



# CMP v8.4 - Product Release Note

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# Contents

1.0	Introduction .....	1
1.1	Scope .....	1
1.2	Audience .....	1
2.0	Release Scope .....	2
2.1	Core CMP Modules .....	2
2.2	Optional CMP Modules .....	4
2.3	UK-specific Adaptors .....	4
2.4	OCS-specific Adaptors .....	5
3.0	New and Changed Functionality .....	6
3.1	Introduction .....	6
3.2	New functionality .....	6
3.2.1	Administration Console Changes .....	6
3.2.2	New RESTful Web Services .....	6
3.2.3	Other Changes .....	7
3.3	Changed Functionality .....	7
3.3.1	Contract Management .....	7
3.3.2	Shared Packages .....	8
3.3.3	Administration Console Changes .....	8
3.3.4	Business Configuration Changes .....	9
3.3.5	SOAP Web Services .....	9
3.3.6	RESTful Payments Web Service .....	10
3.3.7	New Web Services .....	10
3.3.8	Changed RESTful Web Services .....	10
4.0	CMP Impact .....	11
4.1	Introduction .....	11
4.2	AgentView Changes .....	11
4.2.1	New Screens .....	11
4.2.2	Changed Screens .....	15
4.3	Bulk Action Changes .....	19
4.3.1	New Bulk Actions .....	19
4.3.2	Changed Bulk Actions .....	19
4.4	Admin Console Changes .....	19

4.4.1	General .....	19
4.4.2	Daily Operations Changes .....	19
4.4.3	System Management Changes .....	21
4.4.4	System Monitoring Changes .....	21
4.4.5	System Configuration Changes.....	22
4.4.6	System Administration.....	23
4.5	Business Configuration Changes .....	23
4.5.1	New Screens .....	23
4.5.2	Changed Screens.....	23
4.6	SOAP Web Service Changes .....	25
4.6.1	New Web Services .....	25
4.6.2	Changed SOAP Web Services.....	25
4.7	RESTful Web Services Changes .....	26
4.7.1	New Web Services .....	26
4.7.2	Changed RESTful Web Services .....	27
4.8	Integration Adapters .....	27
4.8.1	Bottomline PDF Adapter.....	27
4.9	Openet-specific Adapters .....	28
4.9.1	Openet Bill Cycle Change Adapter.....	28
4.10	Lifecycle-specific Adapters .....	28
4.11	UK-specific Adapters.....	28
5.0	Product Support Issues.....	29
5.1	Solved Issues.....	29
6.0	Documentation .....	31
6.1	Product Documentation .....	31
6.1.1	Online Help .....	32
7.0	Release Upgrade Path.....	33
7.1	Upgrade Notes .....	33
7.1.1	Ansible Version.....	33
7.1.2	Openet Implementations .....	33
7.1.3	Data Migration .....	33
7.2	Inventory Manager Changes .....	33
7.3	Third party libraries.....	34
7.4	Database Changes.....	34

7.4.1	New Tables.....	34
7.4.2	New Attributes .....	34
7.4.3	Dropped Attribute .....	34
7.4.4	Modified attributes .....	34
7.5	Configuration Changes.....	35
7.5.1	Default Fields.....	35
7.5.2	Tariff Change Matrix .....	36
7.5.3	Successful Agreement Purchase Workflow .....	36
7.5.4	SIM Change.....	36
7.5.5	Workflow Event Properties .....	36
7.5.6	System Properties .....	36
7.5.7	External Configuration Module .....	36
7.5.8	New Security Roles .....	36

# 1.0 Introduction

## 1.1 Scope

This document provides an overview of the CMP 8.4 release with specific focus on the additional functional and non-functional enhancements with respect to CMP 8.3.

## 1.2 Audience

This document is intended for both internal and external use for readers familiar with CMP to explain the key features of the release including any changes in how existing functions or processes are working.

## 2.0 Release Scope

### 2.1 Core CMP Modules

The following modules form the basis of the CMP 8.4 release:

Module	Version
agent-view	8.7.67
agent-view-interfaces-layer	8.7.178
agent-view-servlet	8.5.5
bulk-action-console	1.6.13
cmp-database-pkg	8.7.27
configuration-centre	8.7.99
published-interfaces-layer	8.7.101
rest-ws	2.6.125
role-extender	8.6.4
soap-ws	8.7.84
wso2is-login	1.6.3
sabre-action-monitor	2.5.11
sabre-advance-notification	1.3.5
sabre-agreement-plan-monitor	1.0.25
sabre-analyser-extract	2.5.1
sabre-batch-error-management	2.3.1
sabre-bill-print	2.6.1
sabre-bulk-action-framework	1.9.1
sabre-comms	2.6.5
sabre-console	1.11.129
sabre-credit-control	2.5.1
sabre-credit-reference	2.6.2
sabre-dal	2.6.112
sabre-data-fix	1.2.2
sabre-data-warehouse	2.6.4
sabre-debt-recovery-agency	2.6.2
sabre-device-enrolment	1.4.1
sabre-device-enrolment-adaptor	1.4.1
sabre-edit-subscription	1.9.1
sabre-external-configuration	2.6.2
sabre-external-log-collector	1.1.2
sabre-external-reference-upload	1.9.1
sabre-gdpr-purge	2.6.2
sabre-general-ledger	1.3.1
sabre-generic-activity-adapter-daemon	2.3.1
sabre-generic-postingout-daemon	2.3.1
sabre-interface-purge	1.3.2

<b>sabre-invoice-posting</b>	2.5.2
<b>sabre-invoice-production</b>	2.6.2
<b>sabre-ledger-monitor</b>	2.5.1
<b>sabre-managed-number-monitor</b>	2.6.4
<b>sabre-managed-numbers</b>	2.5.2
<b>sabre-manage-plan-tariff-change</b>	1.2.8
<b>sabre-manage-sales-ledger-adjustment</b>	1.1.1
<b>sabre-manage-subscription-contract</b>	1.1.12
<b>sabre-manage-subscription-feature</b>	1.2.4
<b>sabre-manage-workflow</b>	1.2.1
<b>sabre-mandate-registrations</b>	2.5.2
<b>sabre-mandate-revisions</b>	2.5.1
<b>sabre-mdsledger-adapter</b>	2.4.1
<b>sabre-non-recurring-payments</b>	2.6.4
<b>sabre-provisioning</b>	2.6.13
<b>sabre-rated-charge</b>	2.6.1
<b>sabre-rated-usage</b>	2.6.1
<b>sabre-receipt-pdf-collection-adapter</b>	2.3.1
<b>sabre-receipt-print</b>	2.6.2
<b>sabre-recurring-payments</b>	2.6.4
<b>sabre-recurring-pre-payments</b>	1.5.9
<b>sabre-sales-order</b>	1.4.1
<b>sabre-sales-order-adapter</b>	1.4.1
<b>sabre-sales-order-dispatch</b>	1.4.1
<b>sabre-server</b>	1.11.129
<b>sabre-sim-profile</b>	2.6.1
<b>sabre-statement-production</b>	2.4.1
<b>sabre-termination-fee-monitor</b>	1.0.20
<b>sabre-usage-archiving</b>	2.4.2
<b>sabre-workflow-monitor</b>	2.6.14

In addition, the following third-party components are included:

<b>Module</b>	<b>Version</b>
<b>wso2is</b>	5.7.0.17
<b>jboss-postgres-jdbc-driver-eap7</b>	1.0-44
<b>webswing</b>	2.5.5.61

The third-party components above are dependent on the following configuration modules:

<b>Module</b>	<b>Version</b>
<b>jboss-aviewiface-address-lookup-interface-eap7</b>	8.6-123
<b>jboss-aviewiface-stock-check-interface-eap7</b>	8.6-123

<b>jboss-aviewiface-configuration-eap7</b>	1.0-44
<b>jboss-aviewiface-ocs-interface-eap7</b>	8.6-123
<b>jboss-ccentre-configuration-eap7</b>	1.0-44
<b>jboss-pil-configuration-eap7</b>	1.0-44
<b>jboss-soapws-configuration-eap7</b>	1.0-44

## 2.2 Optional CMP Modules

The following modules are not part of the core CMP 8.4 release but are considered optional modules that can be installed if required based on the specific installation requirements:

<b>Module</b>	<b>Version</b>
<b>sabre-bottomline-pdf-collection-adapter</b>	2.3.3
<b>sabre-smpp-adapter</b>	1.3.1

If any of these modules are required for the installation, then they should be added to the 'additional\_modules' section of the inventory file.

## 2.3 UK-specific Adaptors

The following modules are provided specifically for the UK market to support BACS direct debit payments and credit reference extracts to Equifax:

<b>Module</b>	<b>Version</b>
<b>sabre-addacs-transformation-adapter</b>	2.4.1
<b>sabre-addacs-xml-adapter</b>	1.2.1
<b>sabre-arucs-transformation-adapter</b>	2.4.1
<b>sabre-arucs-xml-adapter</b>	1.2.1
<b>sabre-arudd-xml-adapter</b>	1.2.1
<b>sabre-auddis-transformation-adapter</b>	2.3.1
<b>sabre-auddis-transformation-inbound-adapter</b>	2.4.1
<b>sabre-auddis-xml-adapter</b>	1.2.1
<b>sabre-awacs-transformation-adapter</b>	2.4.1
<b>sabre-awacs-xml-adapter</b>	1.2.1
<b>sabre-bacs-transformation-adapter</b>	2.4.1
<b>sabre-bacs-xml-common</b>	1.2.1
<b>sabre-recurring-bank-payments-bacs-adapter</b>	2.3.1
<b>sabre-equifax-insight2001</b>	2.3.1
<b>sabre-experian-transformation-adapter</b>	2.4.1

Note that these modules are not installed by default and if required should be added to the 'additional\_modules' section of the inventory file as required. Note that some of these adaptors are mutually exclusive and therefore the specific modules that need to be added to the inventory file are dependent on the specifics of the deployment.

## 2.4 OCS-specific Adapters

The following modules are provided specifically for a Real Time Charging environment to support use of either Openet or Lifecycle as the external Online Charging System (OCS) integrated into CMP:

Module	Version
openet-synchronous-provisioning-impl	8.6.14
sabre-openet-provisioning-adapter	2.5.5
sabre-openet-recurring-prepayment-adapter	1.2.6
sabre-openet-usage-adapter	2.5.1
lifecycle-synchronous-provisioning-impl	8.7.99
sabre-lifecycle-provisioning-adapter	2.5.2
sabre-lifecycle-provisioning-response-adapter	2.5.2
sabre-lifecycle-usage-adapter	2.5.2

Note that these modules are not installed by default and if required should be added to the 'additional\_modules' section of the inventory file.

## 3.0 New and Changed Functionality

### 3.1 Introduction

CMP 8.4 introduces a number of functional and non-functional changes with respect to CMP 8.3. This includes new functionality as well as changes to existing functionality and non-functional improvements. These changes can be summarised as follows:

### 3.2 New functionality

#### 3.2.1 Administration Console Changes

##### 3.2.1.1 General

In CMP 8.4 the status of Jobs, Daemons and Probes are now preserved after an upgrade or server restart.

##### 3.2.1.2 Daily Operations

In CMP 8.4 the processes now appear as a menu option under the Daily Operations main menu item in addition to appearing on the Operation Monitoring screen.

To support the new agreements functionality, two new batch jobs have been provided. The Agreement Plan Monitor job identifies agreement price plan changes for subsequent processing by the Bulk Plan change job. The Termination Fee Monitor job handles the calculation of termination fee costs for agreements with large amount of subscriptions. The calculated termination fees are then made available in the Termination Costs wizard (see section 4.2.2.4 below).

##### 3.2.1.3 System Administration - Users

CMP 8.4 introduces a new menu option 'System Administration' and within there, the ability to create CMP users through the Administration Console rather than through WSO2. From here new users can be added which automatically creates the user in CMP and the Identity Server (WSO2). Future releases of CMP will bring the ability to assign specific roles to CMP users.

#### 3.2.2 New RESTful Web Services

##### 3.2.2.1 Get Features List

CMP 8.4 introduces a new GET REST web service to allow an external system to get information on the features associated with a subscription. The response contains information on whether the feature is enabled or not and whether any network activity is currently pending to change the status of a feature.

##### 3.2.2.2 Set Features

CMP 8.4 introduces a new POST REST web service to allow an external system to change the status of one or more subscription features. Each subscription feature to be changed is provided along with the desired status, enabled or disabled.

### 3.2.3 Other Changes

CMP 8.4 now provides the ability to send out a communication to an end subscriber on successful purchase and include details of the purchase and purchase amount.

## 3.3 Changed Functionality

### 3.3.1 Contract Management

CMP 8.4 builds on the existing Contract Management functionality in CMP 8.3 to support both agreement and subscription contracts applicable to postpaid subscriptions. Prepaid subscriptions do not have an associated contract but can have terms and conditions associated with them. Contracts are linked with the Price Plan and it is no longer possible to directly manipulate contract information through AgentView or web services but instead the contracts are defined by the contract terms on the Price Plan.

A contract at the agreement level has an associated Price Plan that is applicable to all subscriptions associated with the agreement. The Price Plan determines the contract length, the period after the contract starts that a Price Plan change cannot be performed, when an early upgrade can take place without any associated termination fees and the notice period required before a Price Plan change can be performed. Agreement Price Plan changes can be scheduled immediately or at a future date. Future-dated Price Plan changes can be cancelled before they are effected. For a subscription on an agreement contract, it is not possible to change Price Plan for that subscription only. A Price Plan change needs to be performed at the agreement level and affects all subscriptions associated with the agreement. All subscriptions on that agreement share the same price plan and contract values regardless of when they join the agreement. Subscriptions on agreement contracts are forever associated with that contract even after it expires.

A subscription contract is only applicable to a specific subscription and, as with an agreement contract, the contract terms are driven from the contract associated with the Price Plan. A Price Plan change for a subscription contract can be performed independently of any other subscriptions associated with the agreement and is controlled by the contract terms.

Terms and Conditions are associated with the Price Plan but can be changed independently of the Contract. Contracts are allowed to expire naturally i.e. they are not auto renewed.

#### 3.3.1.1 Termination Costs Calculations

Each contract defines a number of periods that dictate when termination fees apply. The 'Early Upgrade Term' represents a period at the start of a contract where a price plan change is not allowed. The 'Minimum Contract Term' represents the minimum amount of a contract that must be served. If the agreement (for agreement contracts) or subscription (for subscription contracts) is under the minimum contract term and outside the early upgrade term, then a price plan change may be subject to a termination fee. Outside the minimum contract term, a price plan change can be performed without incurring termination fees. Termination fees can be capped by defining a 'Maximum Termination Fee' on the contract.

The calculation of termination fees can now be requested at both the agreement (for agreement contracts) and subscription level (for subscription contracts). The termination fee calculation for an agreement contract can be performed either online or offline, through AgentView, depending on the number of subscriptions on the agreement. For subscription level contracts, the termination fee calculation is requested at account level if there is only a single agreement logged at account level. If there are multiple agreements logged at account level then the request must be performed at the agreement level.

### 3.3.2 Shared Packages

In CMP 8.4 shared packages are defined in Business Configuration as bolt-on packages in the same way as non-shared bolt-on packages with an associated account service to define the charge as oppose to a non-shared package that has a subscription service associated. Unlike other packages, shared packages are not linked to specific tariffs as tariff packages and therefore can be used by any subscribers associated with the shared package irrespective of their payment method. Shared packages are not affected by a price plan change. Allowances on a shared package cannot be transferred or transformed.

A shared package can only be purchased at the agreement level and is charged to the account that the agreement is logged at (with the associated account service). A shared package cannot be purchased using a prepaid balance.

A shared group is created on the OCS on provisioning of the first subscription under the agreement. All subscriptions on the agreement are opted-in to the shared group by default and when a shared package is purchased, allocation to the shared allowance is controlled through subscription specific quotas.

### 3.3.3 Administration Console Changes

#### 3.3.3.1 General

A number of processes, highlighted in sections 4.4.2.3 and 4.4.2.4 below, have been changed and deprecated in this release.

#### 3.3.3.2 Daily Operations

##### Jobs Menu Option

The Jobs list view has been enhanced to show the module that the job is part of rather than its category to aid configuration. The module name provides a hyperlink to the specific module configuration that relates to that job.

In addition, a number of the jobs have been changed in CMP 8.4 namely:

- The **Subscription Analytics** job has been modified to include the Contract Expiry Date
- The **Advance Notification** job has been modified to handle agreement contracts such that there is an option now to only notify the administrator of the agreement
- The **Recurring Prepayments** job has been enhanced additionally extract payments related to recurring shared package purchases.

- The **Data Fix** job now produces a log file for each execution that is available to view from within the Admin Console.

### **Daemons Menu Option**

The Daemons list view has been enhanced to show the module that the daemon is part of rather than its category to aid configuration. The module name provides a hyperlink to the specific module configuration that relates to that daemon.

### **3.3.3.3 System Monitoring Changes**

#### **Probes Menu Option**

In CMP 8.4, the Probes menu option is now part of System Monitoring.

#### **Network Requests Menu Option**

The Network Requests list panel in the Administration Console has been enhanced to allow filtering by additional action types to allow more complete filtering of network requests (see section 4.4.4.4 below for more detail). In addition, the Network Request Detail view now additionally provides a table of Network Activity that provides a list of executed commands and associated values.

### **3.3.3.4 System Configuration Changes**

#### **Modules**

In CMP 8.4, the list of modules has been extended to cover all modules deployed for the installation broken down by application including the module version. For sabre modules the list view has been enhanced to provides links to jobs, daemons and probes that are part of the module.

The sabre modules view also now provides the ability to remove unused modules from the Administration Console so that only modules that are actually used by the installation are visible to the end user.

### **3.3.4 Business Configuration Changes**

#### **3.3.4.1 Price Plan and Tariff Configuration**

In CMP 8.4, a new CMP contract entity has been introduced that is associated with a price plan. Previously contract information was configured directly against a tariff and therefore the Contract entity introduction has necessitated changes to the Price Plan screens (to allow contracts to be linked to a price plan) and the Tariff screen (to remove contract information). Specific details of the Business Configuration changes can be found in section 4.5.2.1 and 4.5.2.2 below.

#### **3.3.4.2 Shared Package Configuration**

In CMP 8.4, the Add Packages screen has been modified to enable the configuration of shared packages.

### **3.3.5 SOAP Web Services**

The following changes have been made to existing SOAP web services in CMP 8.4:

- The Create Subscription and Update Subscription SOAP services have been modified to support agreement contracts. When creating a subscription on an agreement that does not have a price plan defined, the subscription's contract details are now defaulted from the price plan that is selected for the subscription. Contract details on a subscription with an associated agreement price plan cannot be updated.
- The Update Tariff SOAP service has been enhanced to check if the subscription is allowed to upgrade to a new plan or not based on whether the contract is held at agreement or subscription level.
- The Create Agreement SOAP service has been amended to allow a price plan to be specified at agreement creation and the Update Agreement and Query Agreement SOAP services have been modified to deprecate the Contract and Sales containers.

### **3.3.6 RESTful Payments Web Service**

### **3.3.7 New Web Services**

#### **3.3.7.1 Agreement Plans Web Services**

New GET, POST and PATCH Agreement Plan web services have been added to support the contracts changes in CMP 8.4. The GET request returns details of all price plan's configured against a given agreement. The POST request allows a price plan to be added to an agreement and the PATCH request allows a future pending agreement price plan change to be cancelled.

#### **3.3.7.2 POST Shared Allowance Limit Web Service**

A new Shared Allowances web service enables the consumption limit of a shared allowance to be set for a specific subscription.

### **3.3.8 Changed RESTful Web Services**

#### **3.3.8.1 GET Purchases Web Service – Get Purchases by Agreement**

For CMP 8.4 an additional filter has been added to the GET Purchases web service to allow retrieval of shared bolt-on purchases for a specific agreement.

#### **3.3.8.2 GET Allowances and Allowance Summary Web Services**

For CMP 8.4 an additional filter has been added to the GET Allowances and GET Allowances Summary web services to be able to retrieve shared allowances for a specific agreement.

## 4.0 CMP Impact

### 4.1 Introduction

The functional and non-functional changes highlighted in section 3.0 above have had an impact CMP in the following areas:

- New and changed AgentView screens
- Bulk Action changes
- Admin Console changes
- New and changed Business Configuration screens
- SOAP web services changes
- RESTful web services changes
- Integration adapter changes
- Openet-specific adapter changes
- Lifecycle-specific adapter changes
- UK-specific adapter changes.

### 4.2 AgentView Changes

#### 4.2.1 New Screens

##### 4.2.1.1 Agreement Summary – Price Plans Mini Panel

As described in section 3.3.1 above, CMP 8.4 introduces the concept of agreement contracts such that all subscriptions under the agreement have the same price plan and contract. A new mini panel has been introduced onto the Agreement Summary screen to show all the price plans defined at the agreement level.

Price Plans				
Price Plan	Contract Start	Contract End	Status	Cancellation Date Time
Medium 4G Plan	19/05/2022	18/05/2023	Change Pending	
Small 4G Plan	20/04/2021	19/04/2022	Change Completed	

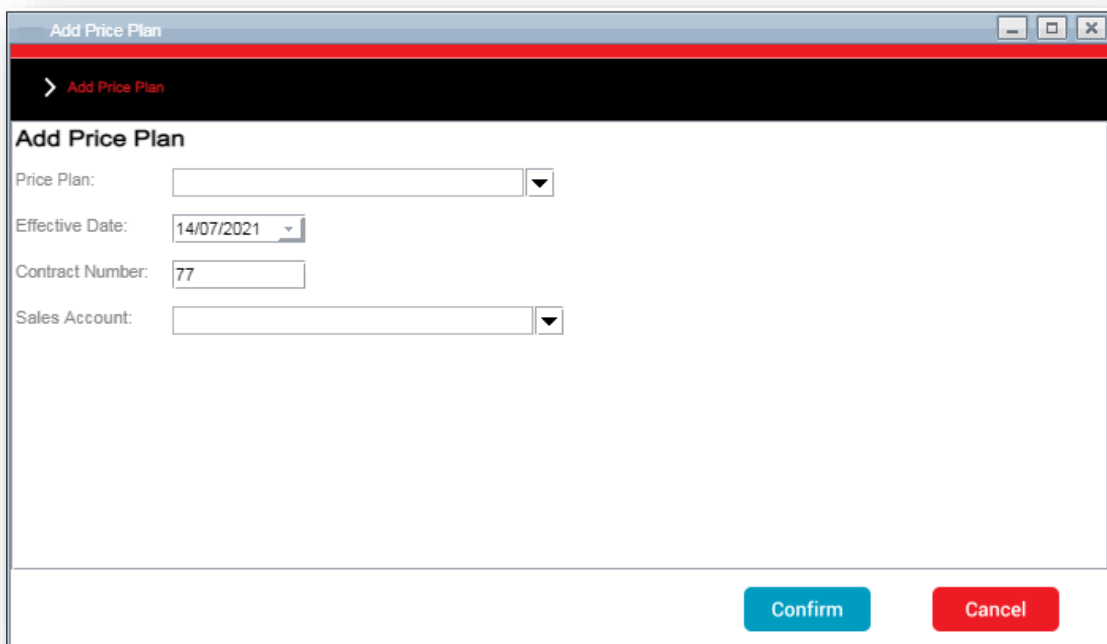
**Figure 1: Agreement Price Plans Mini Panel**

The assignment of a price plan to an agreement and subsequently to any subscription under that agreement is driven from this mini-panel using the right-click Add option (see section 4.2.1.2 below).

A future-dated price plan change can be removed using the right-click Cancel option. If the user confirms the cancel then the status is updated from 'Change Pending' to 'Cancel Completed' and the date and time of cancellation is recorded against the cancelled price plan record.

#### 4.2.1.2 Add Agreement Price Plan Popup

A future price plan change can be added at the agreement level by right clicking in the Price Plans mini panel and selecting 'Add'. The Add Price Plan popup is displayed.



**Figure 2: Add Agreement Price Plan Popup**

The user can enter the new price plan that will be provisioned to all subscriptions under the agreement once the change becomes effective. An effective date greater than or equal to today can be specified to define when the price plan change will take effect. It is not possible to perform a price plan change within the early upgrade term of the current plan. The contract number defaults to the agreement number but can be changed if a specific contract number is available.

#### 4.2.1.3 Agreement Summary - Purchased Products Mini Panel

In CMP 8.4, shared packages are purchased at the agreement level and can be used by any of the subscribers under the agreement providing they have an associated allowance limit (see section 4.7.1.4 below). In order to support this agreement purchase, a new mini panel has been introduced to the Agreement Summary screen:

Date/Time	Type	Description	Price	Receipt	Status	Ended
14/05/2021 14:14:40	Bolt-on	Shared Voice & Data Bolt-on	10.00		In Progress	
14/05/2021 14:13:39	Bolt-on	Shared Voice & Data Bolt-on	10.00		In Progress	

**Figure 3: Agreement Purchased Products Mini Panel**

In a similar way to a subscription purchase, from here a user can choose to add a shared bolt-on, end a shared bolt-on or request a receipt for a previous purchase.

**4.2.1.4 Billing Swish – Shared Services Bottom Panel**

In CMP 8.4, shared packages are configured with an account service to allow the shared service to be billed. This account service can be one-off or recurring depending on the type of shared package purchased. Shared services can now be viewed at agreement level through a new bottom panel accessible from the Billing swish:

Service	Description	Package	Effective	Expiry	Billed Until	Price	Nominal	Recur...
NMSVB1	Shared Voice Bolt-on Charge	Shared Voice Bolt-onZZ	04/05/2021			5.00	010000.0600	

**Figure 4: Shared Services Bottom Panel**

From here the user can see active account services and, using the filter, can also view the details of any expired service.

**4.2.1.5 Agreement Summary - Effective Allowances Mini Panel**

As described in section 3.3.2 above, CMP 8.4 now provides the ability to purchase shared bolt-ons at the agreement level and therefore a new mini panel has been introduced on the Agreement Summary screen to show the effective allowances associated with shared package purchases:

Allowance	Recurring	Inclusive	Remaining	Expiry
512MB Shared Data (OT)		256 MB	256 MB	

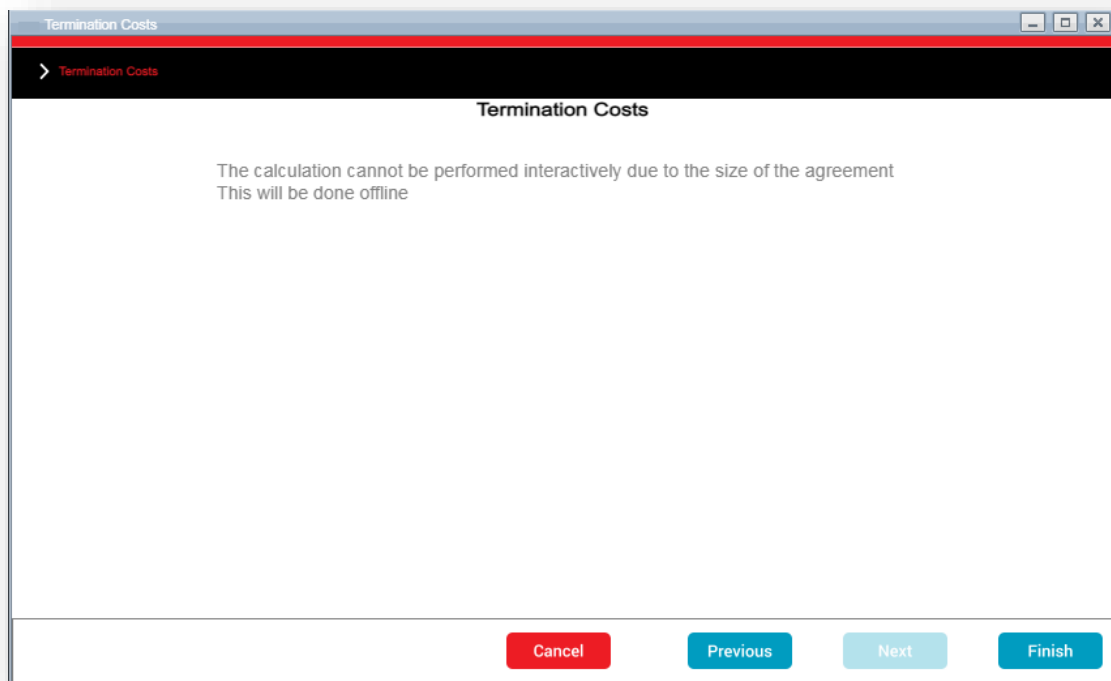
**Figure 5: Agreement Effective Allowances Mini Panel**

The mini panel shows a list of all effective allowances including whether they are recurring or not, the original shared allowance amount and what remains across all subscriptions.

**4.2.1.6 Termination Costs Wizard**

In CMP 8.3, the Termination Costs wizard was invoked from the AgentView Account Summary, Profile - Termination Costs swish and guided the user through a two-panel wizard to calculate the termination costs for the subscriptions on the account given a proposed termination date.

For CMP 8.4, the termination cost wizard is now also available from the Agreement Summary that allows termination costs to be calculated for all subscriptions under the agreement. For an enterprise the number of subscriptions on an agreement can be large and therefore to avoid the agent being stuck in the wizard whilst the cost calculation takes place, a safe guard has been introduced in CMP 8.4 to ensure that termination cost calculations for large accounts are handled offline by a new batch job (see section 4.4.2.6 below). A new system property, `TERMINATION_FEE_SUBSCRIPTION_THRESHOLD`, is used to define the number of subscriptions limit for online termination cost calculation. Above this limit the offline termination cost calculation will be used and a screen advising this is displayed as part of the wizard to advise the user accordingly:



**Figure 6: Termination Costs Advisory Popup**

## 4.2.2 Changed Screens

### 4.2.2.1 Event Summary Screens

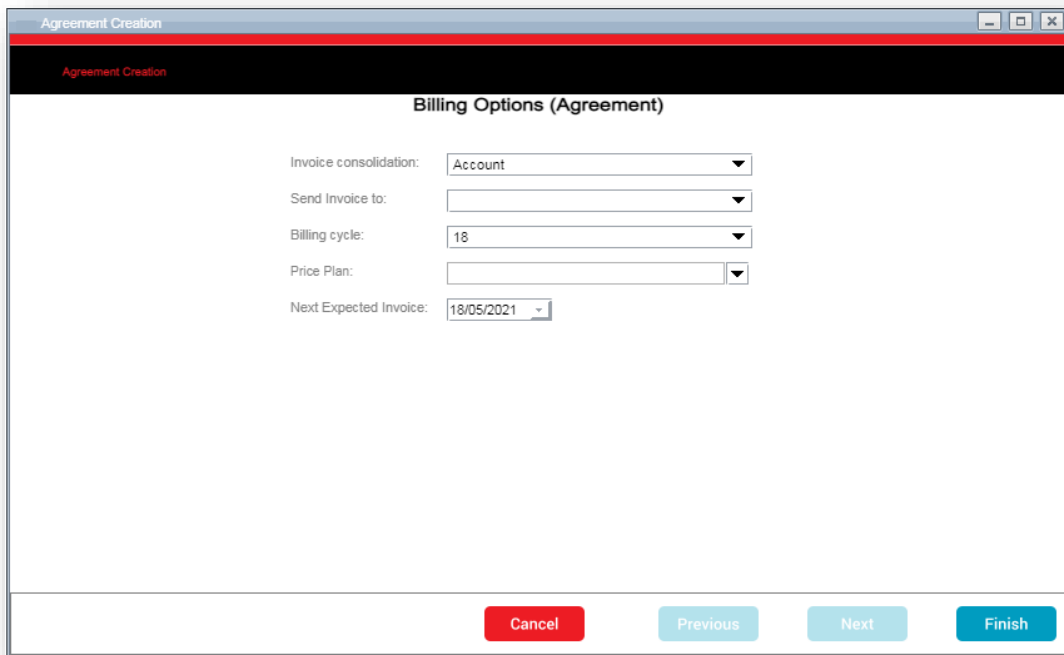
On the Event Summary screens in AgentView, a restriction has been added to the resolution of workflow events in order to force the end user to cancel a workflow event in a status of 'Confirmation Error' rather than attempting to resolve it if the event is related to:

- adding an allowance
- removing an allowance
- Agreement Bill Cycle change
- Subscription Usage Cap change.

### 4.2.2.2 Add Agreement

As described in section 3.3.1 above, CMP 8.4 introduces the concept of agreement contracts whereby all subscribers under the agreement can be contracted onto the same price plan. The presence of a price plan against an agreement indicates an agreement contract is in place.

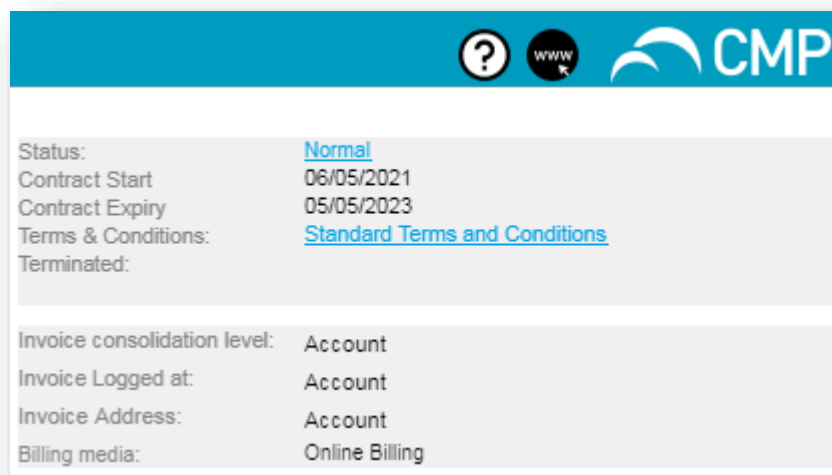
When adding an agreement from the billing structure, it is now possible to select a price plan from the list of available price plans to assign to an agreement in the case that an agreement contract is required. This is an optional field and is not required for contracts held at the subscription level.



**Figure 7: Add Agreement Wizard**

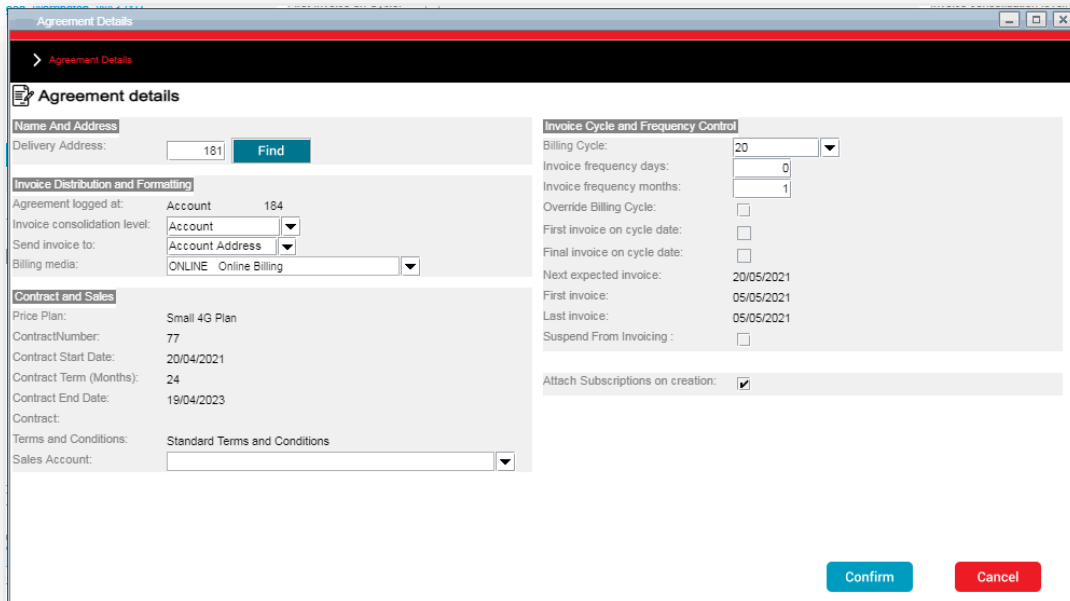
**4.2.2.3 Agreement Summary & Details**

In CMP 8.4 the top right of the Agreement Summary Header panel has been enhanced to show contract information. The Contract History hyperlink has been removed as this information is now available through the price plans mini panel (see section 4.2.1.1 above):



**Figure 8: Agreement Summary Header**

In addition, the Edit Agreement Details popup has been enhanced to show the current price plan and contract details for agreement contracts. The contract information is now display-only as a change of agreement contract is driven by a change of price plan:



**Figure 9: Edit Agreement Details**

#### 4.2.2.4 Termination Costs

In line with the changes to support offline termination costs calculation, the termination costs wizard has been enhanced to show the results of the last offline calculation, broken down by subscription. The screen shows the date of the last calculation and the overall termination cost for all identified subscriptions:

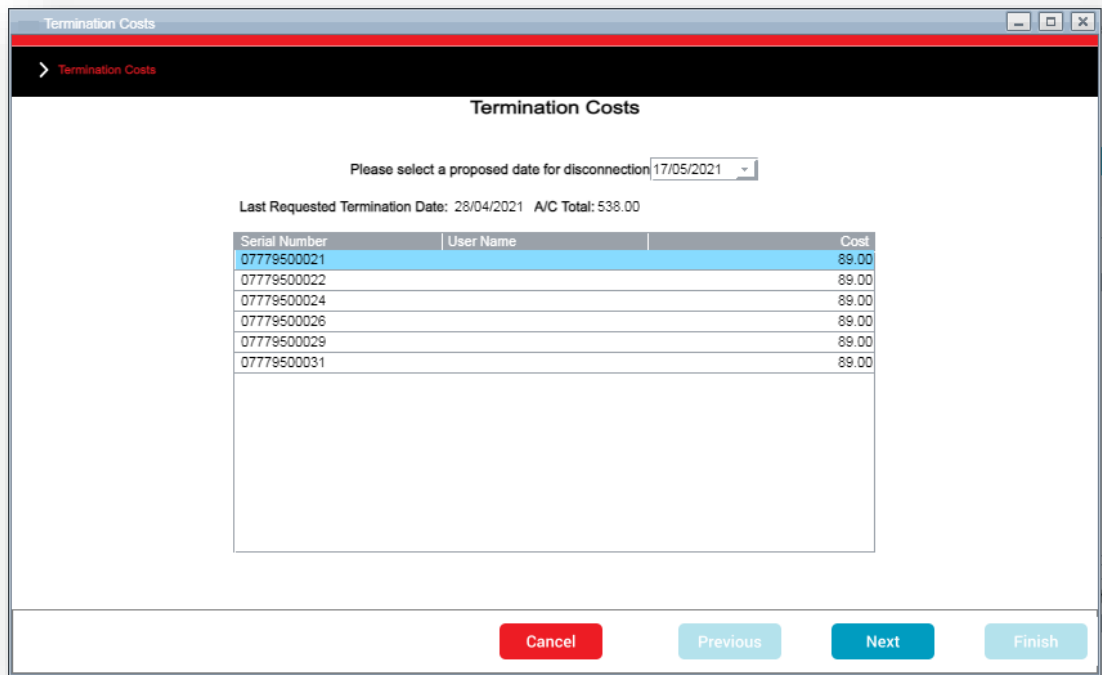


Figure 10: Termination Costs Breakdown

#### 4.2.2.5 Customer Structure - Cust & Paste Option

In CMP 8.3 within the Customer Structure view of AgentView, an agent was able to cut and paste subscriptions to different locations within a hierarchy or to a new CMP structure entirely. In CMP 8.4 this functionality has been enhanced to cater for shared allowance hierarchies that are created in the OCS. If a shared package is active on the agreement then a cut and paste is now only allowed if the agreement is not changing.

#### 4.2.2.6 Billing Structure - Bulk Change Option

In CMP 8.3 within the Billing Structure view of AgentView, an agent was able to right click on a group of subscriptions and be presented with a 'Bulk Change' option. This option launched a wizard to be able to perform one of several bulk actions against a group of subscription. In CMP 8.4 this option has been removed as it has been superseded by the Bulk Actions capability.

#### 4.2.2.7 AgentView Top Bar

In CMP 8.3 the top bar on all AgentView screens had an 'Environment' label that wasn't populated. CMP 8.4 the label has been changed to 'Installation' and populates the top bar with the configured installation name that is also visible within the Admin Console and Business Configuration screens. In addition, the 'About CMP' popup has also been updated to show the name of the installation.

#### 4.2.2.8 Other AgentView Screen Changes

The **Edit Subscription panel** has been updated to make the contract fields and sales account fields display only if the subscription is on an agreement contract. For

subscription contracts the contract number and sales account can be edited. For subscriptions without a contract, only the sales account field can be edited.

The **Subscription Allowances Mini panel** and the **Subscription Allowances Bottom panel** have been updated to additionally show any shared allowances for the subscription's agreement.

The **Effective Discounts** and **Active Services** mini panels have been removed from the Agreement Summary screens as Agreement level services and discounts are not currently supported.

## 4.3 Bulk Action Changes

### 4.3.1 New Bulk Actions

There are no new bulk actions introduced in CMP 8.4

### 4.3.2 Changed Bulk Actions

The following changes have been made to the bulk action jobs as part of CMP 8.4:

- The Bulk Plan Change job has been updated to support a salesperson account number being provided as part of the bulk request.

## 4.4 Admin Console Changes

### 4.4.1 General

When Jobs, Probes or Daemons are intentionally disabled by a user then they should remain disabled after a sabre-server service restart. In CMP 8.3 a user would be required to make a list of disabled Jobs, Probes and Daemons prior to performing an upgrade or an ad hoc server restart. Once the restart had completed, they would need to manually disable them again.

In CMP 8.4 the status of Jobs, Daemons and Probes will be preserved after an upgrade or server restart.

### 4.4.2 Daily Operations Changes

#### 4.4.2.1 Processes Menu Option

In CMP 8.3 the list of processes that could be run manually from the Administration Console was present on the Operation Monitoring screen. Running processes is a daily operation and in CMP 8.4 the processes now appear as a menu option under the Daily Operations main menu item.

#### 4.4.2.2 New Processes

No new processes have been introduced for CMP 8.4

#### 4.4.2.3 Change Processes

The following probes have been removed from the Billing process as these were deprecated in a previous CMP release:

- Bill Print - Batch Complete (BILLPRT01)
- Invoice Posting - Batch Complete (INVPOST01)

#### 4.4.2.4 Deprecated Processes

The following processes have been deprecated as part of CMP 8.4:

- Credit Reference
- Customer Purge
- Debt Recovery - Existing
- Debt Recovery - New
- Interface Purge
- Mandate Registrations
- Recurring Payment Processes (Card & Bank).

#### 4.4.2.5 Jobs Menu Option

The Jobs list view has been enhanced in CMP 8.4 to show the module that the job is part of rather than its category to aid configuration. The module name provides a hyperlink to the specific module configuration that relates to that job.

#### 4.4.2.6 New Batch Jobs

##### Agreement Plan Monitor

The support for agreement contracts in CMP 8.4 has necessitated the ability to perform a price plan change for all subscriptions under an agreement as the price plan on the agreement is assigned to all subscriptions under that agreement. The identification of agreement price plan changes is handled by the Agreement Plan Monitor job.

When an agreement price plan change is requested through AgentView or through the tariff change SOAP web service, then the Agreement Plan Monitor job is responsible for handling these requests based on the effective date of the request. The Agreement Plan Monitor job will trigger the Bulk Plan change job to perform the price plan change on each active subscription under the agreement. As well as updating the price plan on the subscription, the contract details are also updated based on the contract associated with the new price plan.

##### Termination Fee Monitor

The support for agreement contracts in CMP 8.4 has necessitated the calculation of termination fee costs for agreements with large amount of subscriptions to be processed offline through a new batch job, the Termination Fee Monitor job.

When an termination cost calculation is requested through AgentView for an agreement that has more active subscriptions than the configured online calculation threshold (see section 7.5.6 below) then the termination cost calculation will be performed offline. The Termination Fee Monitor job detects agreement termination fee calculation requests and calculates a termination fee for each subscription on the agreement. The results of the

calculation can be viewed through the first screen of the Termination Costs wizard (see section 4.2.2.4 above)

#### 4.4.2.7 Changed Batch Jobs

##### Subscription Analytics

As a result of the Contract Management changes described in section 3.3.1 above, the Subscription Analytics job has also been modified to include the Contract Expiry Date after the Contract Start Date field.

The version of the extract has been updated from version 1.0 to version 1.1.

##### Advance Notification

In CMP 8.3 the Advance Notification job only considers subscription contracts. In CMP 8.4, subscriptions may now be on an agreement contract instead of a subscription contract. This means all the subscriptions on a particular contract have the same plan and contract details. Instead of notifying each individual subscription on the agreement contract, CMP now only allows the option to only notify the administrator of the agreement through an agreement workflow.

##### Recurring Prepayments

The Recurring Prepayments job has been enhanced in CMP 8.4 to additionally extract payments related to recurring shared package purchases.

##### Data Fix

When the Data Fix job runs, the information that is provided through the administration console is limited.

In CMP 8.4 the Data Fix job now produces a log file for each execution of a data fix and this log is available from within the Admin Console for the job execution details view.

#### 4.4.2.8 Daemons Menu Option

The Daemons list view has been enhanced in CMP 8.4 to show the module that the daemon is part of rather than its category to aid configuration. The module name provides a hyperlink to the specific module configuration that relates to that daemon. In addition, the 'Activity', 'Type' and 'Category' have been combined to provide a more meaningful name for the daemon. The 'Name' hyperlink provides the same information that previously was accessible through the 'Activity' hyperlink.

#### 4.4.3 System Management Changes

There were no changes to the System Management menu options as part of CMP 8.4.

#### 4.4.4 System Monitoring Changes

##### 4.4.4.1 Probes Menu Option

In CMP 8.3, the Probes menu option was part of the Daily Operations main menu options but as probes are used to monitor the success or otherwise of jobs then it is more logical that the Probes menu option be part of System Monitoring for CMP 8.4.

#### 4.4.4.2 New Probes

No new probes have been introduced for CMP 8.4.

#### 4.4.4.3 Deprecated Probes

No probes have been deprecated in CMP 8.4.

#### 4.4.4.4 Network Requests Menu Option

##### Network Requests View

The Network Requests list panel in the Administration Console allows for filtering by Action Type. In CMP 8.3, the Action Type drop-down did not contain the complete list of network action types. CMP 8.4 introduces the following additional action types to allow more complete filtering of network requests:

- Allowances
- Bill Cycle Changes
- Caps
- Disable Features
- Enable Features.

##### Network Request Detail

Network Requests can result in the relevant adapter executing multiple commands for a single network request. In CMP 8.4 the Network Request Detail view now additionally provides a table of Network Activity that provides a list of executed commands, the specific command value sent to the network and the result of the command request.

#### 4.4.4.5 Logs Menu Option

The ExternalLogCollector module is used to collect log files from external systems to display in the Administration Console. In CMP 8.3 this module connected to remote hosts using only password-based authentication.

In CMP 8.4, this module has been modified to support private key authentication. The log collector module contains a property for the location of the private key and if not empty this will be used for authentication. For additional security, an additional property has been added for the location of the SSH known hosts file and if not empty StrictHostKeyChecking is enabled.

#### 4.4.5 System Configuration Changes

##### 4.4.5.1 Modules

In CMP 8.3, the Modules menu option with System Configuration only provided a list of modules that were related to the Sabre Server itself.

In CMP 8.4, the list of modules has been extended to cover all modules deployed for the installation broken down by application.

For non-sabre modules, the module version number and installation date are provided in the module list view. There is no expansion of the modules are non-sabre modules have no configurable module properties.

For sabre modules the list view has been enhanced to additionally show the module installation date but also provides links to jobs, daemons and probes that are part of the module. If no link is provided for jobs, daemons or probes then that means that that module has none of that specific item as part of the module.

### **Module Exclusion**

The sabre modules view also now provides the ability to remove unused modules from the Administration Console so that only modules that are actually used by the installation are visible to the end user. An excluded module is not deployed, and therefore will not use any resources, but is still listed in the modules panel. Only modules that do not have child modules (which themselves are not excluded) will be able to be excluded. By default, the modules panel only shows included modules, but the user has the ability to show all modules. The user is able to remove the exclusion from an excluded module.

## **4.4.6 System Administration**

### **4.4.6.1 Users**

CMP 8.4 introduces the ability to create CMP users through the Administration Console rather than through WSO2.

Selecting the 'Users' sub-option within System Administration the user is provided with a list of all users defined in CMP showing the username, full name, email address and security level. From here additional users can be added.

The Add User capability allows new users to be defined including contact details and basic application access. In CMP 8.4 role assignment needs to be still performed in WSO2.

It should be noted that this is the first part of a multi-release implementation and this functionality will be developed further in future releases to include edit capability and role assignment. In addition, there is a known limitation in the search capability on the list view which currently does not support partial searches.

## **4.5 Business Configuration Changes**

### **4.5.1 New Screens**

No new Business Configuration screens have been added for CMP 8.4.

### **4.5.2 Changed Screens**

#### **4.5.2.1 Price Plan Configuration**

In CMP 8.3 contract information was stored at both price plan and tariff level. In CMP 8.4, a new CMP contract entity has been introduced that is associated with a price plan. This has necessitated the following changes to the Price Plan screens:

### **Add Price Plan Screen**

The Add Price Plan screen has been modified as follows:

- The effective date of a price plan cannot be in the past
- The 'Terms & Conditions' field has now been made a dropdown to select from a list of available terms and conditions configured. This is a mandatory field for both postpaid and prepaid plans.
- The 'TCG Effective Date' field has been removed as this is no longer relevant
- A new 'Contract' dropdown has been added to select a contract from those configured. This is a mandatory field for postpaid plans.
- The 'Term of Contract' is now output only and hidden if the Billing Type is prepaid
- 'Early Upgrade Term' and 'Notice Period' fields have been added as output only and populated when a contract is selected from the dropdown of available contracts. These fields are only displayed for postpaid plans
- A new field 'Rank' has been added which will be used to identify a plan upgrade or downgrade in a future CMP release.

### **Edit Price Plan screen**

The Edit Price Plan screen has been modified as follows:

- The 'Effective Date', 'Billing Type' and 'Terms & Conditions' fields output only
- A new field 'Contract' has been added as an output only field and is shown when the billing type is postpaid
- The 'Term of Contract' field is now output only and hidden for prepaid price plans
- The 'TCG Effective Date' field has been removed as this is no longer relevant
- New fields 'Early Upgrade Term' and 'Notice Period' have been added as output only fields and only displayed for postpaid plans
- A new option field 'Rank' has been added.

### **View Price Plan Screen**

The View Price Plan screen has been modified as follows:

- The 'TCG Effective Date' field has been removed as this is no longer relevant
- 'Contract', 'Early Upgrade Term' and 'Notice Period' fields have been added for postpaid plans
- A new field 'Rank' has been added.

#### **4.5.2.2 Tariff Configuration**

In CMP 8.3 contract information was stored at both price plan and tariff level. In CMP 8.4, contracts are stored against the price plan as opposed to the tariff. This has necessitated the following changes to the Tariff screens:

- On the Tariff List screen, the column 'Contract Term' has been removed

- On the Tariff View screen, the 'Contract Details' tab has been removed entirely
- On the Add and Edit panels, the following fields have been removed:
  - Term & Condition Group
  - Contract Length
  - Minimum Contract Length
  - Early Upgrade Term
  - Notice Period
  - Termination Fee Calculation Method
  - Max Termination Fee
  - Min Period for Free Termination.

#### 4.5.2.3 Shared Package Configuration

In CMP 8.4, the Add Packages screen has been modified to enable the configuration of shared packages. Shared packages are defined by checking the 'Shared?' checkbox. Once a shared package is defined, an account service can be linked to the package to define the associated charge as well as shared allowances.

#### 4.5.2.4 Other Changes

The following additional changes have been made to Business Configuration screens:

- On the Add Allowance screen, the Add and Edit Features screens and the Add and Edit Spend Caps screens, the OCS dropdown now filters offers by the carrier id that is defined within the new OCS.INTERFACE.OFFER.CARRIER.ID system property. Only those offers associated with the configured carrier id are listed in the dropdown.
- In CMP 8.3 it was possible to define a target for a Push communication raised at account level as either the 'Oldest Sub on Account' or the 'Parent Subscription'. For an SMS communication it was only possible to select 'Oldest Sub on Account'. This was inconsistent so in CMP 8.4, it is not possible to select 'Parent Subscription' as the target of an SMS raised at account level.

## 4.6 SOAP Web Service Changes

### 4.6.1 New Web Services

No new SOAP web services have been introduced as part of the CMP 8.4 release.

### 4.6.2 Changed SOAP Web Services

The following changes have been made to existing SOAP web services in CMP 8.4:

- The Create Subscription SOAP service has been modified such that when creating a subscription on an agreement that has a price plan, the price plan and associated contract details are now defaulted from the agreement and it is no longer possible to override those details at subscription level. When creating a subscription on an agreement that does not have a price plan defined, the subscription's contract details are now defaulted from the price plan that is selected for the subscription.

- The Update Subscription SOAP service has been modified such that the request is now rejected if an attempt is made to update contract details on a subscription with an associated agreement price plan.
- The Update Tariff SOAP service has been enhanced to check if the subscription is allowed to upgrade to a new plan or not based on whether the contract is held at agreement or subscription level. For subscription-level contracts additional validation has been added to determine whether a plan change is allowed based on where they are within their current contract period. For example, if the subscription is within the early upgrade phase of current plan, an upgrade to another plan is not allowed. agreement contracts, the option to perform a plan/tariff change for a subscription is rejected unless the price plan supplied in the SOAP request is the same as the effective price plan on the agreement.
- The SOAP service Create Agreement has been amendment to allow a price plan to be specified at agreement creation.
- The Contract and Sales container has been deprecated for the Update Agreement and Query Agreement SOAP services.
- The response container for the Services Dataset in SOAP Query Account service has been modified to include the package code and package description.
- Restrictions have been added to the SOAP Resolve Event service for the resolution of workflow events in order to force the end user to cancel a workflow event in a status of 'Confirmation Error' rather than attempting to resolve it if the event is related to:
  - adding an allowance
  - removing an allowance
  - Agreement Bill Cycle change
  - Subscription Usage Cap change.

## 4.7 RESTful Web Services Changes

### 4.7.1 New Web Services

#### 4.7.1.1 GET Agreement Plans Web Service

As part of the contracts changes in CMP 8.4 a new REST web service has been provided that returns details of all price plan's configured against an agreement. For a given valid agreement number the web service will return an array of Price Plans with any associated contract details and terms and conditions.

#### 4.7.1.2 POST Agreement Plan Web Service

As part of the contracts changes in CMP 8.4 a new REST web service has been provided that allows a price plan to be added to an agreement. The request contains the price plan that is to be allocated to the agreement specified and an optional effective date. If an effective date is not provided then the effective date will be defaulted to the current date.

If there are no price plans associated with an agreement, then there are no restrictions regarding the addition of plans. However, if a future plan change is pending for the

agreement, then another plan change cannot be performed. If a plan is currently active for an agreement, the plan change is not permitted if original plan is still in the early upgrade term of the contract.

#### **4.7.1.3 PATCH Agreement Plan Web Service**

Also, as part of the contracts changes in CMP 8.4, a new REST web service has been provided that allows a future pending agreement price plan change to be cancelled. The agreement number and price plan code are provided in the request URL.

#### **4.7.1.4 POST Shared Allowance Limit Web Service**

CMP 8.4 introduces a new REST web service that enables the consumption limit of a shared allowance to be set for a specific subscription. It is not possible to provide a subscription allowance limit that exceeds the overall shared allowance value.

### **4.7.2 Changed RESTful Web Services**

#### **4.7.2.1 GET Purchases Web Service – Get Purchases by Agreement**

For CMP 8.4 an additional filter has been added to the GET Purchases web service to be able to retrieve purchases for a specific agreement. These will be shared bolt-on purchases.

#### **4.7.2.2 GET Allowances Web Service – Get Shared Allowances**

For CMP 8.4 an additional filter has been added to the GET Allowances web service to be able to retrieve shared allowances for a specific agreement. In addition, the web service has been further updated to also return shared allowances for the subscription's agreement when getting allowances for a subscription.

#### **4.7.2.3 GET Allowance Summary Web Service – Get Shared Allowances**

For CMP 8.4 an additional filter has been added to the GET Allowance Summary web service to be able to retrieve shared allowances for a specific agreement. In addition, the web service has been further updated to also return shared allowances for the subscription's agreement when getting allowance summaries for a subscription.

## **4.8 Integration Adapters**

### **4.8.1 Bottomline PDF Adapter**

The Bottomline PDF Adapter is responsible for collecting Invoice PDF's from a print bureau and depositing them on CMP server where they can be accessed through AgentView or via the REST Get Invoice web service.

The adapter has change in CMP 8.4 to accommodate a new naming convention of invoiceTaxDate\_invoiceNumber\_accountNumber.pdf. The invoiceTaxDate is used to create the directory structure for storage and is dropped from the invoice name when storing the PDF. In addition, a workflow is now raised at account level as opposed to subscription and can be used to generate an associated notification.

## **4.9 Openet-specific Adapters**

The Openet-specific adapters are optional components of the CMP deployment that are based on the licence agreement with MDS Global.

### **4.9.1 Openet Bill Cycle Change Adapter**

Due to changes in the way that a bill cycle change is now handled on both CMP and the Openet OCS, the Openet Bill Cycle Change Adaptor is no longer required and has been deprecated in CMP 8.4.

## **4.10 Lifecycle-specific Adapters**

The Lifecycle-specific adapters are optional components of the CMP deployment that are based on the licence agreement with MDS Global.

No changes have been made to the Lifecycle adapter as part of CMP 8.4.

## **4.11 UK-specific Adapters**

No changes have been made to UK-specific adapters in CMP 8.4.

## 5.0 Product Support Issues

### 5.1 Solved Issues

The following issues have been addressed within this release:

Reference	Area	Description
<b>CMPIS-1947</b>	Database	Database - Issue with Sales Ledger Consolidated Transactions View
<b>CMPIS-1941</b>	Web Services	Error in refreshToken API
<b>CMPIS-1940</b>	Web Services	REST Get & Set Features - Query Parameter inconsistency
<b>CMPIS-1931</b>	Sabre Jobs	Ledger Monitor - Account balance (credit) is not getting updated after same amount is refunded from the account - Ledger Monitor Job not triggered
<b>CMPIS-1930</b>	Openet Integration	Transform / transfer deducting and adding from / to incorrect balance in Openet
<b>CMPIS-1928</b>	AgentView	REST/Agent View - Receipt Request - Multiple Payments
<b>CMPIS-1926</b>	Sabre Jobs	Managed Number Monitor Job - issues to resolve
<b>CMPIS-1923</b>	Business Config	Config Centre - Add Package Service Validation
<b>CMPIS-1920</b>	Web Services	Config Centre REST - Tariff Packages (Get & Add)
<b>CMPIS-1919</b>	Web Services	Config Centre REST - Tariffs (Get & Add)
<b>CMPIS-1918</b>	Web Services	Config Centre REST - Packages (Get & Add)
<b>CMPIS-1917</b>	AgentView	Unable to create / update Sub Attribute value as part of Tariff Change request
<b>CMPIS-1912</b>	Web Services	Config Centre REST - Price Plan (Get & Add)
<b>CMPIS-1911</b>	Admin Console	Scheduled Outage - Daemons & Probes
<b>CMPIS-1900</b>	Web Services	REST - POST Payment - Failed payment requests posting amount to ledger
<b>CMPIS-1895</b>	Web Services	SOAP - update tariff - as of Date issue
<b>CMPIS-1894</b>	Web Services	SOAP - Update Tariff - Invalid Sales Account error
<b>CMPIS-1889</b>	Workflow	Cancel Event Shared Service - Deletion of Subscription Usage Cap
<b>CMPIS-1888</b>	Sabre Jobs	Expire Usage Cap - History activity status remains pending
<b>CMPIS-1887</b>	AgentView	Agent View - Values displayed under Query Amount when nothing is in query
<b>CMPIS-1884</b>	Sabre Jobs	Payment Analytics - Ignoring records after failed run
<b>CMPIS-1877</b>	Comms	Comms - Trimming merge fields in comms messages
<b>CMPIS-1867</b>	Sabre Jobs	Purchase Analytics job fails to pick up certain records if the job fails and subsequently runs successfully
<b>CMPIS-1853</b>	Sabre Jobs	Invoice Analytics Extract - Not Extracting Usage Records
<b>CMPIS-1847</b>	AgentView	Subscription Cap History - Internal System Error
<b>CMPIS-1842</b>	Admin Console	Console - Network Requests - Missing Link
<b>CMPIS-1838</b>	Workflow	Resolve Event - Delete records from subscription usage cap table for not connected subs
<b>CMPIS-1817</b>	AgentView	Purchase - Error When Creating Workflow
<b>CMPIS-1813</b>	AgentView	Agent View - Add Payment Existing Card - Not Creating Card Payment

<b>CMPIS-1786</b>	Deployment	webswing.config file replaced during upgrade causing role value to be lost
<b>CMPIS-1781</b>	AgentView	Agent-View - Error if no payment option is selected when purchasing a top-up
<b>CMPIS-1730</b>	Sabre Jobs	Workflow Monitor - Reconnection event getting stuck in the 'In Progress' status
<b>CMPIS-1715</b>	Web Services	REST GET Usages - UoM is Incorrect for Data
<b>CMPIS-1554</b>	Sabre Jobs	Recurring Payments job - Cheque Mode - issues with output
<b>CMPIS-868</b>	AgentView	Agent-view - User Experience after logout or session timeout

## 6.0 Documentation

### 6.1 Product Documentation

The product documentation is available online at <https://cmp-docs.com/Content/Home.htm>. This online portal requires authorised access, which can be obtained by contacting MDS Global support. The documentation is also available as downloadable PDFs as follows:

Document	Version	Status
<b>Release Notes</b>	1.0	New document
<b>Installation Guide</b>	1.0	New properties added to the inventory configuration tool for AgentView fonts, new installer modes and new installation identifier property
<b>Technical Architecture</b>	1.0	No changes for CMP 8.4.
<b>CMP Overview</b>	1.0	No changes for CMP 8.4.
<b>Documentation Overview</b>	1.0	No changes for CMP 8.4.
<b>System Administration Guide</b>	1.0	No changes for CMP 8.4.
<b>Security Guide</b>	1.0	No changes for CMP 8.4.
<b>Operational Overview</b>	1.0	New jobs Agreement Plan Monitor and Termination Fee Monitor. Updates for Action Monitor and Workflow Monitor jobs
<b>Business Configuration Overview</b>	1.0	New section on contracts, including termination fees. Updates for Shared Packages
<b>Billing Functionality Guide</b>	1.0	No changes for CMP 8.4.
<b>Communications Functionality Guide</b>	1.0	Updates for the new purchase bean and associated comms fields.
<b>Payments Functionality Guide</b>	1.0	No changes for CMP 8.4.
<b>Extracts Guide</b>	1.0	Updates to Subscription Analytics
<b>Purge Guide</b>	1.0	No changes for CMP 8.4.
<b>Standard Reporting</b>	1.0	No changes for CMP 8.4.
<b>Batch Jobs and JSON Schemas Guide</b>	1.0	New jobs Agreement Plan Monitor and Termination Fee Monitor. Updates for Action Monitor and Workflow Monitor jobs
<b>RESTful Web Services API Guide</b>	1.0	New Add, Query and Cancel Agreement Plan, Get Purchases By Agreement, Get Allowances and Allowance Summary by Agreement, Purchase Shared Package for Agreement
<b>SOAP Web Services Semantics Guide</b>	1.0	Changes to Query and Update Agreement
<b>Business Configuration RESTful Web Services API Guide</b>	1.0	Updates to Price Plans, Tariff Packages, Tariffs Packages and Package Allowances.

### 6.1.1 Online Help

Online help is available in AgentView, Business Configuration, the Administration Console and the Bulk Actions console. The following table summarises the current versions of the online help and the changes since CMP 8.3:

Online Help	Version	Status
<b>AgentView</b>	8.4.1.0	Updated for version 8.4 for Contracts, Agreement Price Plans, Termination Fee wizard and Shared Packages
<b>Business Configuration</b>	1.9	Updates for changes to Tariffs and Price Plans
<b>Administration Console</b>	1.7	New user creation screens and network request drilldown.
<b>Bulk Action Console</b>	1.3	Updates to the Plan Change bulk action.

## 7.0 Release Upgrade Path

The CMP 8.4 installer includes the capability to upgrade a CMP 8.3 installation without the loss of configuration or customer data provided that the software, file system and database structure of the installation in question are at no point manually modified.

**The CMP 8.4 Installation Guide, and the details below, should be read before attempting the upgrade to CMP 8.4.**

### 7.1 Upgrade Notes

#### 7.1.1 Ansible Version

The version of ansible that is required to perform an upgrade or new installation is 2.9.

#### 7.1.2 Openet Implementations

Prior to performing an upgrade, the CMP 8.3 version of the openet-synchronous-provisioning-impl needs to be re-installed to ensure it is correctly handled as part of the upgrade. The module must first be uninstalled using the following command:

```
ansible-playbook --vault-password-file=<vault_password_file> -i
<inventory_file> -b playbooks/uninstall-external-module.yaml -e
name=openet-synchronous-provisioning-impl -e
host_list=aview_iface,restws,sabre_server
```

Once this has completed then the following command should be run to re-install the module:

```
ansible-playbook --vault-password-file=<vault_password_file> -i
<inventory_file> -b playbooks/deploy-external-module.yaml -e
name=openet-synchronous-provisioning-impl -e
host_list=aview_iface,restws,sabre_server
```

#### 7.1.3 Data Migration

As part of a CMP 8.3 to 8.4 upgrade, a data migration will take place that will copy the existing contract information defined on the tariff and tariffExtension tables into the new contract table. Each record in the contracts table has an associated contract code that will be automatically generated based on the contract terms. The contractCode will use the following naming convention:

- 'PP' + contract terms + 'M' + 2 char sequence for uniqueness e.g. "PP12M01"

The contract description will be also be automatically generated and will use the following naming convention:

- 'Standard postpaid' + contract terms + 'months contract' e.g. "Standard postpaid 24 months contract"

### 7.2 Inventory Manager Changes

Under the Global Properties section, the 'Bulk Action Console Instance Identifier' and 'Administration Console Instance Identifier' fields have been removed from the Installation

Configuration Tool and replaced with a new 'Installation Identifier' field. This value is now used within the individual application to identify the instance of CMP being accessed.

### 7.3 Third party libraries

No third-party libraries will be updated as part of the installation.

## 7.4 Database Changes

### 7.4.1 New Tables

The following tables have been added to the database schema with respect to CMP 8.3:

- TerminationFeeRequestHeader
- TerminationFeeRequestDetail
- Administrator
- AgreementAdministrator
- AgreementPricePlan
- FeatureRequestApproval
- RequestApproval
- Contract

### 7.4.2 New Attributes

The following table attributes have been added in CMP 8.4:

- Table CMPInstallationVersions, attribute ParentModuleName
- Table Feature attribute LongDescription> has been added.
- Table Payment attributes DueDate, ConfirmationDateTime and RejectionDateTime
- Table CSIUCPP attributes ContractCode, ContractEffectiveDate and RankNumber.

### 7.4.3 Dropped Attribute

The following table attributes have been dropped in CMP 8.4.

- Table SharedAllowanceGroup, attributes AccountNumber, Description, ExpiryDateTime, OCSSharedAllowanceGroupId, ExpireActionItemNumber and ExpireEventNumber
- Table SharedAllowanceGroupSubscription, attributes isOwner and ExpiryDateTime.

### 7.4.4 Modified attributes

The following table attributes have been modified in CMP 8.4:

- For table AccountBondRedemption attribute RedemptionAmount has changed from NUMERIC(9,2) to NUMERIC(11,2).
- For table GeneralLedgerPaymentBatchDetail: attribute GLAmount has changed from NUMERIC(9,2) to NUMERIC(11,2).

- For table BondRedemptionBatchDetail attribute RedemptionAmount has changed from NUMERIC(9,2) to NUMERIC(11,2).
- For table GeneralLedgerPurchaseBatchDetail attribute GLAmount has changed from NUMERIC(9,2) to NUMERIC(11,2).
- Table C4JVREP (Analyser Extract Params) has changed as follows:
  - Attribute JVVETY has changed from CHAR(25) to CHAR(10).
  - Attribute JVRZTY has changed from CHAR(25) to CHAR(100).
  - Attribute JVR0TY has changed from CHAR(25) to CHAR(100).
  - Attribute JVXVTY has changed from CHAR(25) to CHAR(100).
  - Attribute JVR1TY has changed from CHAR(25) to CHAR(100).
  - Attribute JVVFTY has changed from CHAR(25) to CHAR(100).
- Table C4JWREP (Analyser Extract Supp) has changed as follows:
  - Attribute JWEWCD has changed from CHAR(6) to CHAR(30).
  - Attribute JWE3CD has changed from CHAR(6) to CHAR(30).
  - Attribute JWEYCD has changed from CHAR(6) to CHAR(30).
  - Attribute JWEZCD has changed from CHAR(6) to CHAR(30).
  - Attribute JWF1CD has changed from CHAR(6) to CHAR(30).
  - Attribute JWF2CD has changed from CHAR(6) to CHAR(30).
  - Attribute JWF3CD has changed from CHAR(6) to CHAR(30).
- For table CMPModuleProperties attribute PropertyName has changed from VARCHAR(20) to VARCHAR(200).

## 7.5 Configuration Changes

The following configuration updates should be considered when upgrading an existing CMP 8.4 environment:

### 7.5.1 Default Fields

CMP 8.4 has introduced the ability to include information related to a purchase in an outbound customer communication. The new Purchase bean supports 5 purchase attributes as follows:

- packageCode
- packageDescription
- packageClassification
- price
- purchaseTimestamp

To use any of these fields in outbound comms, the fields need to be defined in the Default Fields option within the Communications section of Business Configuration.

### 7.5.2 Tariff Change Matrix

A prepaid to prepaid price plan change is not supported so any record in the tariffChangeMatrix table (COIIREP) for prepaid to prepaid network type codes should be removed.

### 7.5.3 Successful Agreement Purchase Workflow

If a workflow event (and subsequent outbound communications) is required to be generated for a successful purchase at agreement level then a corresponding workflow event will need to be defined that can be raised at agreement level or the existing workflow event used for successful purchased updated to enable the workflow to be additionally raised at agreement level.

### 7.5.4 SIM Change

In an OCS environment a change to the MSISDN must be communicated to the OCS but a change to the SIM must not. Accordingly, the configuration of number change actions relating to change of SIM must be configured as 'non-network'. It should be verified that any Network Action Code records relating to a change of SIM should have 'isSendToNetwork' = '0'.

### 7.5.5 Workflow Event Properties

The following workflow event properties have been added in CMP 8.4:

Property Group	Property Name	Event Type	Event Code
TERMINATION	termination.calc.agreement.event	CUST	TERM

### 7.5.6 System Properties

The following system properties have been added in CMP 8.4:

Parameter Group	Parameter Name
GENERAL_SETTINGS	TERMINATION_FEE_SUBSCRIPTION_THRESHOLD

### 7.5.7 External Configuration Module

The following system properties have now been exposed through the External Configuration module and need to be configured post deployment/upgrade:

- OCS. INTERFACE/OCS.INTERFACE.OFFER.CARRIER.ID - used in Business Configuration to filter the list of offers, features and caps that are returned from the OCS based on carrier id (MVNO id)

### 7.5.8 New Security Roles

No security roles have been introduced for CMP 8.4.