or they might be attorneys who negotiate contracts with the organization on behalf of the providers or provider groups.

Maintaining Unassigned Provider Members

An unassigned provider member is a person who was a provider member in the past, or who potentially might become a provider member, but who is not currently associated with a provider or a provider group.

An organization might want these potential provider members to undergo training or a certification program to make them eligible to become a provider member. The organization can record their training or certification details that were completed elsewhere, or alternatively offer the unassigned member training directly.

The following information can be maintained for unassigned provider members.

- Training
- Certifications
- Employment History, which includes previous provider memberships and previous employment.

Maintaining Wait Lists

When the organization searches for providers to deliver services, the most suitable provider might not always have availability. Where no other suitable provider is available, caseworkers can put a client on to a wait list for a provider.

A client can be placed on a wait list to receive both non-placement services and placement services, and either for the provider, or for a specific provider offering.

When a client is added to the wait list, they automatically are assigned a position according to the number of existing clients on the wait list. For example, if 10 clients (entries) already are on a wait list, the new client is assigned the position of 11. A client's position can be moved up or down manually, based on the perceived priority of that client. A wait list entry also can be given an expiry date to avoid out-of-date entries that remain on a list indefinitely.

A resource manager can search for entries in the wait lists. A number of search criteria can be specified:

- The client name
- The status of the wait list entry; for example, allocated, expired
- The priority of the wait list entry

Wait list entries can be reviewed on a periodic basis to see whether the client needs to remain on the wait list, or removed. This review is done by recording a review date on the wait list entry. Alternatively, the review date can be configured to be a specific number of days before the wait list entry expires.

After a provider has available resources to deliver a service, the first client on the wait list can be removed from the wait list. In the case of placement services, after a place becomes available, the caseworker then can allocate the place to a client. Depending on the service period, either a reservation (if the service period is in the future) or a placement is created when the client on a wait list is allocated a place. After the client is allocated a place, the wait list entry automatically is marked as **Allocated**.

Maintaining Service Inquiries

Service inquiries are inquiries that are made by users regarding whether a provider can provide a specified service for a particular time period.

It can be done by using telephone, email, web, or post, depending on the provider's recorded preference. The provider's response is recorded against the inquiry. Depending on the provider's response, the user can authorize a service delivery with the provider.

Ensuring that Providers are Fit for Purpose

Ensuring that providers are qualified to deliver services to clients is a key requirement of organizations. In addition to recording training and certification for provider members, CPM provides several other means by which a resource manager can capture a provider's credentials.

Maintaining Provider Accreditations and Licensing

CPM supports the maintenance of accreditations for providers. A license is an authorization or a permit that providers may be required to have in order to operate or deliver certain services on behalf of an organization.

Maintaining Accreditations

Agencies can maintain accreditation for providers, including the addition of a start date and expiry date. For some categories of provider, it is useful or necessary to gain formal recognition in the form of an accreditation from a third-party organization. Being accredited might signify a provider's suitability to provide services, or be evidence that they have undergone some standard qualification procedure.

Licensing Providers

Licenses can be issued by the organization or by third parties such as a foster care licensing board or contractor license board.

A license can cover one or more of a provider's services and is valid for a specified period of time. To be valid, a resource manager must approve the license. If the resource manager initially rejects the license, it can later be approved. When a license is due for renewal, the resource manager can choose to renew it, or alternatively enter a non-compliance reason, such as 'Safety issues identified' or 'Background check failed'.

The approval of a license might be dependent on the completion of certain training by the provider. If training requirements are specified for a license, then all training marked as required must be completed or waived for all active provider members. If this isn't the case, the resource manager will be warned before the license can be approved.

A provider license can be suspended at the discretion of the resource manager. For example, the resource manager receives a complaint about a foster care provider. The complaint states that the provider is breaching safety rules. The resource manager looks into the claims and suspends the provider's foster care license.

Conducting Home Studies

The purpose of a home study is to verify that the providers' facilities are appropriate for the service offerings that they want to deliver.

Home studies are usually undertaken by a resource manager as part of the approval process for providers of placement services, but can also be repeated at intervals following approval, to ensure that standards are being upheld.

Information can be captured as a part of home study approval.

Conducting Home Study Assessments

An assessment for a provider can vary based on the service offerings being delivered. For example, a provider who wants to offer a child care service would undergo a fire inspection assessment to rule out safety hazards. The result of an assessment could be a pass, fail, or conditional pass. A conditional pass occurs when the resource manager passes an assessment on the understanding that some further action is to be taken by the provider. This is recorded as a corrective action for the assessment. For example, a provider safety assessment as a part of a home study has passed, but under the condition that the provider repair the damaged patio deck on the second level of the home.

Conducting Home Visits

Home visits are usually conducted by the resource manager. It is on these home study visits that most assessments are conducted. They involve one or more interviews at the provider home or at the organization. The date on which the interview was conducted is captured, along with the provider participant or member name. An interview narrative is also captured by the interviewer for future reference.

Creating Supporting Documents

Supporting documents can be created using Microsoft® Word templates and attached to a provider's home study report. The Microsoft Word templates must be created using the application's communication template functionality. A sample Home Study Microsoft Word template is provided by default.

Reviewing Home Study Results and Approval

On completion of a home study, a resource manager submits the recommended result for approval by the resource manager supervisor. The resource manager supervisor can approve the home study, reject it, or send it back for further review.

A home study status history captures the various states during the lifecycle of the home study approval process. Where the approval fails due to non compliance, the reason for this is recorded.

Conducting Background Checks

Provider members can undergo background checks. Examples of background checks are criminal investigations, child protective services, and firearm checks.

A background check can be set for a time period. When the time period expires, the resource manager can conduct another check and update the provider record with the new results. For example, a background check on an employee indicates that the employee had a criminal conviction for a minor offense two years ago. The resource manager records this information and sets the status as 'fail'. The resource manager can then record the failure reason as 'criminal conviction'.

Managing Placement Facilities and Client Placements

Some services offered by an organization require clients to be placed in a facility such as a foster care home, homeless shelter or detention center. The recording of this information is required to track the client's whereabouts, or in some cases to be used as a basis for making payments to providers.

Managing Facilities

Use the facility and placement management functions in CPM to record the provider's capacity, specify the facility layout, configure compartment characteristics, and track place availability on an ongoing basis.

Specifying Capacity and Layout

In order to be able to keep track of a provider's available places, an organization specifies a provider's capacity during enrolment.

The total number of clients that a provider facility can notionally accommodate at any one time is represented by its physical capacity. However, not all of these places may be available for use by the organization. The designated capacity can therefore be used to record the number of places that can actually be used. So, the designated capacity is the capacity of a provider that is available to the organization under normal circumstances. For example, a day care center might have a physical capacity for 12 beds but have allocated only 10 beds to the organization; therefore, the designated capacity for this provider will be 10.

Configuring Compartments and Characteristics

The facility layout consists of compartments and places. Compartments are units of logically grouped places which can be used to represent physical locations such as a room or a building. This allows recording of the structure of the provider facility, more accurate tracking of placements, and setting up placement characteristics for compartments.

A compartment may contain child compartments and/or a group of places for a provider. For example, Lake County Detention Center has a physical capacity of 40 places divided across two buildings. Each building has five floors, with two bedrooms each. Each bedroom has two beds. Each building is a compartment, containing five child compartments, one for each floor. Each floor compartment in turn has two further child compartments, one for each room. These room compartments contain two places to represent the beds. By defining the different levels as compartments, a user can view placement details for each of them and define characteristics.

Some providers may wish to limit the clients in a facility or room to a particular demographic group, for example a room might be for females only, or for children aged between 3 and 10 years.

To facilitate this, CPM allows a user to define characteristics for each compartment. These characteristics are used by an application module which interacts with CPM to find an appropriate place for the client, by matching the client characteristics to those defined for the compartment. The following table describes the characteristics which are provided out of the box in CPM:

<i>Table 3. Compartment Characteristics.</i>	
This table describes compartment characteristics supported in CPM.	
Compartment Characteristic	Description
Gang Affiliation	Only those clients belonging to the specified gang(s) can be placed in the compartment. For example, if "Aryan Brotherhood" and "Skinheads" are specified, members of either of these gangs can be placed in the compartment. You can also specify "Same Gang Affiliation Only" to ensure that only clients from the same gang are placed in the compartment.
Language	Only those clients speaking the selected language(s) can be placed in the compartment. You can also specify "Same Language(s) Only" to ensure that only clients who speak the same language are placed in the compartment.
Ethnicity	Only those clients with the selected ethnicity can be placed in the compartment. You can also specify "Same ethnicity Only" to ensure that only clients with the same ethnicity are placed in the compartment.
Religion	Only those clients practicing the selected religion(s) can be placed in the compartment. You can also specify "Same Religion Only" to ensure that only clients from the same religion are placed in the compartment.
Minimum Age	Only those clients whose age meets the minimum age requirement can be placed in the compartment.

Table 3. Compartment Characteristics.

This table describes compartment characteristics supported in CPM.

(continued)

Compartment Characteristic	Description
Maximum Age	Only those clients whose age falls below the maximum age requirement can be placed in the compartment.
Gender	Only those clients of one gender can be placed in the compartment.
Placement Service Offering	Only clients receiving this service offering can be placed in the compartment.

Note that application properties exist for both ethnicity and religion that are used to indicate whether these characteristics can be maintained for a compartment within Provider Management. By default, both of these properties are disabled. In order for a user to be able to define these characteristics for a compartment, they must be enabled by an administrator. For more information on CPM Application properties, see the Provider Management configuration guide.

Marking Out of Use Places

There may be periods when a place or compartment may not be available for client placement for some reason, for example renovation or repair. CPM provides a facility to mark a place/all places in a compartment out of use so that they are not available for selection when placing a client.

For example, Lake County Detention Center provides client detention services to the organization. A fire breaks out in one of the rooms and the room is badly damaged, making it unsuitable for occupation. The current occupants of this room are moved to a different facility. The provider informs the organization that the room cannot be used as it is under repair. The resource manager marks all the places (all beds in the room) as out of use, specifying the reason as "Under Repair". The places can no longer be selected to place clients. Once the room is ready for occupation, the resource manager marks all the places for use and the room becomes available for client placement again.

Managing Reservations and Placements

When a placement provider has been enrolled and approved, users will then usually be able to allocate clients to the provider, resulting in reservations or placements. Manage placements and reservations, including client transfers and emergency placements.

When a placement provider has been enrolled and approved, users will then usually be able to allocate clients to the provider, resulting in reservations or placements.

Managing Reservations

When a client is authorized to receive a service in the future, the user can allocate a place to the client for a period in the future. This is called a reservation, and is broadly similar to a reservation in a hotel booking system.

The reservation process would usually start with a user searching for available places for a certain period. When a place is found with a suitable provider, the reservation can be created for the client. Since a reservation represents a potential future placement rather than the placement itself, it cannot start from a past or current date.

In the same way that hotel guests have to check in when they arrive to take up a reservation, a reservation in CPM needs to be converted into a placement when the client has turned up to the facility and has been

placed with the provider. Creating a placement from a reservation is a manual process that can be done by the resource manager, facility manager or the user.

In order to ensure that conflicting placement information is not created, a number of checks take place in CPM when a placement is created, or an existing placement modified:

- Where there are overlapping reservations against other places for the same client, the user is asked to confirm whether they should be canceled.
- Where there is an overlapping reservation on the same place for a different client, the user is asked to confirm whether it should be canceled to accommodate the new/modified placement.

Flexibility is provided when confirming a reservation. The period can be changed and the place can be selected, if not already selected while creating the reservation. If no suitable place exists, an emergency place is created in the highest level compartment of the facility, thus resulting in an emergency placement.

A reservation can also be canceled if found to be invalid or if the client is placed with another provider. A reservation expires automatically if the client does not turn up to the providers facility. This happens when either the reservation ends or the date of expiry is reached. The date of expiry is derived by adding the number of days specified for the Grace Period to the start date of the reservation. When a reservation is updated, the user who created the reservation is automatically notified.

Managing Placements

When a client authorized to receive a placement service arrives to receive the service, the user allocates a place to the client. This information is recorded as a placement. The placement could be for a definite period for which the service has to be delivered or it could be ongoing, without an end date.

If there is any change in the placement period, the user or resource manager can update the placement. If the placement was updated by the resource manager, the user who created the placement is notified.

Managing Emergency Placements

When a provider is willing to accommodate a client who needs to be placed urgently, even though there are no places available with the provider on the system, an emergency placement can be created. This might happen where a user wants to place a child with a sibling, or where a provider happens to be in close proximity to the client location and is able to arrange an extra bed for the client on a temporary basis.

CPM supports this by allowing the creation of a place over and above the designated capacity of the provider. Once the provider has a designated place available, the client can be transferred to that place and the emergency place is closed. For example, Joan is a five year old child who has been severely abused by her parents. Her case is brought to the organization, and they decide to move her to an out-of-home placement immediately. There are no places available with any of the registered foster care families (providers) local to Joan. However, the user calls up a few of the providers and among them one family agrees to take the child in. The user creates an emergency placement with the family, which creates an emergency place. A few days later, a place becomes available in a preferred foster home. Joan is moved to the available place and the emergency place is closed.

Managing Transfers

Clients often have to be moved between places within a providers facility. This may be required when the current place is no longer suitable or available for the client, or there is a more suitable place available for him/her.

CPM provides functionality for client transfers within a provider facility. This requires updating client placement information. For example, Lake County Detention Services is registered to provide client detention services to the organization. Detention services are provided in four buildings in a campus which are set up as compartments with cells within each building added as places. One evening, there is an accidental fire which damages Building 2. There are 15 inmates in Building 2 who are moved to Building 1. The provider informs the organization about the transfer of clients. The resource manager

updates the placements by transferring all the clients from Building 2 (compartment) to Building 1 (compartment).

Managing Contracts

It is common for health and human services agencies to enter into contractual agreements with third party service providers, laying out terms under which those providers can deliver services to the agency's clients.

Agencies enter in to contracts with providers mainly for the following three reasons:

- To monitor service delivery quality.
- To monitor provider performance.
- To control costs and more closely manage service delivery.

A provider or a provider group (on behalf of providers) can enter in to a contract with the agency to deliver services to clients. A resource manager oversees the creation and management of contracts with providers and provider groups.

Contract Types

CPM supports two types of contracts: Flat-rate contracts and utilization contracts. An overview of these two types of contracts, contract terms and the contract lifecycle. is provided.

Flat-rate Contracts

A flat-rate contract can be defined as a formal agreement between the agency and the provider or provider group for the payment of a fixed amount specified at the time the contract is negotiated. The amount to be paid does not depend on the volume of services delivered, and is paid at a particular frequency. For example, a flat-rate contract can be set up reserving five day care places for \$500 per month. The provider receives this amount regardless of the number of day care places filled.

Utilization Contracts

A utilization contract, in contrast to the flat-rate contract, is an agreement for making payments based on the volume of services delivered by the provider. The amount paid for each unit delivered is as per the service rate established in the contract. For example, the contract can state that the provider will deliver a physiotherapy service at the rate of \$100 for each unit delivered. So for each session of physiotherapy service delivered by the provider within the contract period, the agency pays \$100. The rates defined in the utilization contract are used for making payments against the invoices and rosters submitted by the provider.

Contract Elements

A contract for the delivery of services to an agency's clients has a number of common elements, such as a period during which it is valid, a list of services covered and details of the rates to be paid.

Provider contracts in CPM include a number of such elements, each of which is explained in this information.

Contract Period

Defining a finite period for a contract helps agencies review the outcomes of contracting, such as provider performance and program effectiveness. Contract periods can also be synchronous with the budgeting procedure of the agency with respect to defining the amount to be spent on service provisions. Start and end dates must therefore be specified for a contract to define the validity period of the terms to be honored by the contracting parties. The provider must be approved by the agency in order to deliver the services as per the terms of the contract.

Services Covered

Services must be included in the contract in order for the contract terms to apply when a client is delivered that service. The provider could be providing more than one service, and the agency may decide that some or all of the services should be included in a contract.

CPM services can be included in a flat-rate or a utilization contract. When a contract is created, the services that are to be covered by the contract terms must be specified. Only active services can be selected to be part of the contract. Services can also be provided by the provider without being contracted with the agency.

Flat-Rate

This is the rate to be paid to the provider irrespective of the number of units of service delivered. The amount to be paid could be specified as a total amount, which is split up based on the payment frequency, or as an amount paid per frequency. For example, a provider can enter in to a contract with the agency for \$12000 with a payment frequency of 'monthly' and a contract period of a year, which would result in a monthly payment of \$1000. Alternatively, a contract could be set up with a regular payment amount of \$1000 and a frequency of 'monthly'.

Unit Rate for Utilization Contract

There are scenarios where a provider may charge a rate different from the rate defined for a service offering by the agency. The difference in rate could be because of a number of factors, such as provider location and provider specialties.

The provider specific rate to be paid for a service delivery can be defined as part of the contract in CPM, as the rate to be paid per unit of service delivered. This rate is of a higher priority than the rate specified for a service offering, or any existing provider offering rate.

Number of Places

In some cases, a contract may be used by an agency and its third party service providers to formally define limits to the number of clients that can be served by the provider. This can potentially be useful to both parties. It may give an agency increased confidence that a provider will be able to accommodate the contracted number of clients, helping ensure that clients will always be able to receive services. From the provider's perspective, it may help them to manage their capacity, especially if they also receive client referrals from other sources.

CPM allows a resource manager to add a place limit in a contract specifying the number of places reserved by the provider for the clients authorized by the agency, and for those services covered in the contract. This element can be specified for providers that provide placement services.

For example, Happy Days Day Care enters in to a contract with the agency for the delivery of Early Age Day Care, with a place limit of 10. This effectively reserves 10 of Happy Days' 20 places exclusively for the agency's clients. The agency can check the places utilized before authorizing a placement and decide whether to send the client to Happy Days.

(deprecated) Performance Measures

In some cases, an agency may choose third party service providers to deliver services to its clients based on an evaluation of their quality, effectiveness or value for money in delivering services. It may choose to formalize the measures by which a provider's performance will be assessed in a contract, for example for the purposes of transparency. This can then be used by the agency to make decisions on the extension or termination of the contract.

In CPM, performance measures can be added to provider contracts. The measures can be used by the resource manager to monitor the provider's performance as part of maintaining the contract.

The measures that are defined in the Administration application can be added to the contract. Target values can also be specified for the measures. For example, a flat-rate contract is set up with a provider

which pays a total of \$10,000. In order to make this contract cost effective, the agency decides that at least a hundred clients should be served by the provider. Therefore the measure 'Total Number of Clients Served' is included on a contract with a target value of 100. At the end of the contract period, the total number of clients that were actually served by the provider comes to 700. Based on this information, the agency decides that the contract wasn't cost effective, and decides not to renew it.

Licenses

Licenses can be used to determine the expertise and service quality of the provider. An agency may stipulate that the provider must be licensed in order to deliver services, and this may be specified as part of the contract. Where a contract specifies that a license of a particular type is required, the provider must have a valid license of that type before the contract can be activated.

Providers

Provider groups can enter in to contracts on behalf of providers associated with the group. Providers affiliated with the group must then deliver services as per the terms of the contract that the provider group has agreed with the agency. Provider groups can enter in to a flat-rate contract or utilization contract with the agency. For such contracts, providers that are to be bound by the contract terms must be included in the contract.

Contract Lifecycle

The table describes the stages that a contract moves through.

<i>Table 4. Contract Lifecycle</i>	
State	Description
In Edit	When a contract is created or renewed and has not yet been signed the status is 'In Edit'. This indicates that the contract has not yet been activated and signed and therefore not yet binding. An 'In Edit' contract can change to 'Issued' after being generated.
Issued	When a contract is generated the status is 'Issued'. This indicates that the contract has been sent to the provider for them to sign. An issued contract can be reissued if changes are made after it has been issued giving a reason of reissue. An 'Issued' status can change to 'Live' after being signed and activated.
Terminated	The status is set to 'Terminated' if the contract is prematurely ended before reaching the end date on the contract.
Live	When a contract has been signed and activated the status is 'Live'. A contract is now binding.
Amended	When a contract is amended a new 'In Edit' contract is created. On activation of this new contract the status of the previous contract version changes to 'Amended'.
Canceled	The status is set to 'Canceled' if the contract is deleted. A 'Canceled' contract status cannot be changed.

Issuing and Activating Contracts

After inputting the contract details, you can generate the contract. The contract document is generated as a PDF document which can be printed and sent to the provider.

The contract is sent to the provider for them to check, sign and return before the agreed terms can come into effect. This process is called issuing the contract.

The provider or provider group review the terms and sign the contract. The signed document is then sent to the resource manager who activates the contract in the system. The contract then becomes live, and as of the contract start date, the provider can start delivering services according to the terms specified in the contract. The provider and provider services must be approved by the agency in order for the contract to be activated.

Amending Contracts

Sometimes there could be a change in the terms and conditions that were agreed upon in the contract, for example a change in the provider rate. Manage these changes by amending the contract, if the contract is already activated.

Most of the time, the change in contract terms only involves the rate element. As there is a single rate defined for a flat-rate contract, it is not possible to edit the contract and change the rate. The contract has to be terminated and a new one must be created effective the date of the rate change.

But for utilization contracts, rates can be maintained for different periods of time within the contract period. If there is a rate change, the contract can be amended with the rate change without changing the contract period. Amending the contract results in the creation of a new version. The amended contract is then issued and activated. The terms in the new contract supersede the previous contract terms.

Renewing Contracts

A contract is active for a finite period and may have to be renewed by the agency during the course of their association with the provider.

The contract expires when the end date is reached, so the contract should be renewed before this point. The resource manager or resource manager supervisor is responsible for renewing contracts. The renewed contract is effective from the day after the end date of the previous contract.

Terminating Contracts

SW

The agency may decide to terminate a contract at any point for a number of reasons, such as the provider violating the terms of contract, or poor provider performance. The resource manager or resource manager supervisor can terminate a contract. Only live contracts can be terminated.

Managing Training and Certifications

CPM provides functions to track and record training that is received by people who are involved in the delivery of services to clients, and also any certifications they have gained.

Organizations have a vested interest in ensuring that the individuals delivering services on their behalf are as capable as possible. Keeping a record of any training courses completed and any professional certifications gained by providers and their staff helps to ensure that services delivered are of the highest standard.

Setting up Training Courses

Training courses are configured in the administration application. Along with the training course name, type and validity period, the administrator can also add training credits. Once the details of the training course have been set up by an administrator, the resource manager can record training for provider members.

For more information about configuring training courses, see [Configuring Provider Management](#).

Configuring Training Credits

In some cases, the award of a certification to an individual might depend on the completion of more than one training course from a range of possible courses. Equally, one training course might be more relevant than another, and hence the organization may wish to give a higher weighting to that training. Both these aims can be supported by the use of training credits.

Training credits can also be configured to be called 'units' or 'points', and can vary based on the category and type of provider that the provider member is associated with. See the section about certifications for an example of how credits can be used with certifications.

Provider Member Training

The completion of training can be recorded and managed for provider members in CPM. A training course can be either managed or non-managed.

Managed Training

Managed training programs allow a resource manager to track the progress of provider members toward completion of a training course. If a training course is to be managed, it must first be set up as a training service offering by an administrator.

When adding a managed training course for a provider, one or more participants in the training can be selected. Alternatively, the training can be added for a provider member individually. A required completion date must be added, along with details of whether the training is either required or recommended. The training can then be approved.

When the training course is completed, the resource manager can record completion details, including the date and number of units that are completed. Should the provider member be exempted from completing the training, it can be waived to indicate that it need no longer be completed.

Non-Managed Training

Individuals involved in service delivery might also receive training which is not directly authorized or managed by the organization. As these training courses might have been received in other locations, it isn't always the case that these courses or their providers will be registered in the system.

Therefore, CPM supports the recording of the completion of non-managed courses for which:

- The training course and provider are registered in the system
- The training course and provider are not registered in the system
- Any combination of the above.

Where training courses and training providers are not recorded in the system, the names of the training and provider can be recorded. The resource manager can also record the units completed, if known, and the date the training was completed.

Training Requirements for Licenses

A training course can be configured to be a training requirement for a particular licenses type. If training requirements are specified for a license, then all training marked as required must be completed or waived for all active provider members. If this isn't the case, the resource manager will be warned before the license can be approved.

Provider Member Certifications

A certification allows an authorized body to recognize a person as meeting pre-determined requirements or criteria which enable them to perform their job. Maintaining certifications for provider members allows

an organization to ensure that people involved in the provision of services are equipped to provide a sufficient level of care for the organization's clients.

Certification types are configured in CPM by an administrator, including the validity period and the details of any credits required to achieve the certification. A certification can be issued either by the organization itself or by a third party issuing body.

Once created, the certification can then be added to provider member records by the resource manager. If a certification for a provider member is to be renewed after expiry, the certification must be modified to reflect the new validity period. Alternatively, the expired certification can be deleted and a new certification can be added.

Recording Client Attendance

Some organizations might require providers to record client attendance for a service delivery.

Client attendance might be tracked for the following three reasons:

- Track the delivery of a service.
- Make payments based on recorded attendance.
- Evaluate client participation.

CPM provides the facility to generate rosters, record client attendance, validate submitted rosters and pay providers based on attendance information. Providers can submit client attendance either through the provider self-service application or by submitting the completed paper roster that is sent by the organization.

Recording Attendance Rosters

Use rosters to record attendance information for a period for a client or group of clients. An organization or a provider can also use rosters to show the clients who scheduled to receive services for an upcoming period.

The client and attendance information is captured to a roster by using roster line items, absences and optionally through daily attendance records.

Recording Roster Line Items

A roster line item allows an organization to record a client's receipt of a service from a provider for a period, such as a week or a month. Therefore a roster will usually have as many line items as the provider has clients for that period. Attendance can be recorded at the roster line item level where the organization is interested only in the total number of units delivered in the roster line item period, and not the breakdown of attendance at the daily level.

Recording Daily Attendance

In cases where organizations need to know the client attendance for each day within the roster line item period, daily attendance can be recorded for the client. The option to record daily attendance provides a more granular level of detail below the roster line item level. Daily attendance includes information on whether the client was present or absent, as well as the number of hours or units attended and not attended for each day within the roster line item period. When daily attendance is recorded, the total number of hours or units delivered in the roster line item period will be the sum of the hours or units attended for each day.

Attendance can also be recorded without units or hours, in which case only the information on whether the client was present or absent on a particular day is recorded. This can be done using configuration for a service. For more information see [“Configuring Attendance Tracking” on page 4](#).

Recording Absences

Where a client did not participate in the service for the planned duration, this can also be captured on a roster as an absence. The absence information that is captured includes the number of hours or units for which the client was absent, along with the absence reason. The recording of an absence reason is important as in some cases providers can receive payments for client absences, for example, where the client was absent without informing the provider. The absences can be recorded at both roster line item and daily attendance levels.

Generating Rosters

Rosters are generated automatically by the system where clients are authorized for a specific provider, or can be created manually by the resource manager.

Automatic Roster Generation

Automatic generation of rosters happens in two ways.

1. At a regular interval based on the roster generation frequency.
2. On creation of a service authorization for the current period.

To determine the interval at which the rosters should be generated, the applicable roster generation frequency is used. For more information see [“Configuring Attendance Tracking” on page 4](#). At the specified frequency, the system generates a roster for all providers who have clients scheduled to receive the service in the current roster period. All the clients scheduled to receive the service are added to the roster as line items, along with the details of their expected attendance.

Attendance rosters are also created automatically when a new service authorization is created and no roster already exists for the provider for the period specified in the authorization. Again, the applicable generation frequency is considered. If a roster already exists for the provider for the period specified in the authorization, the client is automatically added to the existing roster as a new line item, and no additional roster is generated.

An example of automatic roster generation is as follows: Carrie's Day Care begins offering an early child care service. A user creates a service authorization for Robert Smith who is supposed to attend the day care every day from 9am to 5pm for a month, starting from January 1st. The authorization is valid until 31st January. The roster generation frequency is set as "Weekly on a Monday". As there is no existing roster for 1st January for Carrie's Day Care, a roster is generated by the system for the week (Monday 27th December to Sunday 2nd January) and a roster line item is added for Robert Smith for the overlapping period for which he is due to receive day care (1st January to 2nd January). When the next Monday arrives, that is, 3rd January, a roster for the week Monday 3rd January, - Sunday 9th January is automatically generated and Robert Smith is added for the period 3rd January to 9th January. This process is repeated for as long as the authorization for Robert is valid, until 31st January.

Manual Roster Generation

In some cases, rosters might need to be manually generated. This can happen for a number of reasons, for example, where the provider who will deliver the service isn't known at the time of authorization.

In such cases, an organization might issue vouchers that can be redeemed at one of several providers. Since the authorization doesn't have a specific provider on it, the client will not be added to any rosters automatically and he/she would have to be added manually to the roster.

To record the attendance of such a client, the provider can either generate a roster via the self-service application, or request the organization to send a blank paper roster. The blank roster can be generated for a selected service and period.

Entering Attendance

Client attendance can be entered either at roster line item level or at the daily level.

The planned attendance for the period and/or for each day where it is known is displayed on the roster to indicate the planned schedule for the client. For each day where the planned units are available, the client attendance must be provided to say whether client attended those planned units or not. It isn't possible to submit attendance information for a future date.

After client attendance is recorded, completed rosters are returned to the organization to be recorded and processed. In the case of paper rosters, the resource manager can record the attendance information in the system and submit the roster for processing. Alternatively, the providers who are enabled for the self-service application can also submit the rosters online, from where they are directly submitted for processing.

For example, Robert Smith goes to day care on January 1st and is there from 9am to 5pm. Assuming that attendance is required at the daily level, Carrie's Day Care marks his attendance for 1st January as present and enters hours attended as 8. Robert does not report to the provider on January 2nd, and fails to inform the provider. The provider marks his attendance as absent for January 2nd with the absence reason "Did not attend". The hours not attended are entered as 8. The provider submits the roster (27th December to 2nd January) to the organization with this information.

Roster Processing

When submitted, the rosters go through a process of matching and validation. The first step is for the system to check that the clients are registered on the system and the cases for them are valid.

Then, a matching service authorization is found for each client and the clients are validated against that service authorization to ensure that the information entered on the roster line item is correct.

If the matching and validation processes are successful, the roster line items are approved (if manual approval is not required). If manual approval is required, the roster line items need to be approved manually after matching and validation. Once approved, if the service on the roster is configured to be paid based on attendance then payments are issued to the provider.

If the matching or validation process is not successful, the roster line item goes into exception processing, where a task is created for the resource manager. The resource manager can then modify the roster line item, correcting any errors found, and resubmit it for processing, where the roster line item goes through the matching and validation process again.

Correcting Errors

To correct any errors that are made during data entry or the recording of a client's attendance, roster line items can be updated, either directly before being submitted or through exception processing if they are submitted but found to be invalid.

If a roster line item needs to be updated after it has been submitted, approved and paid for, it has to be resubmitted and reapproved before the new information is considered valid. A reevaluation of payments made to the provider is required in such cases.

Managing Provider Incidents

CPM provides functions for the organization to manage incidents that involve providers. Incidents are any negative or detrimental interactions that occur between individuals that are associated with the organization.

Any situation that might adversely affect the standard of care that is given to clients must be dealt with as efficiently and as carefully as possible. Users can record incidents against a provider so that the organization can monitor the wellbeing of its clients, and can also give an indication of the provider's efficiency in managing the facility.

An incident can be recorded against a provider when either the provider or the provider member is involved, or when the incident occurred in the provider's facility.

Incidents can occur between:

- Two or more provider members
- Provider members and clients
- Two or more clients.

Note: Provider groups are not directly involved in an incident because they do not deliver services to the clients. However, a provider group might be involved in an incident in the following scenarios.

- If the incident involves a provider that is associated with a provider group.
- If the provider group reported the incident.

Maintaining Incident Information

Caseworkers can maintain details about the incident, including the incident type, participants, and the injuries sustained if applicable.

Recording the Incident Type, Category, and Severity

Incidents can be of different types, such as Accident or Assault. Category helps caseworkers to assign a finer classification to the incident and can be used for reporting purposes. Category values could be 'client on client'. Severity of the incident can also be recorded.

Maintaining Incident Participants

People who play a part in the incident such as an affected party or the perpetrator are referred to as incident participants. Participants in the incident and their respective roles are also recorded against the incident. The provider must be an incident participant in order to record an incident against the provider; the incident reporter is also an incident participant.

Maintaining Injury Information

Incidents can result in injuries, which can also be captured as part of an incident's details. Injury information such as the identity of the injured party, the severity of the injury, the source and the person responsible are recorded, along with details of any action taken to address the injury. If the injury happened because of a restraint imposed by a member of staff, then that information is also captured to help investigate the incident.

Maintaining Restraints

Restraints can be imposed on incident participants as a measure to contain the incident. A restraint is imposed by a provider member for a defined time period, and could be physical, mechanical or chemical in nature.

For example, a client undergoing juvenile detention has a history of abusing other young people. The detention center in which the youth is housed reports to the organization that a fight has broken out between the youth and his cell mate, resulting in the cell mate being injured. A member of staff had to intervene, to hold the youth on the floor while the injured cell mate was helped. The incident is recorded by the resource manager, who indicates that a physical restraint with a duration of two minutes was applied by the staff member on the youth.

Maintaining Staff Actions

A staff action is an action taken on the staff due to the incident, such as a letter of reprimand or suspension. Action against a member of staff is usually required in cases where a provider member has played a detrimental part in the incident.

Closing Incidents

After collecting sufficient information, caseworkers can close an incident, specifying a closure reason. Closure reasons are based on the incident findings, such as Substantiated, Withdrawn, or Referred for Investigation. An incident can also lead to an investigation against the provider based on the findings

For example, John Smith is a warden who works in a detention facility. John is accused of bullying an inmate in the facility. The facility manager creates a suspected abuse incident for John Smith and the inmate, recording the details of the allegation, including the time, location, and a description of the alleged incident of bullying. After a number of interviews with other inmates and wardens, the facility manager discovers that the inmate has a history of making false claims against wardens and lied about the alleged bullying incident. The facility manager closes the incident with a closure reason 'Unsubstantiated'.

For more information about incidents, see the [Cúram Participant Guide](#).

Managing Provider Investigations

CPM provides the ability to manage investigations for providers. An investigation is an inquiry into circumstances that surround an allegation or an incident.

If a provider or a person who is associated with the provider is suspected of wrongdoing, it is in the organization's best interest to investigate such matters and resolve them as quickly and efficiently as possible.

Multiple investigation types are supported, for example, child welfare, licensing violations, and so on. Allegations of benefit fraud or reported incidents of child abuse may come from a number of sources, such as members of the public, family members or provider members. The details of each allegation recorded are examined to establish whether the allegation is founded or not. If the investigation was created as the result of one or more incidents reported against the provider, the investigation can also be related to those incidents as references.

For more information about investigations, see the [Cúram Investigations overview](#).

Paying Providers

Organizations pay providers for services that are delivered to clients.

CPM provides four ways by which a provider can be paid.

Service Invoices

Providers submit invoices to the organization, which are validated and matched to a service authorization.

Attendance Rosters

Providers submit rosters detailing client attendance against scheduled service delivery, which are validated and matched to a service authorization.

Placements

Providers with placement facilities in which clients are placed can agree to have the organization make payments based on client placement information.

Flat-rate Contracts

A contract between the organization and the provider that specifies a certain payment amount at a frequency, for example, \$1000 per month. The payment is independent of the volume of services that is delivered.

Service Authorizations

Organizations assess client needs and authorize providers to provide services to address those needs. A service authorization is the instrument through which the organization authorizes a provider to provide specific services to a specific client in return for payment.

The period during which the service must be delivered is also specified in the authorization.

Service authorizations contain line items (called service authorization line items). Each line item represents a schedule for a specific service for a certain number of units within a specific period. A provider may or may not be specified on the line item. If a provider isn't specified, clients can avail of the service from any registered provider.

For example, Robert Smith is in need of support to help regain employment. Robert's caseworker recognizes a need for him to take up a training course to help achieve that outcome. The caseworker creates an outcome plan for Robert, and adds the Language Skills service, a training course, to take place over 3 months from 1st January to 31st March with a total of 60 hours duration. The caseworker also records the details of a local training provider from whom Robert needs to take up the course. The caseworker then approves the outcome plan, at which point a service authorization is automatically created for Robert. On the service authorization a line item is created with the service Language Skills, a from date of 1st January, a to date of 31st March and units authorized of 60.

A provider can be paid for the number of units of a service delivered to a client, limited to the number of units specified on the service authorization line item for the client. The delivery of those units is tracked through the invoices or rosters submitted by the provider. Payments against flat-rate contracts are independent of service delivery, and hence service authorizations are not considered when making such payments.

A service authorization can contain multiple clients, which means all the clients are eligible to receive the number of authorized units. The provider will be paid for the entire service delivery and not on per client basis. For example, if two clients are authorized on a single authorization to receive 10 sessions of a counseling service between the 1st and 15th of a month, then they are eligible to receive 10 sessions in total between them, each of which could be attended by one, the other or both clients. If they have received all 10 sessions together, the provider will be paid for 10 sessions and not for 20 sessions.

Service authorization line items may also contain nominee details where the payment is to be received by someone else other than the provider.

The lifecycle of a service authorization is as follows:

<i>Table 5. Service Authorization Life Cycle</i>	
Status	Description
Open	A service authorization has a derived state of 'Open' if the derived state of all of its service authorization line items is 'Open'.
In Progress	A service authorization has a derived state of 'In Progress' if at least one service authorization line item has a status of 'Open' or 'In Progress', but not all service authorization line items have a status of 'Open'.
Complete	A service authorization has a derived state of 'Complete' if the derived state of all of its service authorization line items is 'Complete'.
Canceled	A service authorization has a status of 'Canceled' if the service authorization has been deleted.

The lifecycle of a service authorization line item is as follows:

<i>Table 6. Service Authorization Line Item Life Cycle</i>	
Status	Description
Open	A service authorization line item has a derived state of 'Open' if no service invoice line items or roster line items have yet been matched against the service authorization line item.

Table 6. Service Authorization Line Item Life Cycle (continued)

Status	Description
In Progress	A service authorization line item has a derived state of 'In Progress' if it has been matched to at least one service invoice line item or roster line item, all the units remaining on it are not consumed yet, and it has not already ended (it has a 'To' date in the past).
Complete	A service authorization line item has a derived state of 'Complete' if all the units on it are consumed or it has ended (it has a 'To' date in the past).
Canceled	A service authorization line item has a status of 'Canceled' if the service authorization line item is canceled or deleted.

Paying through Service Invoices

Service invoices are itemized bills that detail the services that are delivered by providers, when they were delivered, and how much the providers should be paid.

Each service invoice consists of service line items that detail the various clients who received services from the provider. Services that are configured to be paid based on placement or attendance information cannot be paid through a service invoice.

Providers can submit service invoices to the organization either through the provider self-service application or by sending paper invoices, which are recorded into the system by the organization's users. Invoices can be:

- From a provider or provider group.
- For one client or for many clients.
- For one service or multiple services.

Initiating Payment Processing

Payment processing for service invoices is initiated when the invoices are submitted. Submission of a service invoice results in all the line items within it being submitted for processing. Service invoice line items can also be submitted individually. Each service invoice line item has to be matched and validated before it can be paid for.

Validating and Matching Service Invoice Line Items

Once service invoice line items are submitted for processing, they must be validated to make sure that the service delivery has been authorized by the organization. This is done by:

- Validating that the client(s), provider and payee specified on the line item are registered with the organization.
- Validating that the case specified is a valid case.
- Validating that the service invoice line item is not a duplicate.
- Validating that the provider is approved to deliver the service.
- Finding a service authorization for the client that contains a schedule of service delivery which matches with the information specified on the service invoice line item. For example, where a service invoice line item is received for three physiotherapy sessions, there must be corresponding service authorization line item for physiotherapy sessions for that client, on which at least three sessions remain (that are not previously billed and paid for).

If a single service invoice line item has been submitted for more than one client, all the clients must be present on the same authorization that matches with the service invoice line item. If there are additional clients on the service authorization, they are not considered when matching and validating this invoice line item.

If a service invoice line item fails the matching or validation process, a task is created in the service invoice exception processing work queue stating the reason why the service invoice line item could not be processed. The service invoice line item remains in an 'Open' state until it is modified and resubmitted by the authorized user. This can be done from the exception processing task where the user can modify and resubmit the line item for processing, or deny the line item. The service invoice line item can also be modified and resubmitted directly from the user's workspace. Once resubmitted, the service invoice line item goes through the process of matching and validation again, and if successful, the task is closed.

During the processing of a service invoice line item, if it is found that a flat-rate contract exists for the provider for the period being invoiced, the line item processing stops. This is done in order to prevent any double payments to the provider, as the provider should be paid as per the terms dictated in the flat-rate contract.

Determining the Payment Amount

Successfully validated and matched service invoice line items can be approved, and corresponding payments can be made to the payee. The payment amount is determined by using one of the following configured service rates, and in the following order of priority:

1. Rate specified on the service authorization line item (highest priority, used if specified).
2. Utilization contract service rate.
3. Provider service rate.
4. Service offering rate (lowest priority, used if no higher priority rate specified).

The unit amount specified on the service invoice line item is compared with the applicable rate, as described above, and if they are found to be different, the payment options configured for the provider or service offering are referenced to decide whether to use the invoiced rate, the configured rate, or whether not to pay at all. Based on the applicable rate, a payment amount is calculated. Any difference between the payment amount and the invoiced amount is recorded as a payment transaction, along with the reason for the adjustment.

Where there is a requirement to use custom rates (a rate which can change over time and can change based on circumstances) in determining a payment amount, the service can be configured to be delivered by 'Product Delivery with Invoicing'. If the submitted invoice relates to a service which has a delivery type of 'Product Delivery with Invoicing', and if a custom rate has been specified for the associated product, then the custom rate will be used to determine the payment amount. Custom rates are specified through rules and rate tables. The system uses product delivery processing in this case to determine the payment amount rather than CPM processing. If a custom rate has not been specified for the associated product, then the payment amount is determined by using CPM processing as described above.

For information on how to define rate tables for product deliveries, see [Implementing rate tables](#).

Paying through Attendance Rosters

When a service is configured to be paid based on attendance information, providers can submit attendance rosters to the organization either through the provider self-service application, or by sending paper rosters that are recorded into system by the organization's users.

For more information on attendance rosters, see [“Recording Client Attendance” on page 24](#).

Services that are configured to be paid based on placement information cannot be paid through rosters.

Initiating Payment Processing

Payment processing is initiated for placement-based payments when the due date arrives according to the placement payment frequency that is configured by the organization. For example, an organization has

set up the placement payment frequency to be the 1st of every month. A client is placed with a provider on 5th January for a period of one month, for a service which is configured to be paid based on placement. The provider will be paid on 1st February, as per the configured frequency, for 25 days of placement in the month of January.

Validating and Matching Roster Line Items

After a roster line item is submitted for processing, as with a service invoice line item, it must be validated to make sure that the service delivery has been authorized by the organization. This includes:

- Validating that the client on the roster line item is registered with the organization.
- Validating that the case (if specified) is a valid case.
- Validating that the provider is approved to deliver the service.
- Finding a service authorization for the client(s) that contains a schedule of service delivery which matches with the information specified on the roster line item.

If the roster line item fails the matching or validation process, a task is created in the roster exception processing work queue stating the reason why the roster line item could not be processed. The user can correct and resubmit the line item for processing, or deny the line item from the exception processing task. The roster line item can also be corrected and resubmitted directly from the user's workspace. Once resubmitted, the roster line item goes through the process of matching and validation again, and if successful, the task is closed.

The validation of a roster line item is limited to ensuring that the expected amount of service is accounted for, and that the authorized amount of service is not exceeded. No additional validation, for example checking whether a certain amount of allowed absence has been exceeded, is performed by CPM by default, although developers can extend CPM to do this. For more information, see [Developing with Provider Management](#)

Determining the Payment Amount

Successfully validated and matched roster line items can be approved, and payments can then be made to the provider, provided that the service included on the roster line item is configured to be paid based on attendance. The payment amount is determined using the same hierarchy of rates as described in the service invoice line item section. In contrast to service invoice line items, roster line items don't include a rate, and so only the rates configured in the system are used.

Like service invoice line items, if the submitted roster line item relates to a service which has a delivery type of 'Product Delivery with Invoicing', and if a custom rate has been specified for the associated product, then the custom rate will be used to determine the payment amount. The system uses product delivery processing in this case to determine the payment amount rather than CPM processing. If a custom rate has not been specified for the associated product, then the payment amount is determined using CPM processing instead. For information on defining rate tables for product deliveries, see [Implementing rate tables](#).

If more than one rate is effective over the period of the roster line item, all of the applicable rates are used. For example, there is a roster line item starting from 1st January and ending on 31st January and a provider offering rate starting from 1st October and ending on 10th January. The provider offering rate would be used to make payment against the first 10 days of the roster line item, and then the service offering rate would be used for the remaining 21 days of the roster line item. This example assumes that there is no rate specified on service authorization and no utilization contract rate exists.

Paying through Placements

When the service offering is configured to be paid based on placement information, no externally submitted payment trigger, such as an invoice or a roster, is required. Rather, the information relating to client placements with a provider is used as a basis for calculating how much should be paid.

Initiating Payment Processing

Payment processing is initiated for placement based payments when the due date arrives according to the placement payment frequency that is configured by the organization. For example, an organization has set up the placement payment frequency to be the 1st of every month. A client is placed with a provider on 5 January for a period of one month, for a service that is configured to be paid based on placement. The provider will be paid on 1 February, according to the configured frequency, for 25 days of placement in the month of January.

Determining the Payment Amount

The payment amount is determined using one of the following service rates, and in the following order of priority:

1. Placement Rate (highest priority, used if specified).
2. Utilization contract service rate.
3. Provider service rate.
4. Service offering rate (lowest priority, used if no higher priority rate specified).

If more than one rate is effective over the period of the placement, all the applicable rates are used. For example, there is a placement starting from 1 January and ending on 31st January and a provider offering rate starting from 1 October and ending on 10 January. The provider offering rate would be used to make payment against the first 10 days of the placement, and the service offering rate would be used for the remaining 21 days of the placement. This example assumes that no placement rate or utilization contract rate exists.

Paying through Flat-rate Contracts

The organization can have a flat-rate contract with a provider or provider group to pay them one of the following amounts.

- A defined payment amount, at a set frequency for a period, for example, \$200 per month for a year or
- A total contract amount over a period, to be paid at a set frequency, for example, \$2400 a year at a monthly frequency.

Providers who have a flat-rate contract with the organization are paid for the services that are defined in the contract, regardless of the volume of the services they have delivered. A fixed amount as specified in the contract is paid for each payment reoccurrence.

Initiating Payment Processing

Payment processing is initiated for flat-rate contracts upon creation and activation of a contract. The information specified in the contract is used to establish a payment schedule for the provider.

Determining the Payment Amount

A total contract amount defined in the contract is paid to the provider, breaking into sub-payments as per the specified frequency in the contract. For example \$2400 at a monthly frequency for a one year contract will be paid as \$200 per month. If a regular amount is specified, the same amount is paid to the provider on a recurring basis as per the specified frequency. For example, a regular payment of \$1000 at a monthly frequency will be paid as \$1000 each month.

Reassessing Payments

Due to changes made to the inputs to the payment calculation process, a second, retrospective calculation of the amount to be paid can be conducted. This is called reassessment.

The purpose of reassessment is to compare the outputs of a retrospective payment calculation with the outputs of the original payment calculation. This comparison detects differences between these outputs, so that the necessary overpayments or liabilities are created, and processed. A description of reassessment processing is outside the scope of this content, as the reassessment process is handled by the existing functions in the Cúram Eligibility and Entitlement Engine. However, there are several possible reassessment triggers in CPM.

Reassessments against Invoices, Rosters and Placement Payments

Reassessment of payments made against service invoice line items, roster line items or placement information is required when one of the following happens:

When provider, provider offering, or service offering details change:

- A service, provider service or custom rate used in the calculation of a payment amount is changed retrospectively
- The rate period is changed, such that a period for which the payment has been made using one rate is now covered by a different rate
- The payment option for a provider is changed, such that a payment previously made using one payment option is now covered by another

When service invoice line item, or roster line item or placement is modified:

- A service invoice line item against which payments have already been made is updated, with the result that the amount to be paid is different or the payee is different
- A roster line item against which payments have already been made is updated, with the result that the amount to be paid is different
- The duration of a placement for which payment has already been issued is changed, or a placement is deleted

When a utilization contract is amended:

- A utilization contract is updated such that payments made using the rate under the previous contract are now covered by a different rate in the amended contract

When the service authorization line item is modified (this is not applicable to the payments made using placement information):

- A service authorization line item against which payments have already been made is updated, with the result that the amount to be paid now is different. The changes on the authorization could include changes in authorized rate, period and/or units authorized. Reassessment occurs in the following cases:
 - there is a change in the period on the service authorization line item, and there are related service invoice line items with a status of 'Complete' for the period outside the new service authorization line item period, and/or
 - there is a change in the units on the service authorization line item, and the new unit value is less than the total units invoiced on all related service invoice line items with a status of 'Complete', and/or
 - there is a change to the existing rate on the service authorization line item that was used for making payments, and/or
 - a service authorization line item with a status of 'In Progress' or 'Complete' is canceled.

Reassessments against Flat-rate Contract Payments

Payments in respect of flat-rate contracts are made in arrears, so there is no reassessment as related to over and underpayments. However, upon termination of a flat-rate contract, the system will amend the payment schedules that were set-up on activation of the contract. For example, if a flat-rate contract is set-up for a period of one year, from 1st January 2011 to 31st December 2011, with a monthly payment frequency and a total amount of \$12,000, each month a payment of \$1000 will go to the provider. If the contract is terminated on 15th March, the payment due up until 15th March is calculated. When the payments are generated at the month end (i.e. at the end of March), a payment of \$500 will be generated.

Managing Provider Deductions

Provider deductions can be used to allocate a portion of a provider payment to recoup monies owed to the organization or to pay a third party. There are three types of deductions that can be set up against a provider payment: applied deductions, un-applied deductions, and third party deductions.

Provider deductions can be created against a combination of provider payment types:

- Provider invoice
- Provider placement
- Provider contract
- Provider attendance

Deductions recorded for a provider are entered as a variable (percentage) rate and will be applied to all components of a provider payment, regardless of whether the payment is issued directly to a provider or issued to a specified nominee. For more information about deductions, see the [Cúram Deductions overview](#).

Applied Deductions

An applied deduction is an agreed monetary amount that is subtracted from a provider payment and applied toward an outstanding liability owed by the provider. For example, where a rate for a service offering has been decreased and an overpayment to the provider has occurred, a deduction can be set up on subsequent payments made to the provider until the overpayment is fully recouped.

Un-applied Deductions

An un-applied deduction is an agreed amount of money that is deducted from a provider payment and used to make a general refund to the organization. For example, if a one-off emergency payment is issued to a provider, the organization can deduct the amount from future payments issued to the provider.

Third Party Deductions

A third party deduction is an agreed monetary amount that is deducted from a provider payment and paid to another participant. For example, \$15 of a provider's weekly payment can be deducted and applied toward paying off an electricity bill that is owed to a registered utility company.

(deprecated) Performance Monitoring

Performance monitoring of providers is done by agencies to evaluate provider efficiency and to establish provider accountability for results. This also helps ensure quality service delivery to clients.

Provider performance can be evaluated using statistical measures, feedback, or both on the service delivery, for instance service evaluation. Agencies can monitor provider performance using performance measures and service evaluation.

(deprecated) Performance Measurement

Performance measures are parameters that can be used to evaluate the performance levels of providers. The measures are presented as statistical results of data collected.

Performance measures are parameters that can be used to evaluate the performance levels of providers. The measures are presented as statistical results of data collected. There are four major areas for which performance can be measured:

Table 7. Areas of Performance Measurement	
Area	Example Performance Measure
Service Quality	Percentage of clients satisfied
Service Output	Number of units delivered per client
Service Efficiency	Cost per unit of service
Service Effectiveness/Outcome	Percentage of clients placed successfully (after availing of a job training service)

Performance measurement in CPM involves configuration of measures in the Administration application, defining measures relevant to providers and services and then determining the actual values for those measures.

An agency defines the measures relevant to the services provided by a provider and then collects information against those measures. For example, a measure of 'Successful job placement' is defined for a provider that provides job training services. The agency then collects information for that measure i.e., whether or not each client is placed. This is then used to calculate the percentage of clients that get placed post training.

(deprecated) Configuration of Performance Measures

Performance measures can be configured in the Administration application and associated with service offerings.

For more information, see [“Configuring Evaluation Criteria for a Service Offering” on page 9.](#)

Out of the box, the following performance measures are available. Default logic is provided to calculate the values of these measures, but this logic can be overridden if required. New performance measures can also be configured.

Table 8. Out of the Box Measures	
Type	OOTB Measures
Service Output	Total number of units delivered, Total cost of services delivered, Flat rate contract payments, Utilization contract payments
Service Efficiency	Average cost per unit of service, Average cost per successful outcome.
Service Effectiveness/Outcome	Rate of achievement of successful outcomes.
Service Quality	Number of incidents, Number of investigations, Number of incidents requiring investigation.

Measures can also be marked as applicable to only a provider or a service or both.

Table 9. 'Applicable To' Configuration		
Applicable To	Usage	Example
Provider	Where a measure is independent of the service types delivered by the provider.	Number of Incidents.
Service	Where a measure has to be calculated for a specific service.	Average cost per unit of service.
Both Provider and Service	Where a measure can be measured for a service as well as all services provided by the provider.	Average cost per successful outcome.

(deprecated) Performance Measures and Evaluation Criteria Configuration

Performance measure values also can be determined based on service delivery evaluation results. For example, the measure **Percentage of clients satisfied** is determined based on the number of client satisfaction evaluations that have passed. For measures that are dependent on service evaluation, evaluation criteria are configured in the Administration application, along with ranges of scores and outcomes.

A sample configuration follows:

Service Offering - Job training service

Measure - Client satisfaction

Service Evaluation Criteria related to the measure client satisfaction (both configured to score 0 for 'No' and 1 for 'Yes':

1. Were you satisfied with the course administration?
2. Were you satisfied with the course content?

Failure: Maximum Score = 1

Success: Minimum Score = 2

In this example, scores are assigned to the possible responses and ranges are defined for the possible outcomes. When the responses are collected, based on the number of service evaluations that are successful, the percentage of clients satisfied is determined. For more information, see [“\(deprecated\) Measuring Provider Performance”](#) on page 37.

(deprecated) Defining Performance Measures for a Provider

Performance measures configured in the **Administration** application can be related to providers by the resource manager. The measures can be defined at two levels: at the provider level (covering all services), or for each service provided. This depends on the configuration setting for the measure - whether it is applicable only to a service, or to a provider, or both.

Performance measures can also be added to provider contracts. The measures can be used by the resource manager to monitor the provider's performance as part of maintaining the contract. The values for the measures can be used to make decisions on the extension or termination of the contract.

(deprecated) Measuring Provider Performance

Two methods of calculating the values are supported: one is based on internal data such as invoices and authorizations, and the other is to collect information from clients, through service evaluation. For example, the value for the measure 'Total number of clients served' is calculated based on internal data (See Appendix A).

The measure **Percentage of clients satisfied** is determined based on service evaluation done on the service delivery. If 5 out of 10 clients served have successful evaluation outcomes, then the measure value is 50.

The values for the measures are displayed against the provider, provider service or contract. The values displayed for a contract are for the contract period. The values displayed against a provider or provider service is calculated using all data available since the enrollment of the provider.

(deprecated) Service Evaluation

Evaluation of service deliveries involves answering questions related to various factors influencing the delivery such as staff attention, facility cleanliness etc. This serves two purposes: to determine the effectiveness of the delivery, and to evaluate provider efficiency.

Refer to *Cúram Integrated Case Management Guide* for more information on service delivery and evaluation. Evaluating provider efficiency is the focus of service evaluation with respect to CPM.

Evaluation criteria are defined in the Administration application and the responses are captured from the service delivery. The responses are scored in order to determine the outcome of the evaluation. The outcome of the evaluation can be used to feed in to provider performance measurement. For more information, see [“\(deprecated\) Measuring Provider Performance” on page 37](#).

(deprecated) Configuring Evaluation Criteria

Evaluation criteria can be configured in the **Administration** application. Configuration involves specifying the name of the criterion, type of response for the criterion and the score for each response.

A few sample criteria follow:

1. Criterion - Was there adequate staff attention?

Response Type - Boolean.

Table 10. Scores	
Response	Score
Yes	1
No	0

2. Criterion - Please rate the cleanliness of the facility.

Response Type - Rating 1 to 5.

Table 11. Scores	
Response	Score
1	0
2	1
3	2
4	3
5	4

Scores are specified for the responses in order to determine the outcome of the service evaluation.

After setting up the evaluation criteria, these have to be related to the service offering. For more information, see [“Configuring Evaluation Criteria for a Service Offering” on page 9](#).

Performance measure values for a service offering can be also determined based on the outcome of service evaluation. A prerequisite for this is to relate the performance measure to relevant evaluation

criteria in the Administration Application. For more information, see “(deprecated) Performance Measures and Evaluation Criteria Configuration” on page 37.

(deprecated) The Services Taxonomy

In a human services context, a taxonomy is a classification of services arranged in a hierarchical structure, which allows an organization to index and access resources based on the services they provide and the target populations they serve.

As a taxonomy provides a standard and clear way of classifying services, indexing provider services using taxonomy terms provides greater efficiency in accessing provider information. Cúram Provider Management (CPM) supports the AIRS/211 LA County Taxonomy of Human Services, as it is widely acknowledged as the industry standard in North America. However, organizations including those outside of North America may also maintain their own taxonomies relevant to their area. Therefore CPM supports two ways of creating a taxonomy, which will be described in detail in this chapter:

- Importing the AIRS/211 LA County Taxonomy of Human Services
- Manually creating and maintaining an organization-specific (custom) taxonomy

(deprecated) Maintaining an AIRS Taxonomy

2-1-1 is a three digit telephone number used in the US and Canada that connects callers to a full range of community, social and government services information. Alliance of Information and Referral Systems (AIRS) is the accrediting body of the 2-1-1 centers and has developed a taxonomy of human services that provides a standard language and terminology for information and referral providers nationally.

(deprecated) About the AIRS/211 LA County Taxonomy of Human Services

The taxonomy a hierarchical system that contains more than 9,200 terms that cover the complete range of human services.

The AIRS/211 LA County Taxonomy of Human Services (to be referred to henceforth as "the Taxonomy") is an intellectual property copyrighted by 211 LA County and available only to licensed subscribers. 211 LA County produces two versions of the taxonomy: a US version, and a Canadian version which is available in both English and French. When new terms become available or when the language describing human services changes, the Taxonomy is modified accordingly. 211 LA County issues several updates a year to the Taxonomy to meet the ongoing needs of users

The Taxonomy is available to be downloaded in XML format from the AIRS website by subscribed users. The Taxonomy can be incorporated into the organizations database by importing the file by way of the Cúram Provider Management (CPM) administration application.

More information on the AIRS/211 LA County Taxonomy of Human Services can be found on the website www.211taxonomy.org.

(deprecated) AIRS Taxonomy structure and content

The Taxonomy has 9,200 terms that have been classified into 10 basic categories, each of which is broken down to a maximum of six levels. Each term describes a service, program or organization type which can be used to categorize a provider offering.

In order to increase the likelihood of a database search successfully identifying the most suitable service provider, a term can also be linked to other taxonomy concepts, for example:

- See Also References links terms to other related terms which might help identify more useful alternative providers
- Use References are synonyms for a taxonomy term which allow users to easily find a type of service without knowing the exact wording used in the Taxonomy
- Related Concepts are used to group similar terms, to quickly identify a cluster of services identified with a particular target population or problem/need

Table 12. Taxonomy Status.

The following table describes the various statuses of the Taxonomy. The transition through these statuses is described in the following sections..

Status	Description
In Edit	The status of a taxonomy version on creation. The taxonomy can be created manually or by importing an AIRS XML file.
Pending User Review	When a subsequent version of the taxonomy is imported, if there are changes to terms that require user review and acceptance before importing, the status of the version is set to 'Pending User Review'.
Published	The taxonomy is published indicating that all the changes are completed, indicating that it can now be used for indexing and searching.
Superseded	When a version is published, the status of the previous published versions are set to 'Superseded'.

(deprecated) Importing the AIRS XML file

Organizations which have subscribed to the Taxonomy can download the XML file and the corresponding schema definition from the LA County website. The downloaded file then can be imported through the Cúram Provider Management (CPM) administration component.

It is important to note that the initial configuration of the Alliance of Information and Referral Systems (AIRS) XML schema is the only schema for which the importing of a taxonomy file is supported. During each Taxonomy file import, a taxonomy version is created in CPM. The version number of the taxonomy version is copied from the release date field of the XML file.

(deprecated) Customizing the Taxonomy

It is unlikely that an organization will require all the 9,200 terms imported from the Taxonomy file. An organization can control which terms will be available for use for indexing by setting the display status of the term.

Organizations that use the taxonomy published by Alliance of Information and Referral Systems (AIRS) also can add custom terms to the imported taxonomy to suit their own needs. Custom terms are specific to the organization and are not part of the third party taxonomy. New terms can be created, existing terms can be modified and terms that do not apply to the organization can be deleted.

Table 13. Taxonomy Display Status.

The following table describes the various display statuses for a term

Status	Description
Active	Available for use but has not been used for indexing. This is set by the user. An Inactive term can be re-activated.

Table 13. Taxonomy Display Status.

The following table describes the various display statuses for a term

(continued)

Status	Description
Used	Available for use and has been used for indexing. This is set by the system when the term is used for indexing. When the term is not used for any indexing, the status changes to Active.
Inactive - Displayed	Not available for indexing, but is displayed in searches and hierarchical views. This status is set by the user. This is set for those terms that cannot be used for indexing, but has to be displayed in order to maintain the hierarchy.
Inactive - Hidden	Not available for use and not displayed in searches and hierarchical views. This is set by the user. An organization can hide those terms that are not directly related to the services supported.

(deprecated) Publishing the Taxonomy

After any required customizations have taken place, the taxonomy can be published. The publish functionality is provided in order to minimize any impact on searches while the taxonomy data is being imported, customized or updated. Information and referral systems are expected to be accurate and hence it is important to make sure that the data returned when searching is reliable and is not impacted by changes made to the taxonomy data

Once published, taxonomy terms in a taxonomy version are available for indexing. Publishing the taxonomy should be done not only after incorporating the taxonomy in the database for the first time, but also following any further additions and updates to the Taxonomy.

(deprecated) Taxonomy Updates

A published version of the taxonomy can be updated in two ways: By editing and then republishing the current version, or by importing an updated XML file.

Where there are only minor changes required to the taxonomy, an administrator can manually update the terms without importing a new Taxonomy version. Editing a published term creates a new 'In Edit' version of that term. For the changes to be made available, the updated terms have to be republished.

When updates to the Taxonomy from Alliance of Information and Referral Systems (AIRS) 211 become available, these can be imported as new versions. The import process compares the existing and new versions, and identifies any terms which have been added, modified, replaced or removed, and records this information for reference. Terms which have been replaced or removed are automatically added to a list of terms requiring review by the administrator to confirm that they can be removed from the database.

Cúram Provider Management (CPM) also provides some options that allow an administrator some flexibility in how modified terms are handled. Before selecting the file to be imported, the administrator can choose whether or not to review any changes before they are imported. In addition, the administrator can choose to review only those terms for which a particular element has changed, such as the name or definition.

Where terms are identified which require review, the status of the taxonomy version will be 'Pending User Review'. When all terms requiring review have been accepted or rejected, the status of the taxonomy version will become 'Published'. The previous taxonomy version will become 'Superseded'.

(deprecated) Support for Multiple Languages

Some organizations support information and referral systems in more than one language, either for internal users or where citizens access a public Information and Referral site. Cúram Provider Management (CPM) supports this in two principle ways.

Firstly, CPM provides a facility to import translations of the Taxonomy XML file. Although the translations are maintained as separate XML files, importing a second XML file in a different language from the one already uploaded results in a single taxonomy version on the database for which each term has two descriptions - one in each language. This means that customizing and indexing has to happen only once for both languages. Currently, the only translation which has been made available by 211 LA County is a French language version of the Canadian Taxonomy.

Secondly, standard support for text localization is provided. This allows an administrator to add translations for individual fields on an as required basis. It can also be used where custom terms have been added to an existing Taxonomy version.

(deprecated) Maintaining a Custom Taxonomy

A number of reasons exist for why the Alliance of Information and Referral Systems (AIRS)/211 LA County Taxonomy may not be suitable for use by an organization. A custom taxonomy that can be used to index services and programs can be created for such organizations that can be used to index services and programs..

The AIRS/211 LA County Taxonomy may not be suitable for use by an organization for a number of reasons such as:

- It is specific to North America
- It is extremely comprehensive and hence may not be required by organizations which don't provide a wide range of services
- An organization may prefer to maintain a taxonomy for which a subscription isn't required

Such organizations can create their own custom taxonomy to be used to index services and programs.

A custom taxonomy is stored using the same data structure, and maintained using similar processes as for the AIRS/211 LA County Taxonomy. The creation of a custom taxonomy follows the following steps:

- A taxonomy version is created, with the administrator specifying the name, language country and version number
- Terms are added to the taxonomy, with the administrator defining where the term sits in the hierarchy by defining a term's parent term, setting the term status and adding any further information such as use references
- When the taxonomy terms and hierarchy are complete, the taxonomy is published
- Indexing takes place as described in [“\(deprecated\) Indexing Provider Services” on page 42](#), to categorize the resources offered by the organization
- Updates can be made by editing the existing version, and re-publishing

An 'In Edit' version of a custom taxonomy can be deleted if it is no longer required. Translations can also be added using the standard localization functionality provided.

(deprecated) Indexing Provider Services

Provider services are categorized using taxonomy terms in order to maximize the chances of users or clients finding the resources most appropriate to their needs. The process of linking taxonomy terms and provider services is known as indexing.

It is important that indexing is performed in a standard and transparent manner. In order to support this aim, Alliance of Information and Referral Systems (AIRS) has published guidelines with respect to indexing for organizations subscribing to the AIRS/211 LA County Taxonomy. Cúram Provider

Management (CPM) supports these indexing principles, and helps the resource manager index services accordingly.

Indexing of provider services is performed by the resource manager by selecting terms to add to a provider service. Each provider service can be indexed with a single term or multiple terms. The terms which can be associated to the provider service should either describe:

- The type of service the organization is providing
- The way in which the service is provided
- The people at which the service is targeted
- The type of facility or place where the service is being provided

Compound indexing refers to the act of combining (or linking) two or more Taxonomy terms to form a "compound" term that represents a single service. This is generally used where a resource can be categorized both by a type of service and a target population, or by a type of service and a facility type.

Examples are "Food Pantries * Women" to index a food pantry that targets women, or "Adolescent/Youth Counseling * At-Risk Youth * Girls" to index a counseling program for at-risk girls.

An index can also be removed from a provider service if it is for some reason no longer appropriate to categorise the service in that way.

The example given in the next section illustrates an example of compound indexing.

(deprecated) Retrieving Resource Information

Indexing resources (provider services) against terms from the services taxonomy increases the chances of a search for a particular resource being successful. Cúram Provider Management (CPM) provides application programming interfaces (APIs) which can be used to leverage these more extensive search capabilities, which the following example illustrates.

An agency provides services for vulnerable youths. One of the providers they use, "Park Street Outreach Center" is an organization offering counseling programs to vulnerable girls. The service associated with the provider in CPM is 'Counseling Services'. While indexing the provider service, the Resource Manager associates it to the service term 'Adolescent/Youth Counseling', along with the target terms 'At Risk Youth' and 'Girls' to form a compound index.

Without the indexes, in order to return Park Street Outreach's counseling service, a search would have had to include the word "Counseling." With the compound index above, a search for any of "at risk", "adolescent", "girls" or "counseling" would retrieve the provider service."

Note that a service must be indexed against terms from the services taxonomy in order for the keyword search (for a service) to work.

Using Provider Self-Service

To facilitate the viewing of the information held by the organization about a provider and submitting invoices and rosters online, providers are given access to provider self-service application.

To grant access to a provider self-service application, login credentials are issued. The registered providers can use the login credentials to access the application. Provider groups can also gain access to the self service application to manage their details as well as the details of the providers associated with the group.

Getting Started with Self-Service

Individuals or organizations that are interested in becoming a registered provider with an organization can submit an enquiry through self-service. When registered, they can request for login credentials to access their details.

Submitting an Inquiry

An enquiry is an official communication to the organization which allows potential providers to register their interest in joining the organization as registered providers. They can create an enquiry by visiting the Self-Service as a guest user. Once an enquiry has been submitted, it is sent to an enquiry work queue where it can be dealt with by the resource manager in due course. The resource manager can convert the enquiry into a registered provider or alternatively close the enquiry.

Obtaining Login Credentials

A registered provider can access the provider self service application as a guest user where they can request for login credentials. The provider needs to choose a username and along with it provide the reference number generated and communicated by the organization. After checking the validity of the reference number provided, a password is generated by the system and sent to the provider's primary email account. The provider can then use the username and password to login to the application and access their details.

In case the password is forgotten, the providers can also reestablish the password. This is done by validating the username and the reference number and then emailing the new password to provider's email account.

Self-Service Functions

Providers can view all their details such as credentials, people associated to them and financials. They can also submit service invoices and attendance rosters through provider self-service.

Submitting Service Invoices

Providers can view the details of payments that have been made to them and any service invoices they have sent to the organization. Providers can also submit the service invoices through the self-service application. They can do so by creating a service invoice and then line items within it. Service invoices submitted through self-service are created as requests to be first reviewed by the resource manager. When the resource manager accepts the request, service invoice and line items are available for financial user for further processing. After this, the service invoices follow the same lifecycle that is described in [“Paying Providers” on page 28](#).

Submitting Attendance Rosters

Providers can view the rosters generated for them for all the clients scheduled with them for a particular period and record attendance for them. For clients who are not listed in the rosters but authorized to receive the services, for example clients carrying vouchers, the provider can generate a blank roster and manually add the client. Once the client attendance are recorded, providers can submit the rosters where the roster line items are submitted for processing. For more information, see [“Recording Client Attendance” on page 24](#). Contrary to the invoices, no request is created in case of attendance rosters and they are directly submitted for processing, where they are matched and validated.

Notices

This information was developed for products and services offered in the United States.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing IBM Corporation North Castle Drive, MD-NC119 Armonk, NY 10504-1785 US

For license inquiries regarding double-byte character set (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

Intellectual Property Licensing Legal and Intellectual Property Law IBM Japan Ltd. 19-21, Nihonbashi-Hakozakicho, Chuo-ku Tokyo 103-8510, Japan

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM websites are provided for convenience only and do not in any manner serve as an endorsement of those websites. The materials at those websites are not part of the materials for this IBM product and use of those websites is at your own risk.

IBM may use or distribute any of the information you provide in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Director of Licensing IBM Corporation North Castle Drive, MD-NC119 Armonk, NY 10504-1785 US

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

The performance data and client examples cited are presented for illustrative purposes only. Actual performance results may vary depending on specific configurations and operating conditions.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

Statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

All IBM prices shown are IBM's suggested retail prices, are current and are subject to change without notice. Dealer prices may vary.

This information is for planning purposes only. The information herein is subject to change before the products described become available.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to actual people or business enterprises is entirely coincidental.

COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs. The sample programs are provided "AS IS", without warranty of any kind. IBM shall not be liable for any damages arising out of your use of the sample programs.

Privacy Policy considerations

IBM Software products, including software as a service solutions, ("Software Offerings") may use cookies or other technologies to collect product usage information, to help improve the end user experience, to tailor interactions with the end user or for other purposes. In many cases no personally identifiable information is collected by the Software Offerings. Some of our Software Offerings can help enable you to collect personally identifiable information. If this Software Offering uses cookies to collect personally identifiable information, specific information about this offering's use of cookies is set forth below.

Depending upon the configurations deployed, this Software Offering may use session cookies or other similar technologies that collect each user's name, user name, password, and/or other personally identifiable information for purposes of session management, authentication, enhanced user usability, single sign-on configuration and/or other usage tracking and/or functional purposes. These cookies or other similar technologies cannot be disabled.

If the configurations deployed for this Software Offering provide you as customer the ability to collect personally identifiable information from end users via cookies and other technologies, you should seek your own legal advice about any laws applicable to such data collection, including any requirements for notice and consent.

For more information about the use of various technologies, including cookies, for these purposes, see IBM's Privacy Policy at <http://www.ibm.com/privacy> and IBM's Online Privacy Statement at <http://www.ibm.com/privacy/details> the section entitled "Cookies, Web Beacons and Other Technologies" and the "IBM Software Products and Software-as-a-Service Privacy Statement" at <http://www.ibm.com/software/info/product-privacy>.

Trademarks

IBM, the IBM logo, and [ibm.com](http://www.ibm.com) are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at <http://www.ibm.com/legal/copytrade.shtml>.

Adobe, the Adobe logo, PostScript, and the PostScript logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States, and/or other countries.

Java™ and all Java-based trademarks and logos are trademarks or registered trademarks of Oracle and/or its affiliates.

The registered trademark Linux is used pursuant to a sublicense from the Linux Foundation, the exclusive licensee of Linus Torvalds, owner of the mark on a worldwide basis.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Other names may be trademarks of their respective owners. Other company, product, and service names may be trademarks or service marks of others.



Part Number:

(1P) P/N: