

**Release Note - What's New in SP 1**

SAP Convergent Charging

Document Version: 1.0 – 2016-05-04

**CUSTOMER**

**SAP Convergent Charging 4.1 SP 1**



# Typographic Conventions

Type Style	Description
<i>Example</i>	Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options. Textual cross-references to other documents.
<b>Example</b>	Emphasized words or expressions.
EXAMPLE	Technical names of system objects. These include report names, program names, transaction codes, table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE.
Example	Output on the screen. This includes file and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools.
<b>Example</b>	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
<Example>	Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.
EXAMPLE	Keys on the keyboard, for example, F2 or ENTER.

# Document History

The following table provides an overview of the most important document changes:

Version	Date	Description
1.0	May 2016	Initial version

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# 1 Introduction

## Audience

- Solution and technology consultants
- System and application administrators
- SAP sales representatives

## About this Document

This *Release Note - What's New* documentation lists all the features introduced in SAP Convergent Charging 4.1 SP 1.

### Note

If you update a support package earlier than SAP CC 4.1 SP 1, refer to the *Release Note - What's New* documents published with the previous support package.

## What's New in SP 1

The support package 1 provides the following features in your SAP system landscape:

- [Mapping Table Bulk Update](#) (Changed)
- [CIF Enhancements](#) (Changed)
- [User Isolation](#) (New)
- [Allowance Renewal](#) (Changed)
- [Activation Scheduler Optimization](#) (Changed)
- [Automatic Mapping of VKONT/GPART Fields](#) (Changed)
- [Thread Dump Generation](#) (New)

## Section "What's New" in SAP CC Guides

For more details about the new features of the support package 1, see the section *What's New* in the guides of SAP Convergent Charging 4.1.

## Abbreviations

The following table shows the list of abbreviations used throughout this document.

Abbreviation	Meaning
BRIM	Billing Revenue and Innovation Management
CC	Convergent Charging
CMA	Customer Management Area
CRM	Customer Relationship Management
ERP	Enterprise Resource Planning
GUI	Graphical User Interface
JCo	Java Connector
WS	Web Services

## 2 Before You Start

### SAP BRIM Solution

SAP CC 4.1 is part of the *SAP Billing and Revenue Innovation Management (BRIM) Solution* with the SAP ERP and SAP CRM components of SAP Business Suite 7 Innovation 2016.

Depending on your *SAP Industry*, you consider the following ERP applications:

- Cross Industries: SAP ERP/FI-CA (Contract Accounts Receivable and Payable)
- SAP for Telecommunications: SAP ERP/RM-CA (Contract Accts. Rec./Payable for Telecommunications)

SAP for Utilities: SAP ERP/Contract Accts Receivable and Payable for the Utilities Industry

### SAP Help Portal

SAP Help Portal is the central place to access *SAP product documentation*. Find the documentation of SAP Convergent Charging at: <http://help.sap.com/cc>.

### Important SAP Notes

In the following table, the *SAP Notes* contain information for delivering and implementing SAP CC 4.1 SP 1:

Title	SAP Note	Description
<i>SAP CC 4.1 Support Package 1</i>	<a href="#">2269858</a>	This delivery and information note contains information and references to documents or notes to implement this maintenance support package.
<i>Technical Implementation of SAP CC 4.1 SP 1</i>	<a href="#">2273944</a>	This last-minute information contains few supplementary maintenance procedures necessary to perform your technical operations when implementing this SP in your SAP system landscape in the following cases: <ul style="list-style-type: none"><li>• Initial installation</li><li>• Upgrade from a former release (SAP CC 4.0)</li><li>• Update from a previous support package of SAP CC 4.1</li></ul>

In the following table, the *SAP Notes* contain information for installing the initial shipment and the previous support packages of SAP CC 4.1:

Title	SAP Note	Comment
<i>Release and Information Note for</i>	<a href="#">2226403</a>	This Release and Information Note (RIN) contains

Title	SAP Note	Comment
<i>SAP Convergent Charging 4.1</i>		information and references to documents or notes for installing the initial shipment stack of SAP CC 4.1.
<i>Release Restriction Note for SAP CC 4.1</i>	<a href="#">2249339</a>	This Release Restriction Note provides information about release restrictions for installing the initial shipment stack of SAP CC 4.1.

## Additional Information

For more information about specific topics, see the quick links in the following table:

Content	Quick Link on SAP Service Marketplace or SCN
SAP Convergent Charging (Customers and Partners)	<a href="http://help.sap.com/cc41">http://help.sap.com/cc41</a>
SAP Billing and Revenue Innovation Management Solution	<a href="http://service.sap.com/BRIM">http://service.sap.com/BRIM</a>
Related SAP Notes	<a href="http://support.sap.com/notes">http://support.sap.com/notes</a>
Product Availability Matrix	<a href="http://support.sap.com/pam">http://support.sap.com/pam</a>
SAP Solution Manager	<a href="https://support.sap.com/solutionmanager">https://support.sap.com/solutionmanager</a>

## 3 Mapping table Bulk Update (Changed)

### 3.1 Feature Overview

As of SP 1, the Web Services of SAP Convergent Charging are enhanced for updating a bundle of mapping tables in a catalog.

#### Summary

Through the Web Services of SAP CC, you can now create, change, or delete rows in a bundle of mapping tables with two new operations:

- Create or change rows of mapping tables in bundle mode
- Cancel rows of mapping tables in bundle mode

#### Benefits

This enhancement allows you to update a bundle of mapping tables in one operation call instead of one single mapping table in the previous versions of SAP CC.

#### More Information

See the *Web Services Documentation* for more information about this feature.

## 4 CIF Enhancements (Changed)

### 4.1 Feature Overview

As of SP 1, the configuration of the Charging output Integration Framework (CIF) has evolved:

- On rater side:
  - The cleanup service is now executed during the starting sequence of raters, in order to process the data files that have not been properly released during the previous shutdown sequence
  - A new parameter named "preCreateFile" is now available to specify a policy relating to the pre-creation of data files. For further information about this parameter, refer to the *SAP Convergent Charging Configuration Guide* documentation
- On bulkloader side:
  - The cleanup service is now executed during the starting sequence of bulkloaders, in order to process the data files that have not been properly released during the previous shutdown sequence
  - The file listing operation used to retrieve the list of data files that must be processed has been optimized

To monitor the data files generated by raters and handled by bulkloaders, some new Introscope probes have been implemented. For further information about these metrics, refer to the following nodes of the *Metric Reference and Performance Troubleshooting* documentation:

- Frontends / BulkReader / {Reader Name} / {Customer Area} / File Management
- Backends / {Writer Name} (BulkWriter) / {Customer Area} / File Management

#### Benefits

This enhancement increases the global performance and monitoring capabilities of the operations performed by the raters and bulkloaders when managing data files.

# 5 User Isolation (New)

## 5.1 Feature Overview

As of SP 1, the management of users within SAP Convergent Charging has evolved. A new system parameter named "USER\_ISOLATION\_ENABLED" has been introduced to specify whether service users must be isolated from individual users or not.

For further information about this system parameter, refer to the *System Parameter Reference* documentation

### Benefits

If isolation between service and individual users is enabled:

- Web Services operations can only be executed specifying a service user
- HCI operations can only be executed specifying an individual user
- User interfaces can only be launched specifying an individual user

Otherwise, service users and individual users can both execute Web Services and HCI operations and launch the SAP CC user interfaces.

# 6 Allowance Renewal (Changed)

## 6.1 Feature Overview

As of SP 1, the graphical user interface of SAP Convergent Charging is enhanced for extending the usage of the **Create Allowance Operator** component to the **Allowance Logic** component.

### Summary

Through the graphical user interface of SAP CC, you can now use the **Create Allowance Operator** component in the **One-Shot Trigger** branch of the **Allowance Logic** component.

However, this usage is only allowed if you configure a **One-Shot Trigger** with an expiration event and no shifted activation.

### Benefits

This enhancement allows the renewal of allowances that is automatically triggered at the expiration of allowances in SAP CC.

#### Note

SAP Convergent Charging cannot however renew an allowance more than once per day.

### More information

See the *Application Help* guide, the *Primary Help of Core Tool*, and the *Primary Help of Logic Components* for more information about this feature.

## 6.2 Effect on User Interfaces

### Changes in SAP CC Core Tool

You can now insert a **Create Allowance Operator** component in the **One-Shot Trigger** branch of the **Allowance Logic** component (figure 1):

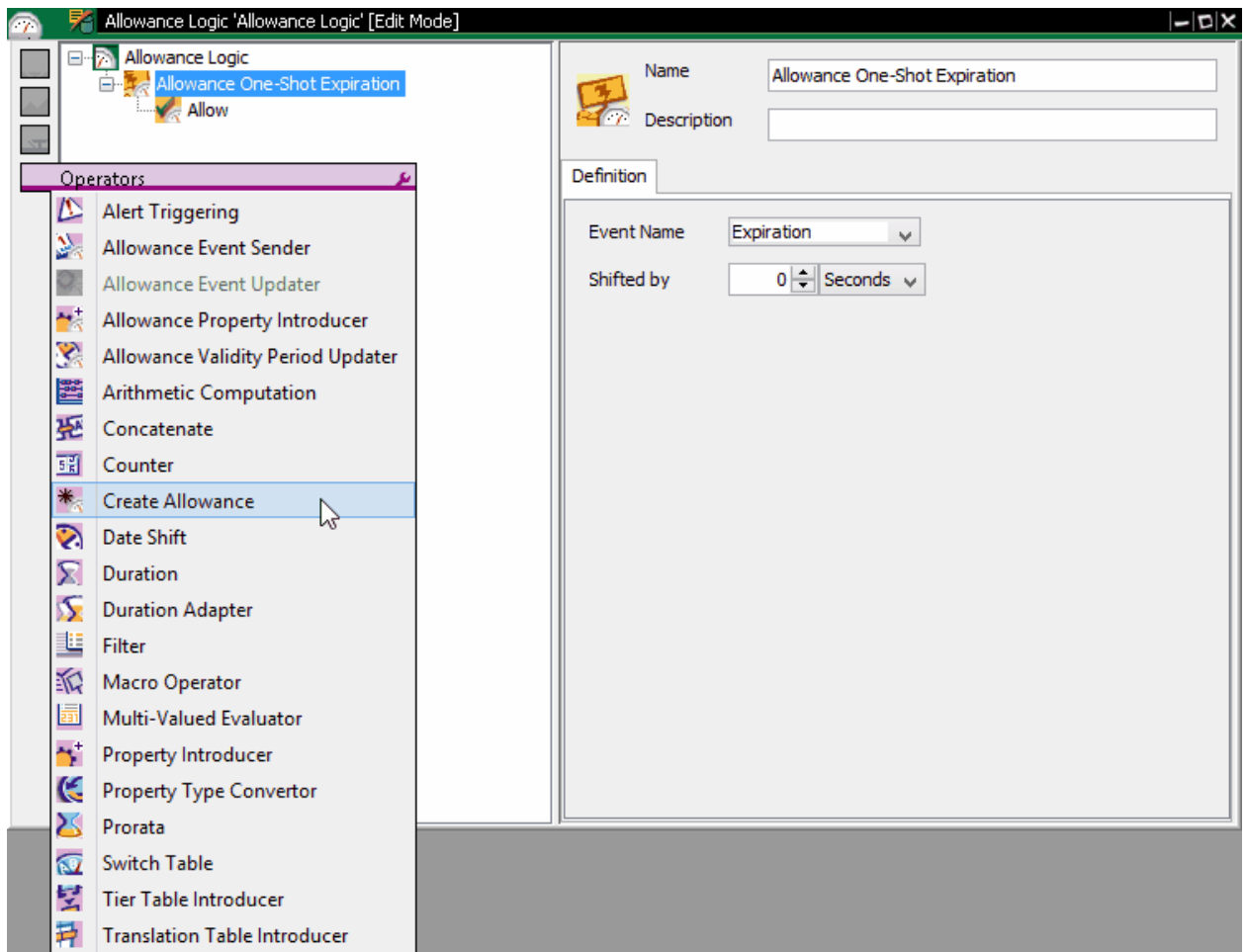


Figure 1: A **Create Allowance Operator** component in the **One-Shot Trigger** branch that is configured with an expiration event and no shifted activation

When you create an allowance, the **Validity Start Date** of the new created allowance is automatically aligned with the **Validity End Date** of the current expired allowance. You are not allowed to modify the **Validity Start Date** (figure 2):

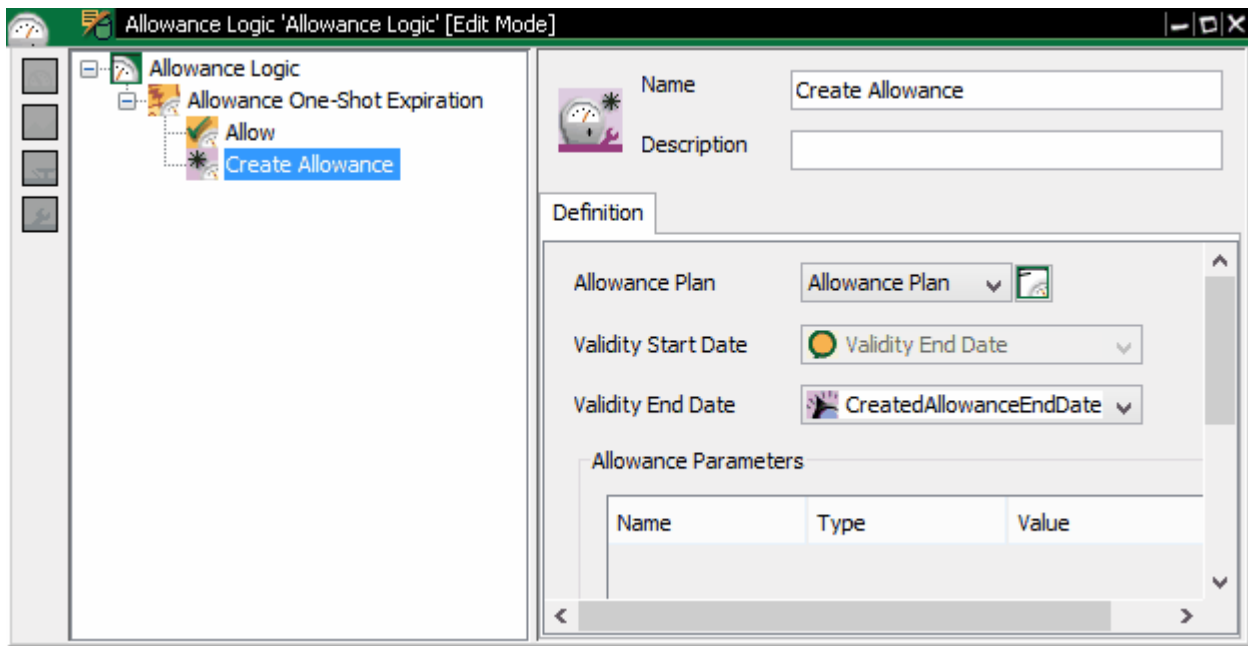


Figure 2: The **Validity Start Date** of the new allowance is aligned with the **Validity End Date** of the expired allowance (**Validity Start Date** is not modifiable)

# 7 Activation Scheduler Optimization (Changed)

## 7.1.1 Feature Overview

As of SP 1, SAP Convergent Charging is enhanced for optimizing the scheduler activation.

### Summary

If your system only works with provider contracts, you can now set the `ACTIVATION_SCHEDULER_SUBSCRIPTION_ENABLED` parameter to false for disabling the activation of subscriptions.

### Benefits

This enhancement improves the performance of your system.

### More Information

See the *System Parameter Reference* for more information on the `ACTIVATION_SCHEDULER_SUBSCRIPTION_ENABLED` parameter.

# 8 Automatic Mapping of VKONT/GPART Fields (Changed)

## 8.1.1 Feature Overview

As of SP 1, SAP Convergent Charging is enhanced for automatically mapping the VKONT and GPART fields when SAP CC is used with SAP Convergent Invoicing in an integrated *SAP Solution* scenario.

### Summary

This enhancement changes the graphical user interface and the web services of SAP CC.

Through the graphical user interface of SAP CC, you can now fill in the fields **External Account Code** (GPART) and **External Account Name** (VKONT) in the prepaid account of a subscriber account.

Through the Web Services, you can now use the following new versions V1 that integrate the fields **External Account ID** (VKONT) and **Additional ID** (GPART):

- **Subscriber Account Management** (V1) to manage the provisioning of subscriber accounts, prepaid accounts and external accounts stored in SAP Convergent Charging
- **Export and Import of Customer Data** (V1) to move data from a SAP CC system to another system or vice versa

### Benefits

This enhancement improves integration and performance between SAP Convergent Charging and SAP Convergent Invoicing in an integrated *SAP Solution* scenario.

### More Information

See the *Primary Help of Core Tool* and the *Web Services Documentation* for more information about this feature.

## 8.1.2 Effect on User Interfaces

### Changes in SAP CC Core Tool

You can now fill in the fields **External Account Name** (VKONT) and **External Account Code** (GPART) in the prepaid account of a subscriber account (Figure 1):

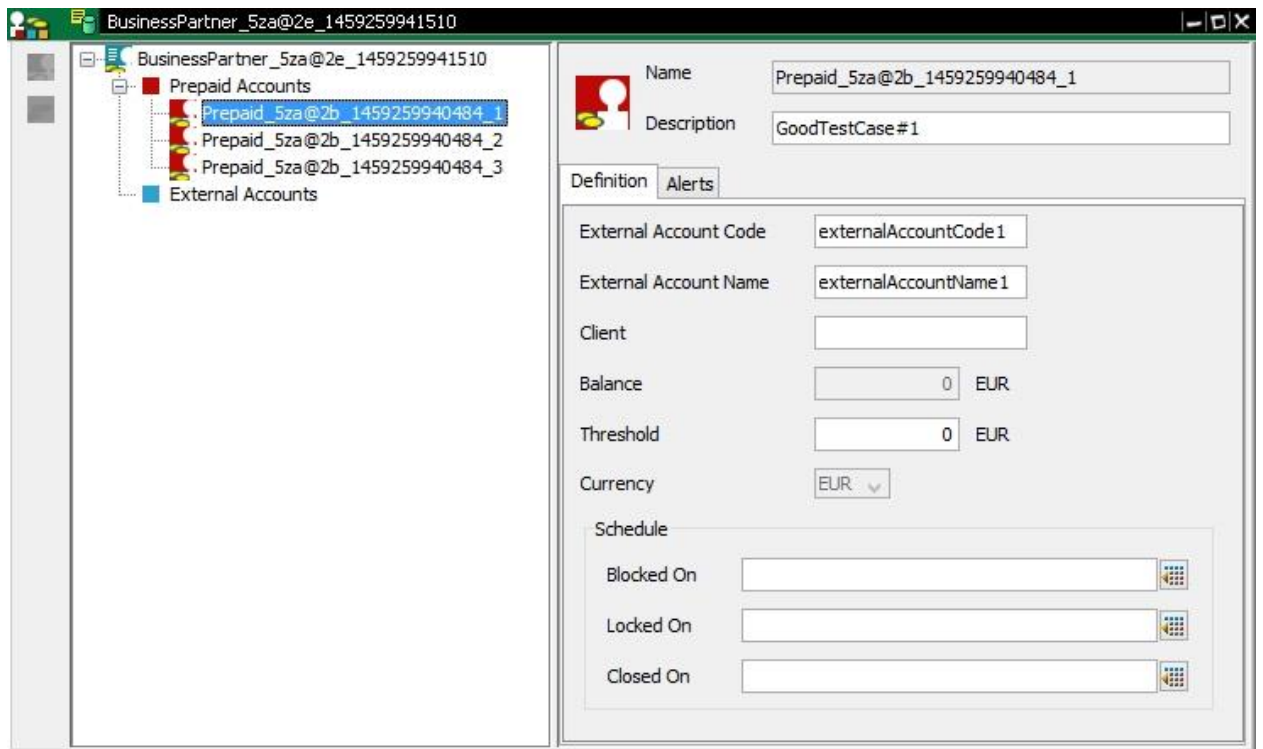


Figure 1: A prepaid account with the fields **External Account Code** (GPART) and **External Account Name** (VKONT)

# 9 Thread Dump Generation (New)

## 9.1.1 Feature Overview

As of SP 1, the troubleshooting capabilities of SAP Convergent Charging have evolved. It is nevertheless possible to configure your system to generate files containing detailed information about the execution context of the threads that are executed within each instance of the Core Server system. In case a problem occurs during the execution of an operation, or if the execution exceeds some defined thresholds, dump files are automatically generated in addition to logs and traces.

To enable or disable this feature, a new system parameter named "THREAD\_DUMP\_ENABLED" has been introduced. To manage the generation policy, the following additional system parameters have been introduced:

- THREAD\_DUMP\_MINIMUM\_INTERVAL
- THREAD\_DUMP\_OUTPUT\_PATH
- THREAD\_DUMP\_RETENTION\_PERIOD
- THREAD\_DUMP\_THRESHOLD\_CPU\_TIME
- THREAD\_DUMP\_THRESHOLD\_OUTPUT\_ITEMS
- THREAD\_DUMP\_THRESHOLD\_RATING\_CONTEXTS
- THREAD\_DUMP\_THRESHOLD\_SQL\_TIME
- THREAD\_DUMP\_TRIGGER\_PERIOD

For further information about this feature and the new system parameters, refer to the description of the "Troubleshooting (Advanced): Thread Dump Generation" group available in the *System Parameter Reference* documentation.

To monitor this feature, the following Introscope metrics have been created:

- **Data Collections Average Response Time (ns)**, which provides the average response time for collecting the data that is used to fill the thread dump files
- **File Generations Average Response Time (ns)**, which provides the average response time for generating the thread dump files
- **File Generations Per Interval**, which provides the number of thread dump files generated on a given period

For further information about these metrics, refer to the description of the "Thread Dump" group available in the *Metric Reference and Performance Troubleshooting* documentation.

### Benefits

This enhancement improves the troubleshooting capabilities of your SAP Convergent Charging landscape. It gives you valuable insight about the execution context of the threads when a problem occurs, and doing so helps you to quickly determine the root cause and fix the problem.





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