Oracle® Communications Network Charging and Control

Subscriber Profile Manager User's Guide

Release 15.1

April 2025

Copyright

Contents

About This Document

Scope

The scope of this document includes all functionality a user must know in order to effectively operate the Oracle Communications Network Charging and Control Subscriber Profile Manager (SPM). It does not include detailed design of the service.

Audience

This guide is written primarily for SPM administrators. However, the overview sections of the document are useful to anyone requiring an introduction to this software.

Prerequisites

Although there are no prerequisites for using this guide, familiarity with the target platform would be an advantage.

This manual describes system tasks that should only be carried out by suitably trained operators.

Related Documents

The following documents are related to this document:

- *Charging Control Services User's Guide*
- *Customer Care Portal User's Guide*
- *Advanced Control Services User's Guide*
- *Service Management System User's Guide*

Document Conventions

Typographical Conventions

The following terms and typographical conventions are used in the Oracle Communications Network Charging and Control (NCC) documentation.

Formatting Convention	Type of Information
Special Bold	Items you must select, such as names of tabs. Names of database tables and fields.
Italics	Name of a document, chapter, topic or other publication. Emphasis within text.
Button	The name of a button to click or a key to press. **Example:** To close the window, either click **Close**, or press **Esc**.
Key+Key	Key combinations for which the user must press and hold down one key and then press another. Example: **Ctrl+P** or **Alt+F4**.
`Monospace`	Examples of code or standard output.
`Monospace Bold`	Text that you must enter.
variable	Used to indicate variables or text that should be replaced with an actual value.
menu option > menu option >	Used to indicate the cascading menu option to be selected. Example: **Operator Functions > Report Functions**
hypertext link	Used to indicate a hypertext link.

Specialized terms and acronyms are defined in the glossary at the end of this guide.

Chapter 1

System Overview

Overview

Introduction

This chapter explains the main features of the Oracle Communications Network Charging and Control Subscriber Profile Manager SPM and describes the basic functionality of the system.

In this chapter

This chapter contains the following topics.

What is Subscriber Profile Manager?

Introduction

The Subscriber Profile Manager (SPM) is a configuration tool available for use with CCS and the CCP Dashboard. It enables users to customize which elements appear on some SMS screens including:

- The CCP Dashboard
- Edit Subscriber screen
- Edit Product Type screen

Features

Features of the SPM include:

- customizing SMS screens for individual Service Providers
- ability to copy or delete Service Provider customization configurations
- control over SMS screen layout
- facility to create user-defined Subscriber search fields, and
- facility to define rules governing data entry into profile fields.

Chapter 2

Getting Started

Overview

Introduction

This chapter explains how to access the Oracle Communications Network Charging and Control Subscriber Profile Manager.

In this chapter

This chapter contains the following topics.

Subscriber Profile Manager Screen

Introduction

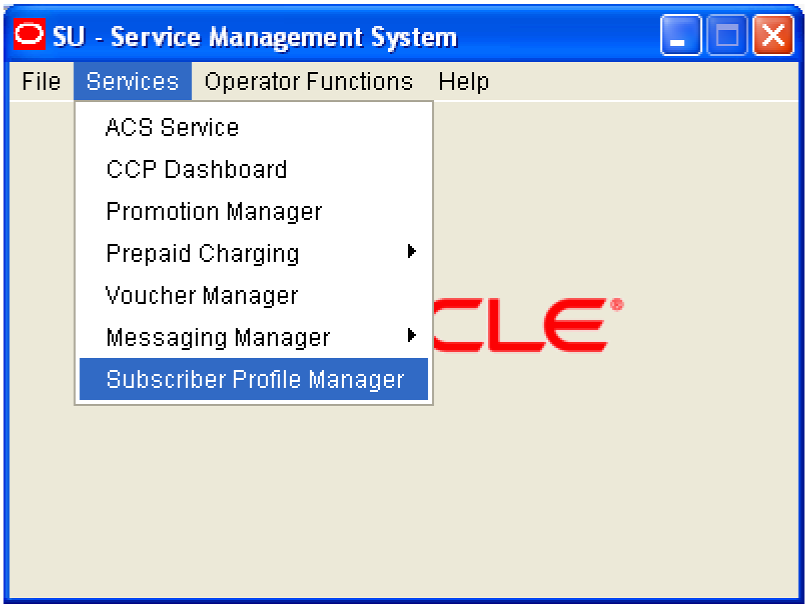
The Subscriber Profile Manager screen allows you to configure the elements which appear on the following screens:

- CCP Dashboard
- In Prepaid Charging:
    - Subscriber panels on the Edit Subscriber screen
    - Profile Group panels on the Edit Product Type screen

Accessing the Subscriber Profile Manager screen

Follow these steps to open the Subscriber Profile Manager screen.

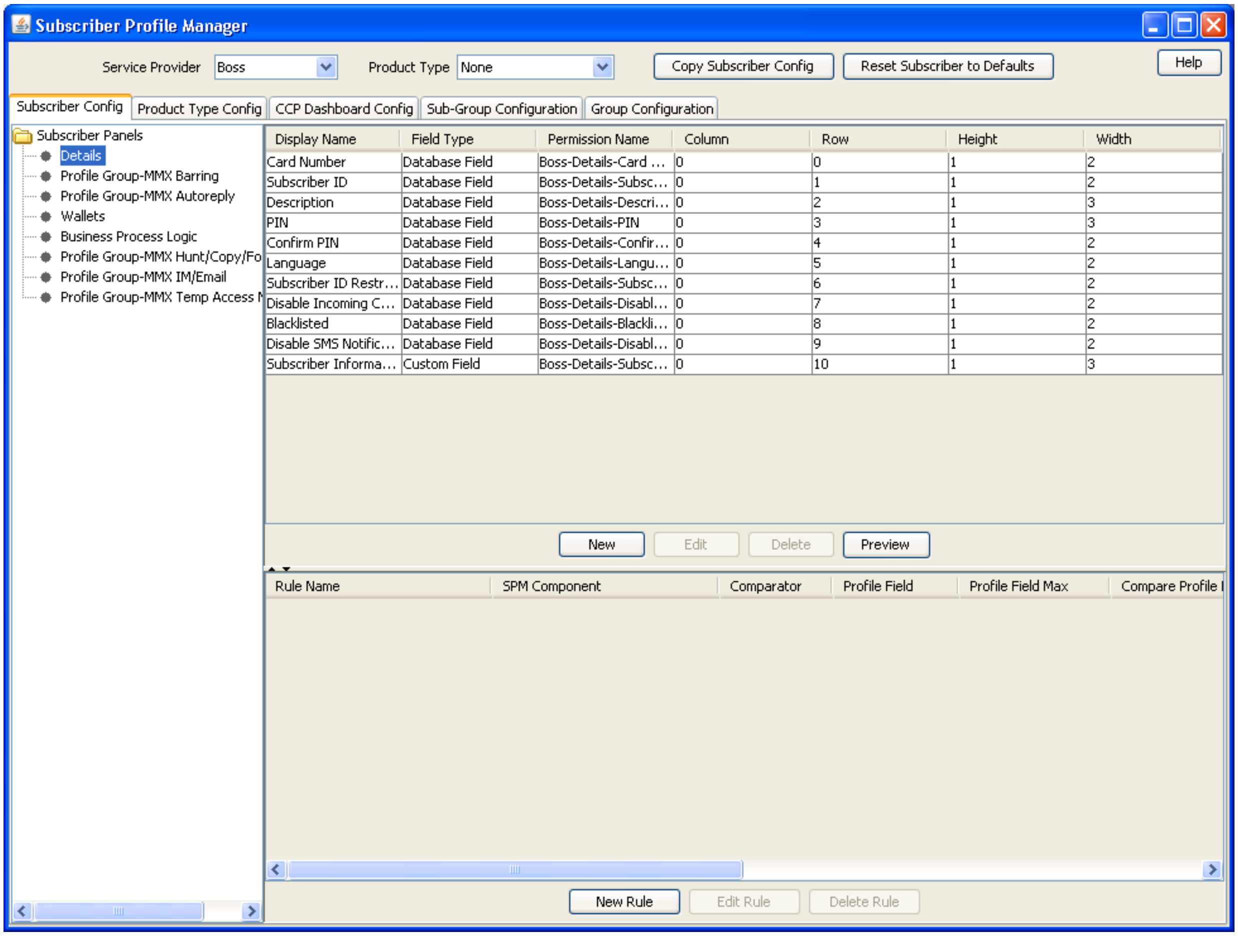
Step	Action
1	Select the **Services** menu from the SMS main screen.



Step	Action
2	Select **Subscriber Profile Manager**. **Result:** You see the Subscriber Profile Manager screen.

Subscriber Profile Manager screen

Here is an example Subscriber Profile Manager screen.



Chapter 3

Subscriber Profile Manager Screen Layout

Overview

Introduction

This chapter explains how to configure the screen layout for the Prepaid Charging Edit Subscriber screen and for the panels in the CCP Dashboard screen using Oracle Communications Network Charging and Control Subscriber Profile Manager.

Configuring field layout

The SPM provides the facility to define which fields will be displayed, and how they will be laid out in the screen. To configure a new panel you need to:

1 Assign groups to the node on a tab.
2 Configure the fields in the group which will be used on the screen
3 Configure the option which the fields will be displayed on

Details of these tasks are covered in this chapter.

In this chapter

This chapter contains the following topics.

Assigning Groups to Config

Introduction

This topic describes how to:

- *Assign a group to a node* (on page 8)
- *Edit a group assignment* (on page 9)

Config tabs where you can assign groups

You can assign groups, or edit assignment of groups, on the following tabs on the Subscriber Profile Manager screen.

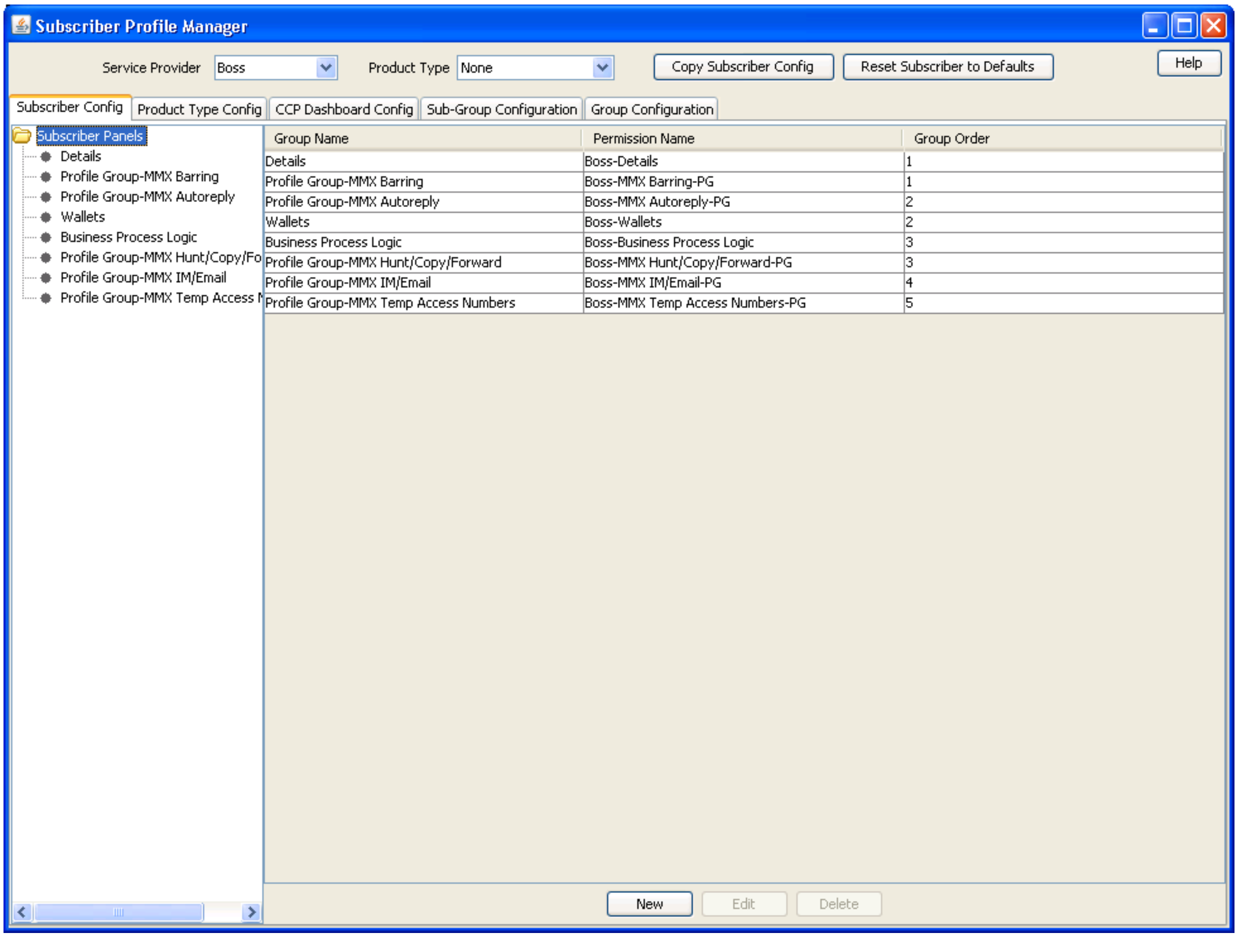
- **Subscriber Config** - to define the screen layout of the Prepaid Charging Edit Subscriber screen. For specific details, see *Subscriber Panels* (on page 29).

- **Product Type Config** - to define the screen layout for profile tag fields in the Prepaid Charging Edit Product Type screen. For specific details, see *Product Type Panels* (on page 38).
- **Sub-group Configuration**. For specific details, see *Sub-Groups* (on page 75).

Note: Groups are configured on the **Group Configuration** (on page 23) tab of the Subscriber Profile Manager screen.

Subscriber Profile Manager screen

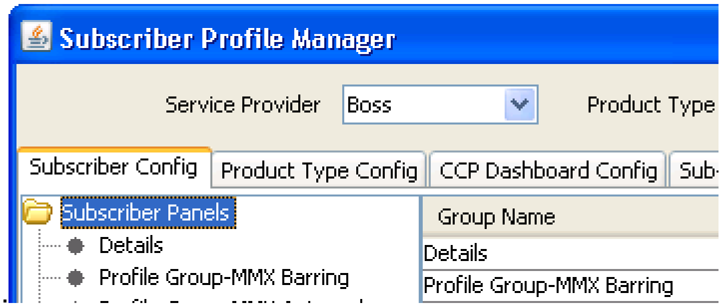
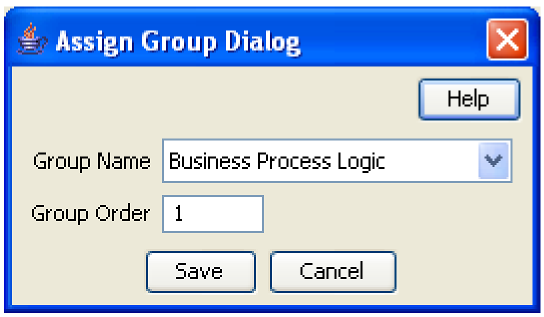
Here is an example Subscriber Profile Manager screen with the Subscriber Panels node selected. The groups assigned to the node are listed in the config tree below.



Assigning a group to a node

Follow these steps to assign a group to a node in a Config tree.

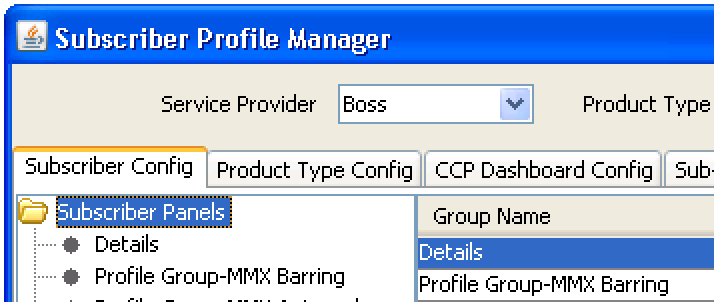
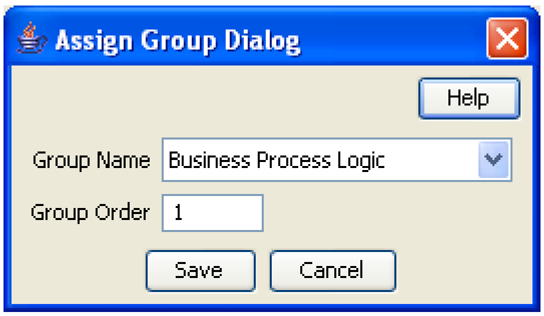
Step	Action
1	On the Subscriber Profile Manager screen, select the **Service Provider** and **Product Type** from the drop down lists.
2	Select the tab on which to assign a group. Tabs are listed in the *Config tabs where you can assign groups* (on page 7) topic.
3	Select the folder on the config tree on the left-hand side of the screen, for example:

Step	Action
	
	Result: The grid will display the groups which have been configured for the Config tree.
4	Click **New**.
	Result: You see the Assign Group Dialog screen.
	
5	From the Group Name drop down list, select the group you want to assign to the Config tree.
	Note: This field is populated with the relevant Group Type defined on the **Group Configuration** tab.
6	In the **Group Order** field type the order number for the group. This determines the position of the group on the node in the Config tree and in the screen you are configuring.
	Note: Groups with the same order number are ordered alphabetically.
7	Click **Save**.

Editing a group assignment

Follow these steps to edit the assignment of a group to a node in a Config tree.

Step	Action
1	In the Subscriber Profile Manager screen, select the **Service Provider** and **Product Type** you require from the drop down lists.
2	Select the tab on which to assign a group. Tabs are listed in the *Config tabs where you can assign groups* (on page 7) topic.
3	Select the folder on the config tree on the left-hand side of the screen.
	Result: The grid will display the groups which have been configured for the Config tree.
4	Select the group to change in the grid, for example:

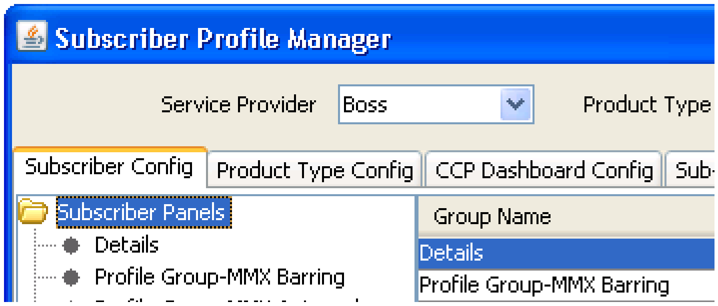
Step	Action
	
5	Click **Edit**. **Result:** You see the Assign Group Dialog screen. 
6	If required, select a different **Group Name** from the drop down list. **Note:** This field is populated with the relevant Group Type defined on the **Group Configuration** tab.
7	If required, in the **Group Order** field edit the order number for the group. This determines the position of the group on the node in the Subscriber Config tree and in the Edit Subscriber screen. **Note:** Groups with the same order number are ordered alphabetically.
8	Click **Save**.

Deleting a group

Follow these steps to delete a group from a Config tree.

Warning: You cannot delete a group that has had fields added to it. Any fields included in the group must be removed from the group before you attempt to delete it.

Step	Action
1	In the Subscriber Profile Manager screen, select the **Service Provider** and **Product Type** you require from the drop down lists.
2	Select the tab on which the assigned group to delete is located. Tabs are listed in the *Config tabs where you can assign groups* (on page 7) topic.
3	Select the folder on the config tree on the left-hand side of the screen. **Result:** The grid will display the groups which have been configured for the Config tree.
4	Select the group to delete in the grid, for example:

Step	Action
	
5	Click **Delete**. **Result:** You see the Delete Confirmation prompt.
6	Click **OK**.

Field Type Definition and Layout

Introduction

The Subscriber Profile Manager allows you to define which fields will be displayed on some Prepaid Charging and CCP Dashboard screens. You can perform the following actions:

- *Adding a new field for group* (on page 11)
- *Editing a field from a group* (on page 14)

Config tabs where you can define fields for groups

You can add fields to groups, or edit fields from groups, on the following tabs on the Subscriber Profile Manager screen.

- **Subscriber Config** - to define the screen layout of the Prepaid Charging Edit Subscriber screen. For specific details, see *Subscriber Group Field Configuration* (on page 31).
- **Product Type Config** - to define the screen layout for profile tag fields in the Prepaid Charging Edit Product Type screen. For specific details, see *Product Type Field Configuration* (on page 40).
- **CCP Dashboard Config** - to define the screen layout for the Quick View in the CCP Dashboard. For specific details, see *Quick View* (on page 59).
- **Sub-group Configuration**. For specific details, see *Sub-Group Field Configuration* (on page 77).

Adding a new field for group

Follow these steps to add a field for a group.

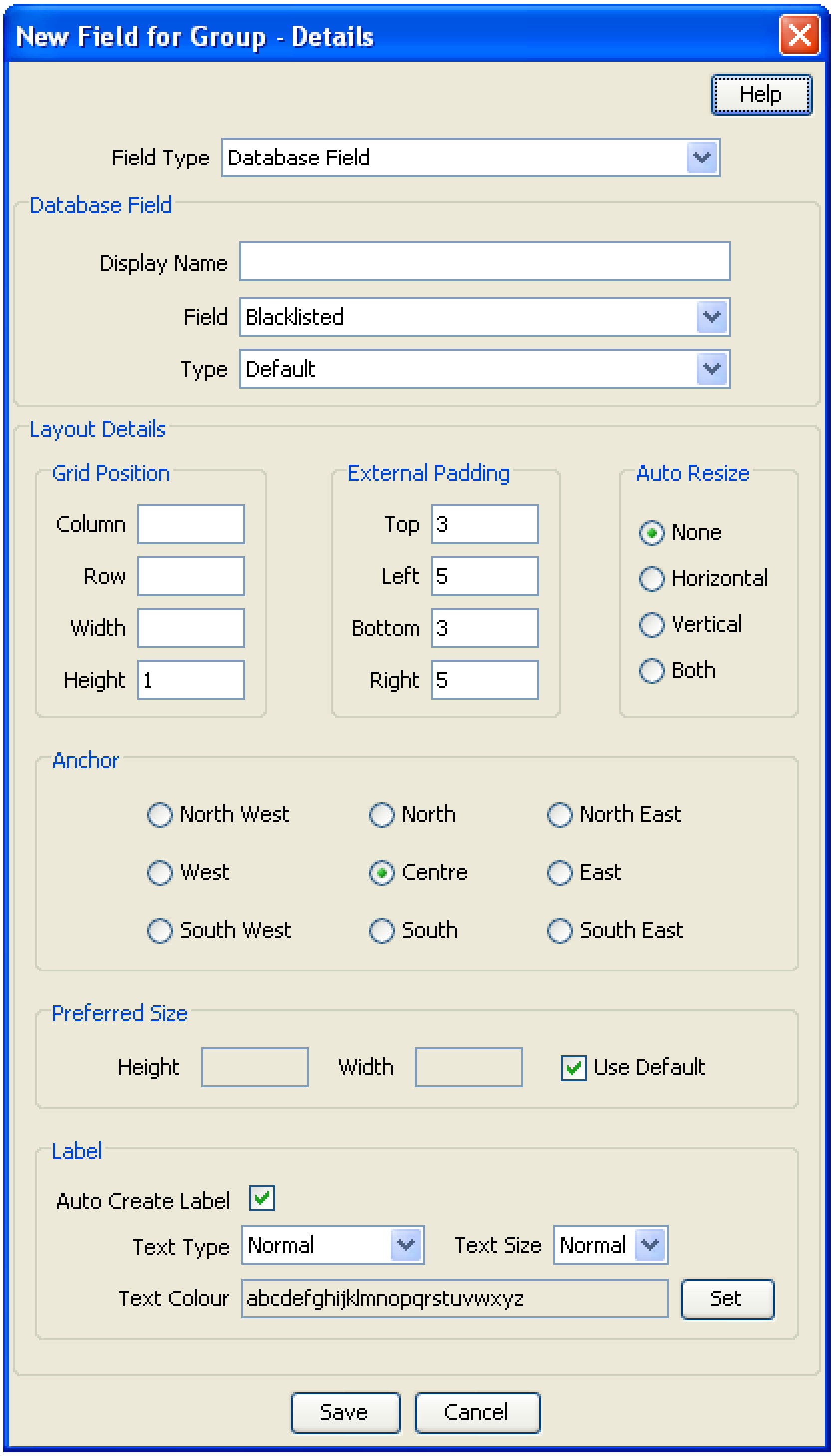
Tip: You can create a basic layout for a field by specifying values only in the **Field Type**, **Display Name**, and **Grid Position** fields.

Step	Action
1	In the Subscriber Profile Manager screen, select the required **Service Provider** and **Product Type** from the drop down lists.
2	Select the tab where the group to add a field to is configured. Tabs are listed in the *Config tabs where you can define fields for groups* (on page 11) topic.

Step	Action
3	In the panel on the left, select the required group. **Tip:** If the group is not currently visible, double click on its node.
4	Click **New**. **Result:** You see the New Field for Group screen. The name of the currently selected group is appended to the screen title bar. For an example screen, see *New Field for Group screen* (on page 13).
5	Select the **Field Type** from the drop down box. **Result:** You see the field configuration options for the selected field type in the panel below.
6	Specify the Field Type details. For more information, see *Field Type fields* (on page 16).
7	Specify the **Layout Details** for the field. This will determine where the field will appear on the screen. For more information on the layout details options, refer to *Layout Details* (on page 18).
8	Click **Save**.

New Field for Group screen

Here is an example New Field for Group screen.



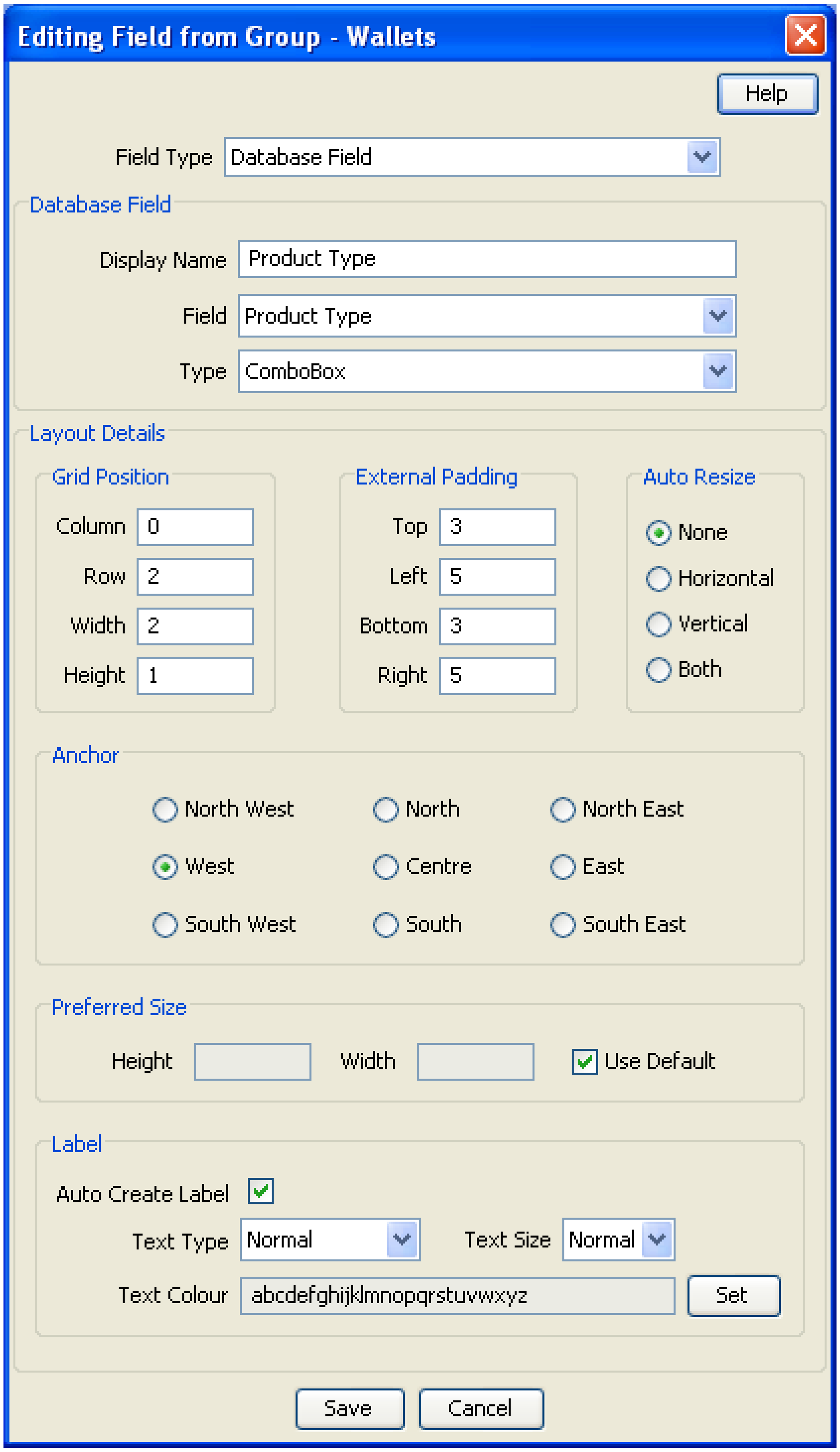
Editing a field from a group

Follow these steps to edit a field included in a group in a Config tree.

Step	Action
1	In the Subscriber Profile Manager screen, select the required **Service Provider** and **Product Type** from the drop down lists.
2	Select the tab where the group to edit a field from is configured. The relevant tabs are: • Subscriber Config • Product Type Config • Sub-group Configuration
3	In the panel on the left, select the required group. **Tip:** If the group is not currently visible, double click on its node.
4	Select the field on the grid and click **Edit**. **Result:** You see the Editing Field from Group screen. The name of the currently selected group is appended to the screen name. For an example screen, see *Editing Field from Group screen* (on page 15).
5	Edit the fields to reflect the changes you need to make. For more information, see: • *Field Type fields* (on page 16) • *Layout Details* (on page 18).
6	Click **Save**.

Editing Field from Group screen

Here is an example Editing Field from Group screen. The name of the currently selected group is appended to the screen name.



Field Type

Introduction

Each field used on a screen has a Field Type. The field type defines the features of the field, such as:

- What actions a user can take with the field
- Some elements of the field's appearance (such as whether it is a data entry field or a button)

Field Type fields

This table describes the fields in the field type area of the New/Edit Field for Group screen.

Note: Most of these fields will only be displayed for a specific Field Type.

Field	Description
Field Type	Defines the functions and appearance of the field. For more information about the different types of field which are available, see *Field Types* (on page 17).
BPL	The BPL task to attach to this field. This drop down list is populated by records from the Task Management screen. **Note:** Only available if the Field Type is `Business Process Logic`.
Display Name	This is the label that will appear next to the field when the **Auto Create Label** check box is ticked. It is also used as part of the name of the access permission for this field. Access permissions are controlled in the SMS User Management screen. For more information about access permissions, see *NCC Service Management System User's Guide*. **Note:** This field is required for all field types except `Business Process Logic`.
Profile Tag Name	The profile tag this field will provide access to. The list of available profile tags is populated by records configured in the ACS Configuration screen. For more information about profile tags, see *Profile Tag Fields* (on page 35). **Note:** Only available if the **Field Type** value is `Profile Tag Field`.
Date Type	Defines whether or not a profile tag date field includes a time element. **Note:** Only available if the **Field Type** value is `Profile Tag Field`, and the **Profile Tag Name** displays a date type profile field.
Field	This will be either a database field or a search key field depending on the selected field type. **Note:** Only available if the **Field Type** value is `Database Field` or `Search Key Field`.
Type	A predefined list of display options for the field. This information is used to define how to display a field in the Preview screen. **Note:** Only available if the **Field Type** value is `Database Field` or `Search Key Field`.
Custom Type	A predefined group of fields.

Field	Description
	Note: Only available if the Field Type is `Custom Field` or `Custom Profile Field`.
Sub-Group	A group of fields included in a Sub-Group on the Subscriber Config tree. This drop down list is populated by sub-group records from the **Group Configuration** tab. **Note:** Only available if the **Field Type** value is `Sub-Group`.
Periodic Charge	The periodic charge to associate with this field. This list of available periodic charges is populated by the records on the **Periodic Charge** tab on the Wallet Management screen. For more information about periodic charges, see *NCC Charging Control Services User's Guide*. **Note:** Only available if the **Field Type** value is `Periodic Charge Field`.
Show Date Fields	Whether or not the three date fields should be displayed as part of this field. **Note:** Only available if the **Field Type** value is `Periodic Charge Field`.
Promotion	The promotions to associate with this field. The list is populated by the promotions defined in the Promotion Manager screen for the current service provider. **Note:** Only available in the Field Type is `Promotion Info Field`.
Show Expiry Date	Whether or not to display the promotion expiry date as part of this field. **Note:** Only available if the Field Type is `Promotion Info Field`.

Field Types

This table describes the function of the available fields for the different Field Types.

Field Type	Description	Screen
Business Process Logic	Provides a button which executes a BPL task. For more information about BPL task configuration, see *NCC Charging Control Services User's Guide*.	CCP Dashboard (Common Tasks option) Edit Subscriber
Profile Tag	Profile tags are flexible data fields which can be defined for subscribers or product types. Profile tags have different types depending on the type of data they store. For more information about profile tag configuration, see *NCC Advanced Control Services User's Guide*.	Edit Subscriber Edit Product Type
Database Field	A field which is specifically related to CCS functionality. These are usually predefined Profile Tags.	CCP Dashboard (Quick View and Vouchers options) Edit Subscriber
Search Key Field	A field on the CCP Dashboard which is used to search the SMF database.	CCP Dashboard (Quick View option)

Field Type	Description	Screen
Sub-Group	A group of fields of other types.	CCP Dashboard (Quick View option) Edit Subscriber
Periodic Charge Field	A field which displays the status of a subscriber's subscription to a periodic charge. **Notes:** • To change the status of a subscriber's periodic charge subscription, you must use a BPL task which uses a Periodic Charge Subscription node. • This option is only available if the periodic charge license is activated. For more information about periodic charges and periodic charge groups, see *NCC Charging Control Services User's Guide*.	Edit Subscriber
Promotion Info Field	A field which displays a predefined list of promotion data including the promotion: • name • status • tracker balance value, and • limited liability balance and status information. For more information about promotions, see the *NCC Promotion Manager User's Guide.*	Edit Subscriber
Custom Type	A predefined list of special fields.	CCP Dashboard (Quick View option) Edit Subscriber
Custom Profile Field	A predefined list of profile fields.	Edit Product Type
Wallet Life Cycle Field	Provides the Display Name of a Wallet Life Cycle Period. For more information about Wallet Life Cycle, see *NCC Charging Control Services User's Guide*.	CCP Dashboard (Quick View option) Edit Subscriber

Note: The availability of Field Types will depend on the screen the group is defined for. For example, the Vouchers group on the CCP Dashboard can only contain database fields.

Layout Details

Introduction

You specify how a field will be displayed in the Layout Details panel in the New Field for Group and Edit Field From Group screens. For each field you can define its:

- Grid position
- External padding
- Auto resize option
- Anchor position
- Preferred size

- Label settings

Grid position

The SPM uses a grid to determine where a field is located on the screen. The grid position for a field defines which column and row it will be displayed on. Care must be taken when specifying the grid position to ensure fields do not overlap and that enough space is given to group field types. For example, you need to allow 5 columns to display the fields in the Wallet Information group.

Note: Rows and columns are not uniformly sized. Row height and column width is allocated dynamically and depends on how all the fields appearing in the screen have been configured.

Grid position fields

This table describes the function of each field.

Field	Description
Column	The column number defines which column the field will be displayed in. Valid column numbers are in the range 0 to 99, where '0' is the column furthest to the left of the screen. **Tips:** • The width of each column is allocated dynamically and depends on the length of the longest item to appear in the column. • Fields with the same column number will appear in a vertical line.
Row	Defines which row the field will be displayed on. Valid row numbers are in the range 0 to 99. **Tip:** It is a good idea to leave a gap between row numbers so that you can easily change a field's vertical position. This is especially important if you want to insert a new field or swap two fields around.
Width	Defines the number of columns required to display the field. **Note:** The field label will use one column, therefore you must set the width to more than one if the **Auto Create Label** check box is ticked.
Height	Defines the number of rows required to display the field.

External padding

You use the external padding fields to define the minimum amount of space between the field and the border of its display area. This helps to ensure that each of the fields displayed in the screen can be clearly identified.

Notes:

- Values must be specified in pixels.
- The display area is the whole cell in the grid.

Auto resize

You use the auto resize options to resize the field to fit the available display area.

Auto resize fields

This table describes the function of each field.

Field	Description
None	The displayed field is not resized.
Horizontal	The displayed field is stretched horizontally to fill the width of its display area.
Vertical	The displayed field is stretched vertically to fill the height of its display area.
Both	The displayed field is stretched horizontally and vertically to fill the available space.

Anchor position

The option you select for the Anchor position defines where the field will be placed within its display area. This feature is useful when the field you want to display is smaller than the display area specified for it.

Preferred size

You can override the default size used to display a field by setting a preferred size for it.

Note: The values specified for the preferred size may be ignored depending on which auto resizing option is selected.

Preferred size fields

This table describes the function of each field.

Field	Description
Height	Sets the display height for the field. Valid values are in the range 0 to 999 pixels. **Note:** This value will be ignored when the Auto Resize option is set to `Vertical` or `Both`.
Width	Sets the display width for the field. Valid values are in the range 0 to 999 pixels. **Note:** This value will be ignored when the Auto Resize option is set to `Horizontal` or `Both`.
Use Default	Use the default size to display the field. The Height and Width options will be ignored.

Label options

You can display a label next to each field in the screen. The Label options let you define the type, color and size of the text used for the label.

Tip: BPLs and Custom fields (excluding Label/Separator fields) do not normally required a label.

Label fields

This table describes the function of each field.

Field	Description
Auto Create Label	When selected, the Display Name specified for the field will be used as a label. **Note:** If selected you will need to allow an additional column for the label when specifying the Grid Position Width.
Text Type	Sets the type of the text used for the label.
Text Size	Sets the size of the text used for the label.
Text Colour	Displays text in the selected color for the label.

Screen Preview

Introduction

You can preview the screen layout for a group of fields. This will help you to see what adjustments are needed to improve the screen layout.

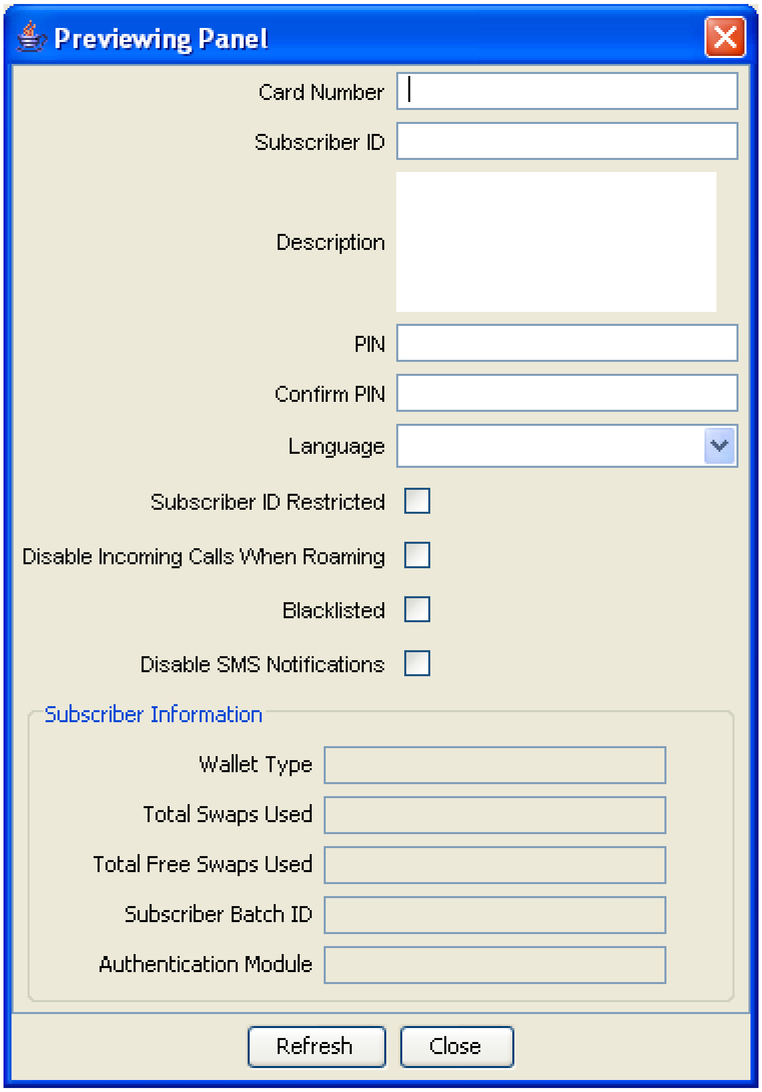
Note: The preview is only an approximation of the screen layout which may appear slightly different on the real screen.

Previewing a subscriber screen

Follow these steps to preview how a group of fields will look in the Edit Subscriber screen.

Tip: You can display the Preview panel while making changes to the screen layout. Then you can refresh it as required by clicking **Refresh**.

Step	Action
1	In the Subscriber Profile Manager screen, select the **Service Provider** from the drop down box.
2	On the **Subscriber Config** tab, select the **Product Type** from the drop down list.
3	In the panel on the left select the group that you want to preview. **Tip:** Double click on the node to see the list of groups assigned to the node, if these are not currently in view.
4	Click **Preview**. **Result:** You see the Previewing Panel for the selected group.

Step	Action
	
5	When you have finished previewing, click **Close**.

Chapter 4

Group Configuration

Overview

Introduction

This chapter explains how to configure groups.

In this chapter

This chapter contains the following topics.

Group Configuration

Introduction

You configure groups on the **Group Configuration** tab on the Subscriber Profile Manager screen. Once you have configured a group, you can assign it to a tree node on the **Subscriber Config** tab or **Product Type Config** tab. You can then define which fields belong to the group.

Group Types

The Group Type determines whether the group can be assigned to a node in the Subscriber Config tree or Product Type Config Tree. The available group types are:

- Product Type
- Subscriber
- Sub-Group

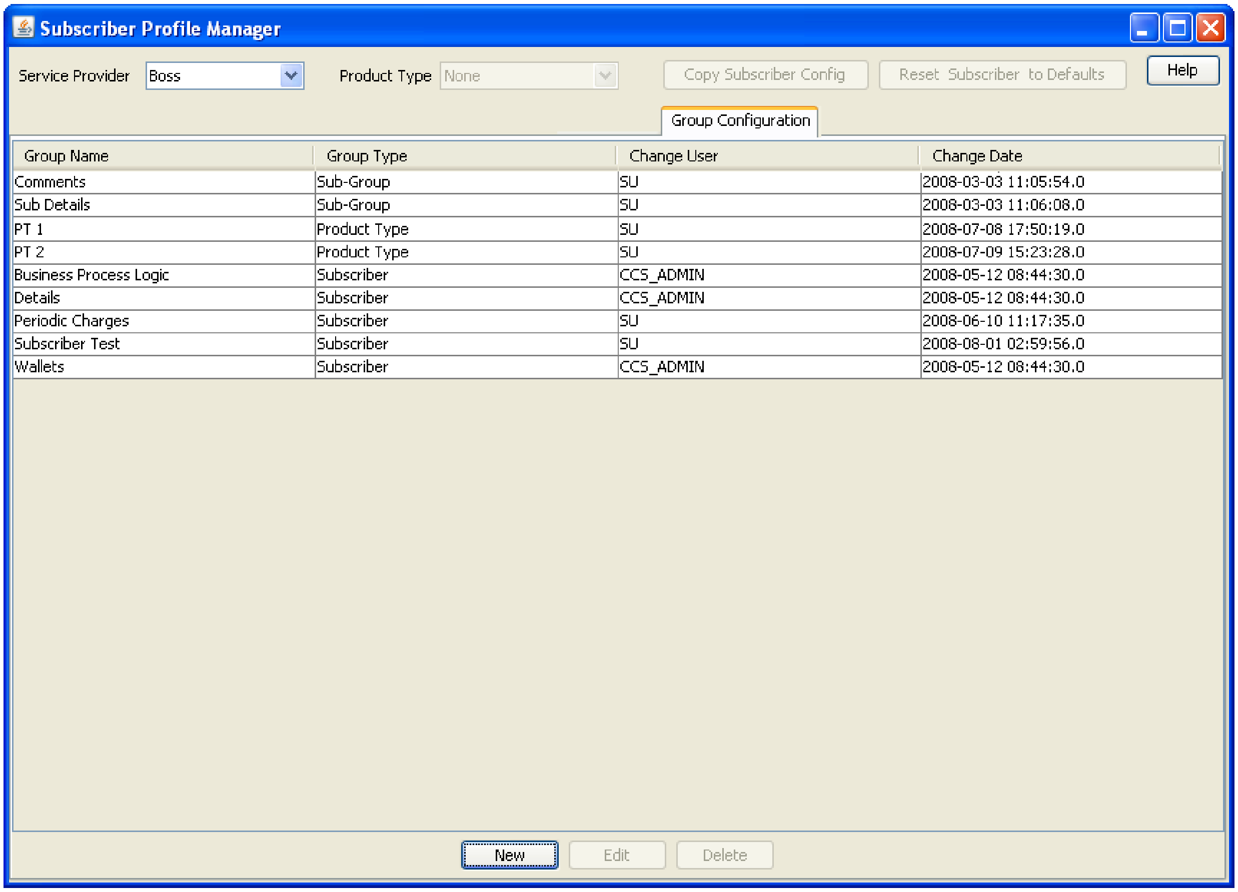
Assigning groups to nodes

For details on assigning groups to nodes on the:

- Subscriber Config tree, see *Subscriber Configuration* (on page 27)
- Product Type Config tree, see *Product Type Configuration* (on page 37)
- Sub-Groups tree, see *Sub-Group Configuration* (on page 75)

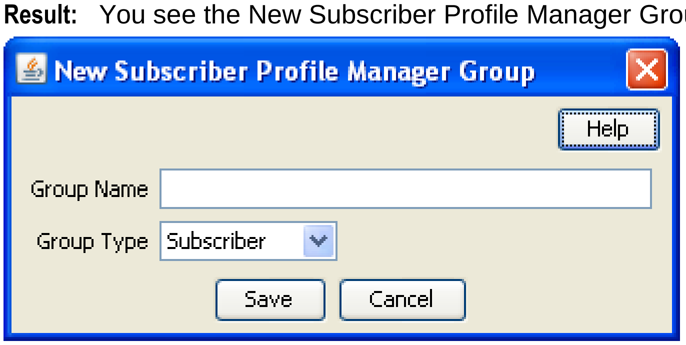
Group Configuration tab

Here is an example **Group Configuration** tab on the Subscriber Profile Manager screen.



Adding groups

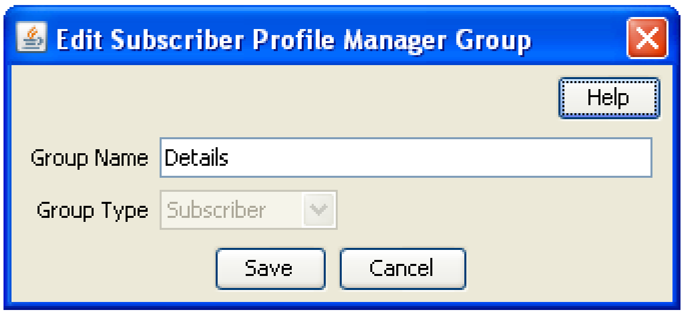
Follow these steps to add a new group.

Step	Action
1	In the Subscriber Profile Manager screen, select the **Service Provider** from the drop down box.
2	On the **Group Configuration** tab, click **New**. **Result:** You see the New Subscriber Profile Manager Group screen. 
3	In the **Group Name** field, enter the name for this group.
4	Select the **Group Type** from the drop down list.
5	Click **Save**.

Editing groups

Follow these steps to edit an existing group.

Note: You cannot change the group type.

Step	Action
1	In the Subscriber Profile Manager screen, select the **Service Provider** from the drop down box.
2	On the **Group Configuration** tab, select the group to edit.
3	Click **Edit.** **Result:** You see the Edit Subscriber Profile Manager Group screen. 
4	Enter a new **Name** for the group if required.
5	Click **Save**.

Deleting groups

Follow these steps to delete a group.

Warning: You cannot delete a group if it is currently assigned to a node on the **Subscriber Config** tab, the **Product Type Config** tab, or the **Sub-Group Config** tab.

Step	Action
1	In the Subscriber Profile Manager screen, select the **Service Provider** from the drop down box.
2	On the **Group Configuration** tab, select the group to delete.
3	Click **Delete**. **Result:** You see the Delete Confirmation prompt.
4	Click **OK**. **Result:** The record is deleted.

Chapter 5

Subscriber Configuration

Overview

Introduction

This chapter explains how to configure the groups and fields available in the Prepaid Charging Edit Subscriber screens.

Note: Sub-groups are configured in the **Sub-Group Config** tab. Once the sub-group has been configured, you can add it to the Subscriber Config tree and the Edit Subscriber screen in the same way as adding a field.

In this chapter

This chapter contains the following topics.

Subscriber Config

Introduction

The **Subscriber Config** tab allows you to configure the Prepaid Charging Edit Subscriber screen. You can:

- Define which options will appear in the left hand menu on the screen
- Define the fields belonging to each group
- Configure how each field is displayed on the screen
- Define profile rules for the profile tag fields in each group

For more information about the Edit Subscriber screen, see NCC *CCS User's Guide*.

Profile rules

You can define a set of profile rules for the profile tag fields configured to appear in the Edit Subscriber and Edit Product Type screens. The profile rules are applied at run time to help prevent invalid data from being entered in profile tag fields.

For details on defining profile rules, see *Rule Definition* (on page 47).

Subscriber config definitions

You can set up a subscriber config definition for a specific service provider, or for a specific service provider and product type combination. The configuration is applied to a Subscriber based on the product type specified for the subscriber's wallet.

Default product type

The default product type is `None`. The configuration defined for this product type is used where no specific configuration has been defined for the subscriber's product type.

Set the default product type by selecting a product type from the **Product Type** drop down list at the top of the Subscriber Profile Manager screen.

Subscriber config rules

Here are the rules used to determine which subscriber config definition will be used to display subscriber information in the Edit Subscriber screen.

1. If the service provider and product type specified for the subscriber's wallet match a subscriber config product type definition, then this definition will be used.
2. If there is no match for the product type then the subscriber config definition for the service provider's default product type None will be used.

User access

The fields included in a subscriber group can be accessed in the Edit Subscriber screen provided the user has been given sufficient privileges.

User access permissions are managed through the User Templates defined in the SMS User Management screen. They can be set for all the fields in the subscriber group, or for selected fields.

This table describes the privileges that may be assigned to a field.

Privilege	Description
Read/Only	The field's value (if present) will be visible to the user through the screens, but they will not be able to edit, create, or delete it.
Read/Modify	The field's value (if present) will be visible to the user through the screens, and they will be able to edit it, but they will not be able to create or delete it.
Create/Delete	The field's value (if present) will be visible to the user through the screens, and they will be able to edit, create and delete it.
Execute	Valid for BPL tasks only. This BPL task will be visible to the user through the screens, and they will be able to execute it.

Note: For information on creating and maintaining user Templates, see *NCC SMS User's Guide*.

Note about including wallet information

Where secondary or shared wallets are to be used, you are strongly advised to design screens that place the wallet information on a separate panel. You should not include any specific subscriber details in this panel.

Here is a list of all the items that relate to the wallet and which should be configured to appear on a separate wallet panel. All other details fields, profile tags and profile panel information relate to the subscriber:

- Balances table panel
- Wallet expiry details panel
- Wallet history panel (wallet history and creation date)
- Wallet info panel
- Wallet state
- Product type

Example

To see the importance of keeping wallet information separate, consider these two scenarios:

1 A subscriber has both a primary and a secondary wallet. In this case there will be independent wallet information for each wallet, and a single set of subscriber information (profile panel, details fields, and any profile tags).

2 Two subscribers have independent primary wallets and a shared secondary wallet. In this case the two subscribers will have independent subscriber and primary wallet information, and therefore independent profile panel, details fields and profile tags. However, there will be a single set of wallet information for the shared secondary wallet. This means that the profile panel, details fields and profile tags displayed when a user accesses the secondary wallet, will depend on which subscriber is selected.

Subscriber Panels

Introduction

The **Subscriber Config** tab enables you to define the groups in the Subscriber Panels node tree. The groups which are assigned to nodes in the tree, are displayed under the Subscriber option on the left hand panel in the Edit Subscriber screen.

Once the group is defined, you can:

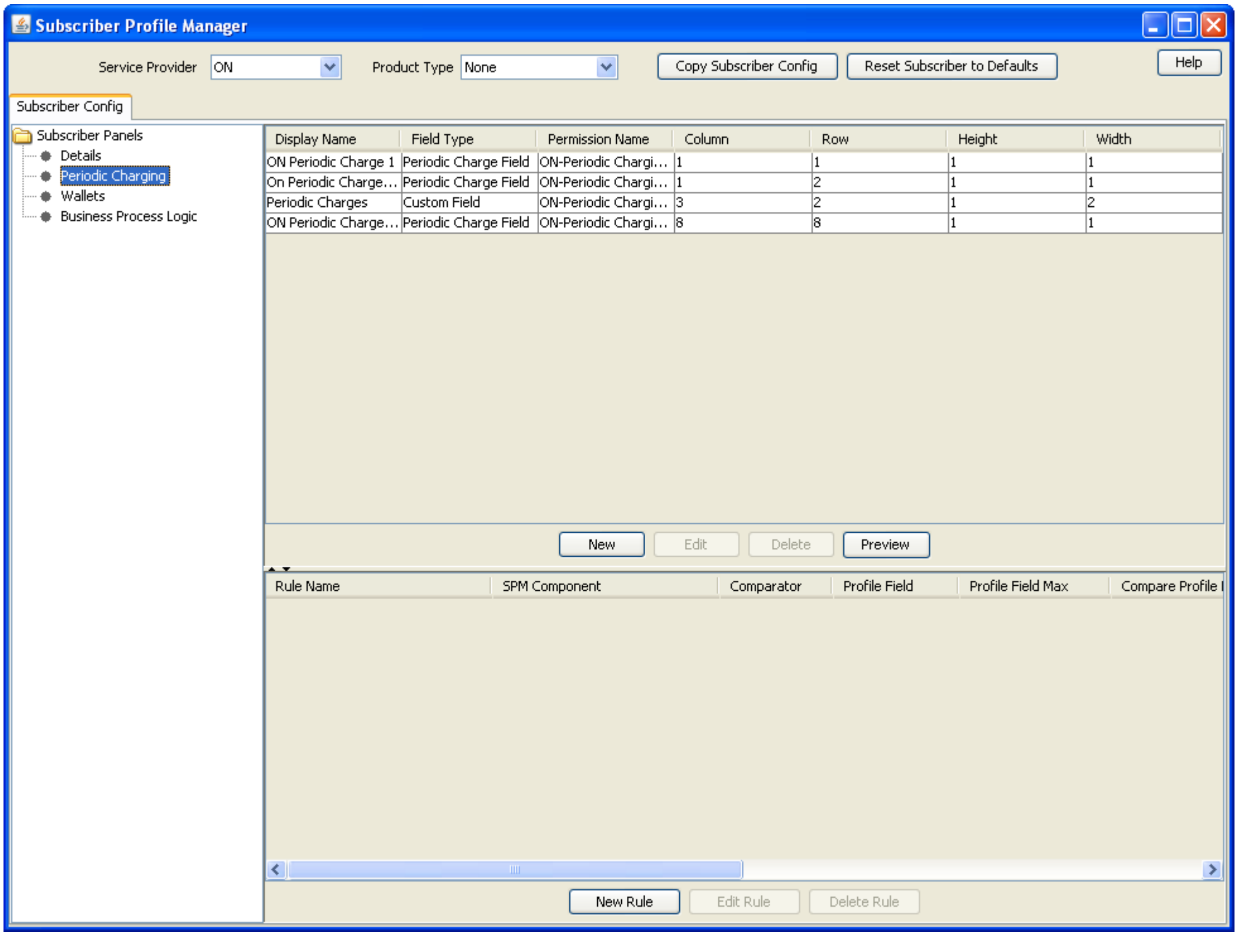
- Define the set of fields belonging to the group for the selected Service Provider and Product Type
- Specify the screen layout for each field.

For more information about:

- Configuring the fields which are in the group, see *Subscriber Group Field Configuration* (on page 31)
- How the fields are displayed, see *Layout Details* (on page 18)

Subscriber Config tab

Here is an example **Subscriber Config** tab in the Subscriber Profile Manager screen with the Subscriber Panels node selected.



Assigning a group

To assign a group to a node in the Subscriber Config tree, follow the procedure detailed in *Assigning a group to a node* (on page 8).

Editing a group assignment

To edit the assignment of a group to a node in the Subscriber Config tree, follow the procedure detailed in *Editing a group assignment* (on page 9).

Deleting a group

To delete a group assigned to a node in the Subscriber Config tree, follow the procedure detailed in *Deleting a group* (on page 10).

Warning: You cannot delete a group that has had fields added to it. Any fields included in the group must be removed from the group before you attempt to delete it.

Subscriber Group Field Configuration

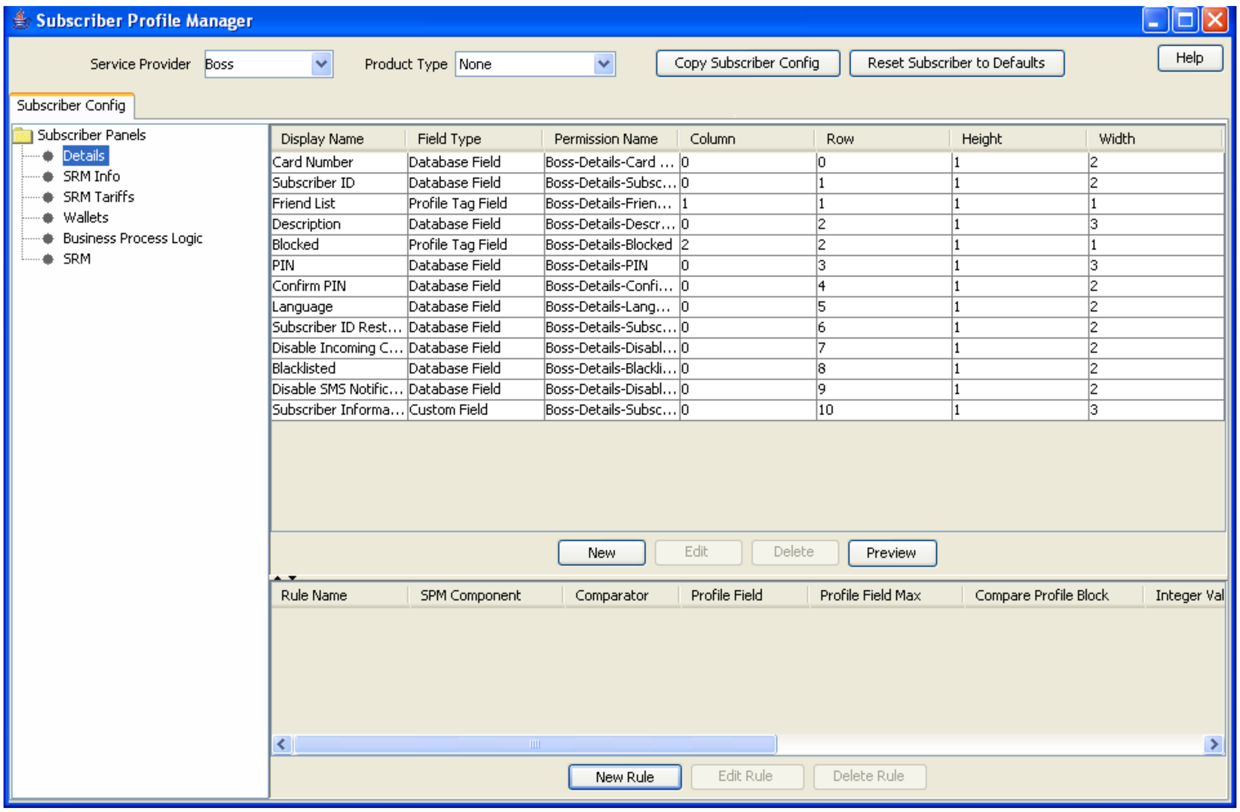
Introduction

You can add, edit and delete the fields belonging to a group assigned to a node in the **Subscriber Config** tab. These fields will be displayed on the Edit Subscriber screen under the option which corresponds to the group they are configured in.

If you include any profile tag fields in your configuration, then you can also define the profile rules that will be applied to the profile tag fields at run-time. For details, see *Rule Definition* (on page 47).

Subscriber Config tab - Details group

Here is an example **Subscriber Config** tab on the Subscriber Profile Manager screen, with the Details group selected.

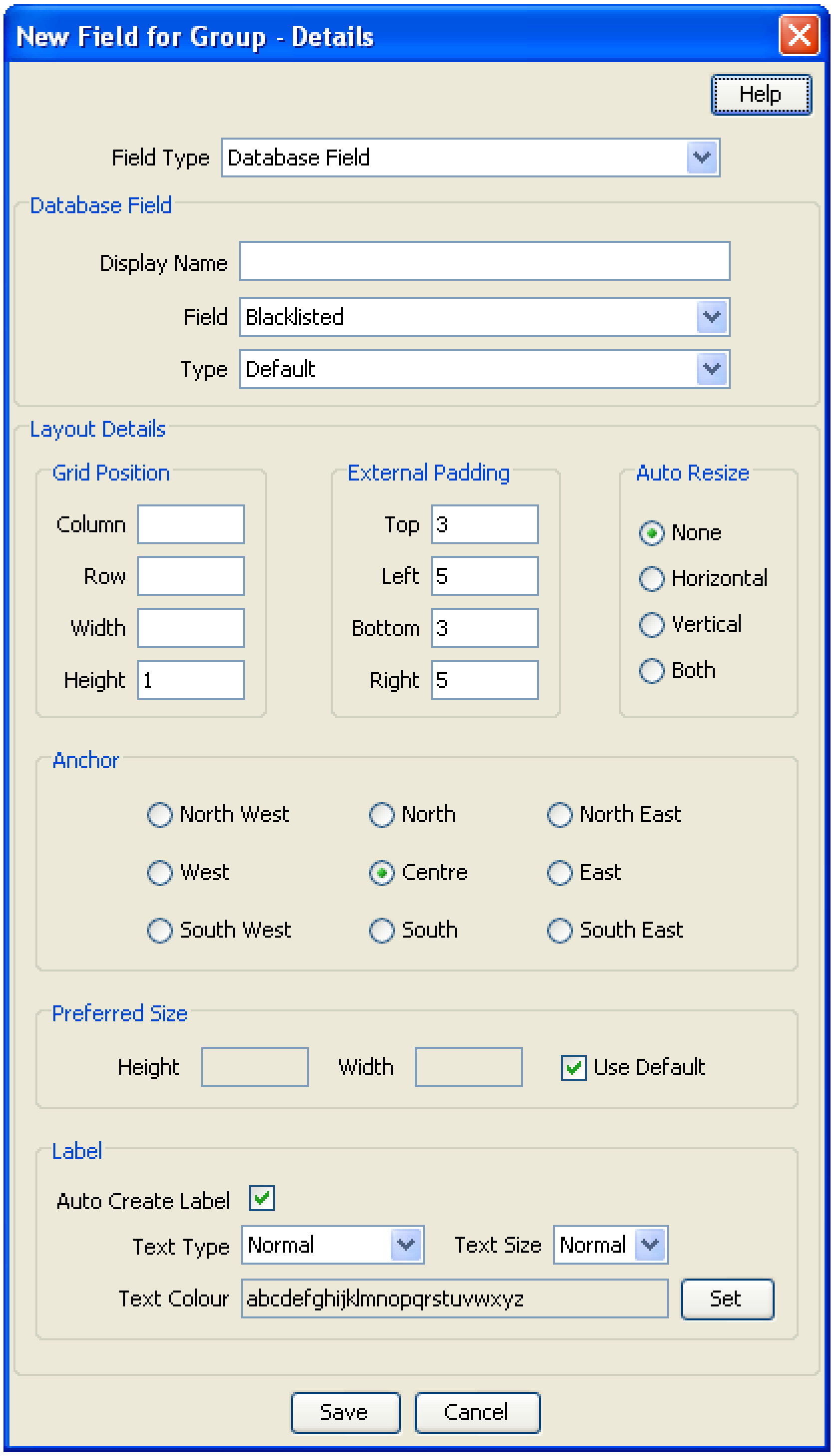


Adding new field for Subscriber Config group

Follow these steps to add a field for a group in the Subscriber Config tree.

Step	Action
1	In the Subscriber Profile Manager screen, select the **Service Provider** and **Product Type** you require from the drop down lists.
2	From the left hand panel on the **Subscriber Config** tab select the group that you want to add the field to. **Tip:** Double click on a node to see which groups are assigned to it, if these are not currently visible.

Step	Action
3	Click **New**. **Result:** You see the New Field for Group screen. The name of the currently selected group is appended to the screen name.



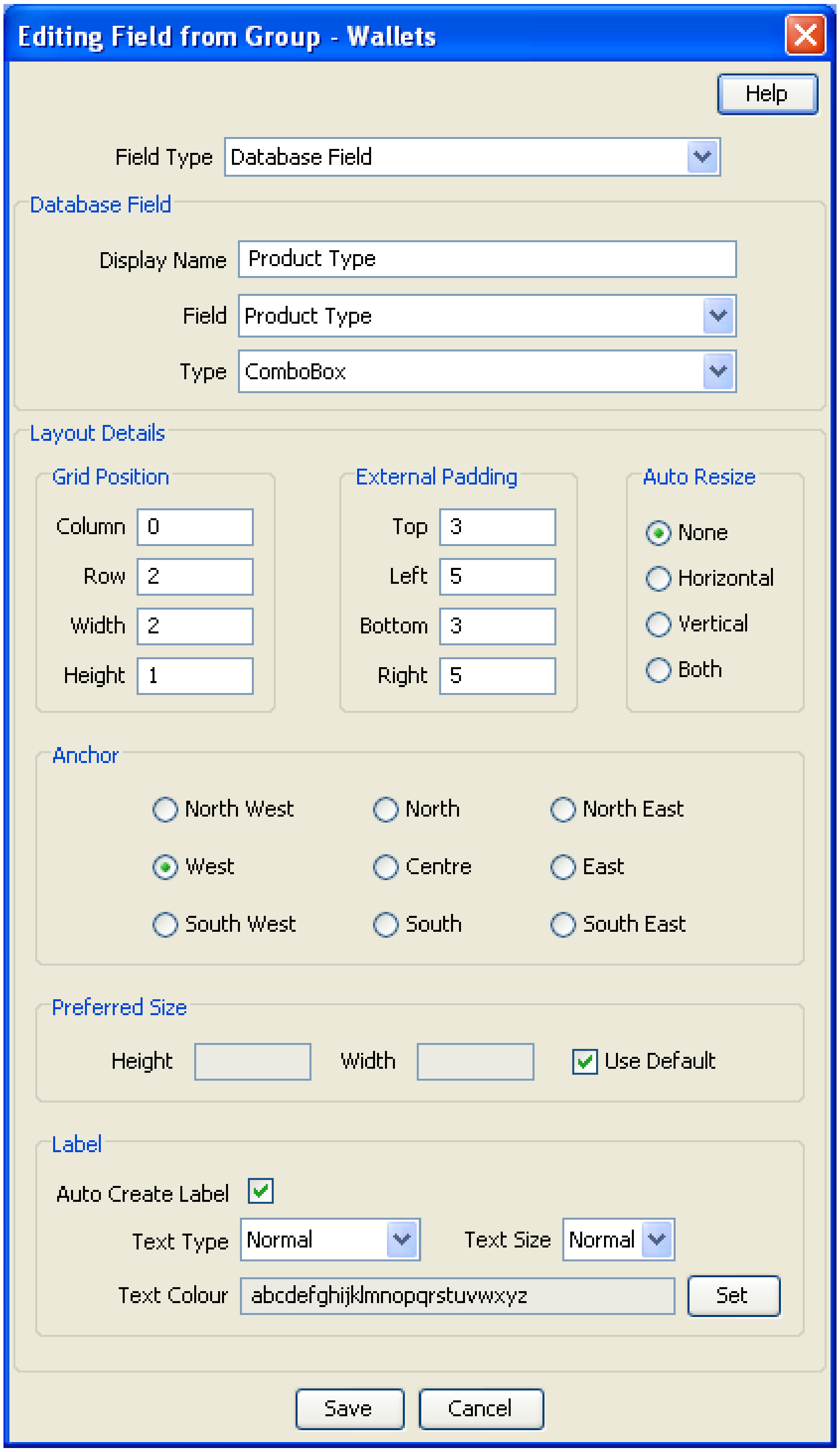
4	Select the **Field Type** from the drop down box. **Result:** You see the field configuration options for the selected field type in the panel below.

<table>
<tr><th>Step</th><th>Action</th></tr>
<tr><td>5</td><td>If you are adding a:
<table>
<tr><th>Type Field</th><th>Specify These Database Fields</th></tr>
<tr><td>Database Field</td><td>Display Name
Field
Type</td></tr>
<tr><td>BPL</td><td>BPL</td></tr>
<tr><td>Profile Tag Field</td><td>Display Name
Profile Tag Name
Date Type (if Tag field is a DATE)</td></tr>
<tr><td>Custom Field</td><td>Display Name
Custom Type</td></tr>
<tr><td>Sub-Group</td><td>Display Name
Sub-Group</td></tr>
<tr><td>Periodic Charge</td><td>Display Name
Periodic Charge or Periodic Charge Group
Show Date Fields</td></tr>
<tr><td>Promotion Info Field</td><td>Display Name
Promotion
Show Expiry Date</td></tr>
<tr><td>Wallet Life Cycle Field</td><td>Display Name</td></tr>
</table>
For more information, see Field Type fields (on page 16).</td></tr>
<tr><td>6</td><td>Specify the Layout Details for the field. This will determine where the field will appear on the group panel in the Edit Subscriber screen.
For more information on the layout details options, refer to Screen Layout (see "Field Type Definition and Layout" on page 11, "Subscriber Profile Manager Screen Layout" on page 7).</td></tr>
<tr><td>7</td><td>Click Save.</td></tr>
</table>

Editing field from Subscriber Config group

Follow these steps to edit a field included in a group in the Subscriber Config tree.

<table>
<tr><th>Step</th><th>Action</th></tr>
<tr><td>1</td><td>In the Subscriber Profile Manager screen, select the Service Provider and Product Type you require from the drop down lists.</td></tr>
<tr><td>2</td><td>From the left hand panel on the Subscriber Config tab, select the group where the field to edit is configured.
Tip: Double click on a node to see which groups are assigned to it, if these are not currently visible.</td></tr>
<tr><td>3</td><td>Select the field on the grid and click Edit.
Result: You see the Editing Field from Group screen. The name of the currently selected group is appended to the screen name.</td></tr>
</table>

Step	Action
	

Step	Action
4	Edit the fields to reflect the changes you need to make. For more information about the fields at the top of this screen, see *Field Type fields* (on page 16). For more information about the layout fields on this screen, see *Layout Details* (on page 18).
5	Click **Save**.

Deleting a field

Follow these steps to delete a field from a group in the Subscriber Config tree.

Step	Action
1	In the Subscriber Profile Manager screen, select the **Service Provider** and **Product Type** you require from the drop down lists.
2	From the left hand panel on the **Subscriber Config** tab, select the group where the field to delete is configured. **Result:** The grid will display the fields which have been configured for the group you have selected. For an example of this screen, see Subscriber Config tab - Details group.
3	Select the field you want to delete on the grid and click **Delete**. **Result:** You see the Delete Confirmation prompt.
4	Click **OK**. **Result:** The field is removed from the grid.

Profile Tag Fields

Introduction

The facility to configure profile tag fields enables you to create customized fields which can then be:

- Accessed and populated through the CCP Dashboard, Edit Subscriber and Product Type screens
- Uused in control plans.

For more information about how profile fields are used in control plans, see *NCC CPE User's Guide*.

Profile tags

The tag names for profile fields are defined on the **Profile Tag Details** tab in the ACS Configuration screen.

This table describes the supported data types for profile tags.

Profile Field Tag Type	Description
BOOLEAN	A single value: • True • False
BYTE	A single digit integer (signed).
DATE	A date.
INTEGER	An integer value (signed).
LNSTRING	A limited numeric string. Valid characters are 0-9. **Note:** The limits for LNSTRING field values may be set for the Product Type (in the Product Type screen) and/or Service Provider (in Service Management, Resource Limits screen).
LOPREFIX	A limited ordered prefix tree. This is made up of a limited list of numbers. **Note:** The limits for LOPREFIX field values may be set for the Product Type (in the Product Type screen) and/or Service Provider (in Service Management, Resource Limits screen).
NSTRING	Numeric string. Valid characters are 0-9.

Profile Field Tag Type	Description
OPREFIX	An ordered prefix tree comprising an ordered list of numbers.
PREFIX	A prefix tree comprising a list of numbers.
STRING	A non limited ASCII string.
ZONE	A set of shape definitions for the area covered by the zone. Shapes may be circular or rectangular and are defined by their coordinates. **Note:** You can set up and populate zone tags but they may only be used if the Location Capabilities Pack (LCP) is installed.

Configuring Zone Profile Tags

You can define a set of zones that can be used to determine the location of a subscriber.

To define a zone, you must first define the zone profile group field using a ZONE profile tag.

ZONE profile tags are configured in ACS. The LCP ZONE profile tags, Home and Work, are all configured at installation. All other zone profile tags are user defined and must conform to the configuration shown in this table.

Profile Tag Name	Profile Tag Type	Profile Tag	Parent Profile Tag	Comment
LCP ZONES	Profile Block	4128769		Configured during installation.
Home	ZONE	4128770	4128769	Configured during installation.
Work	ZONE	4128771	4128769	Configured during installation.
ZoneName	ZONE	An integer value in the range: 4128772 to 4194305	4128769	User defined. **Warning:** The parent profile tag must be set to 4128769 (the profile tag value for LCP ZONES).

For more information about profile tags, see *ACS User's Guide*.

Chapter 6

Product Type Configuration

Overview

Introduction

This chapter explains how to configure the Profile groups and fields available in the Edit Product Type screen in CCS.

In this chapter

This chapter contains the following topics.

Product Type Config

Introduction

The **Product Type Config** tab lets you:

- Add, edit and delete the Profile group options available in the Edit Product Type screen
- Add, edit and delete the profile tag fields belonging to each group
- Configure the screen layout for each field
- Define the profile rules for the profile tag fields in each group

Profile rules

You can define a set of profile rules for the profile tag fields configured to appear in the Edit Subscriber and Edit Product Type screens. The profile rules are applied at run time to help prevent invalid data from being entered in profile tag fields.

For details on defining profile rules, see *Rule Definition* (on page 47).

User access

The profile tag fields included in a Product Type Group can be accessed in the Edit Product Type screen provided the user has been given sufficient privileges.

User access permissions are managed through the User Templates defined in the SMS User Management screen. They can be set for all the fields in the group, or for selected fields.

This table describes the privileges that may be assigned to a field.

Privilege	Description
Read/Only	The field's value (if present) will be visible to the user through the screens, but they will not be able to edit, create, or delete it.

Privilege	Description
Read/Modify	The field's value (if present) will be visible to the user through the screens, and they will be able to edit it, but they will not be able to create or delete it.
Create/Delete	The field's value (if present) will be visible to the user through the screens, and they will be able to edit, create and delete it.

Note: For information on creating and maintaining user Templates, see the *SMS User's Guide*.

Product Type Panels

Introduction

You assign Product Type groups to the Product Type Panels node on the **Product Type Config** tab. You can then:

- define the set of fields belonging to each group for the selected Service Provider and Product Type, and
- specify the screen layout for each field.

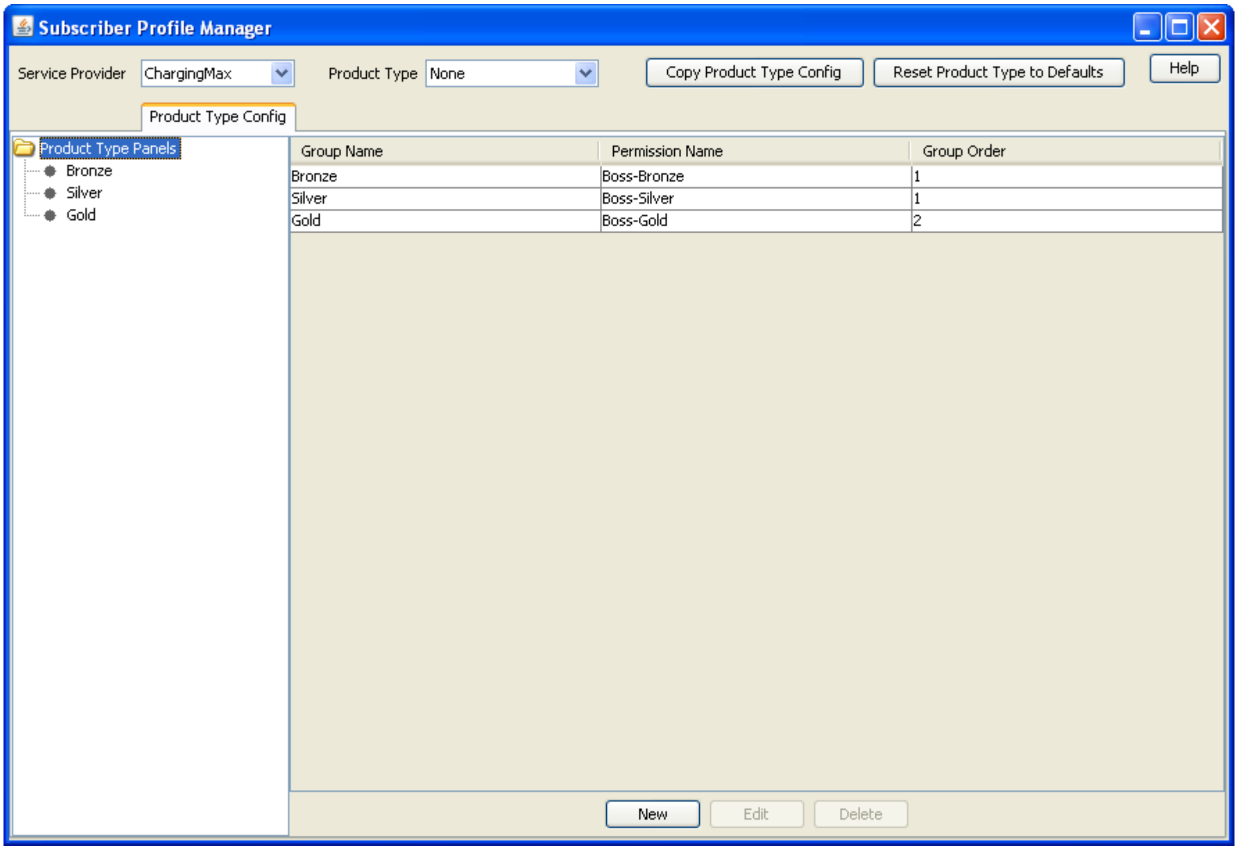
The **Product Type Config** tab enables you to define the groups in the Product Type Panels node tree. The groups which are assigned to nodes in the tree are displayed under the Profile Fields option on the left hand panel in the Edit Product Type screen.

Once the group is assigned, you can specify the screen layout for each field. For more information about:

- Configuring the fields which are in the group, see *Product Type Field Configuration* (on page 40)
- How the fields are displayed, see *Layout Details* (on page 18)

Product Type Config tab - groups

Here is an example **Product Type Config** tab in the Subscriber Profile Manager screen with the Product Type Panels node selected.



Assigning a group

To assign a group to a node in the Product Type Config tree, follow the procedure detailed in *Assigning a group to a node* (on page 8).

Editing a group assignment

To edit the assignment of a group to a node in the Product Type Config tree, follow the procedure detailed in *Editing a group assignment* (on page 9).

Deleting a group

To delete a group assigned to a node in the Product Type Config tree, follow the procedure detailed in *Deleting a group* (on page 10).

Warning: You cannot delete a group that has had fields added to it. Any fields included in the group must be removed from the group before you attempt to delete it.

Product Type Field Configuration

Introduction

You can add, edit and delete the fields belonging to a group assigned to the Product Type Panels node on the **Product Type Config** tab. All the fields in the group must be either:

- profile tag fields, or
- custom profile fields.

If you include any profile tag fields in your configuration, then you can also define the profile rules that will be applied to the profile tag fields at run-time.

The following types of profile field are available to product types:

- DATE
- BOOLEAN
- BYTE
- INTEGER
- PREFIX
- OPREFIX
- STRING
- NSTRING
- DISCOUNT
- PATTERNS
- ZONE (the profile tag must be in the range 4128770 to 4194303)

You cannot include LOPREFIX profile fields in product type configurations.

Note: For more information on profile tag fields, see *Profile Tag Fields* (on page 35). For details on defining profile rules, see *Rule Definition* (on page 47).

Custom profile fields

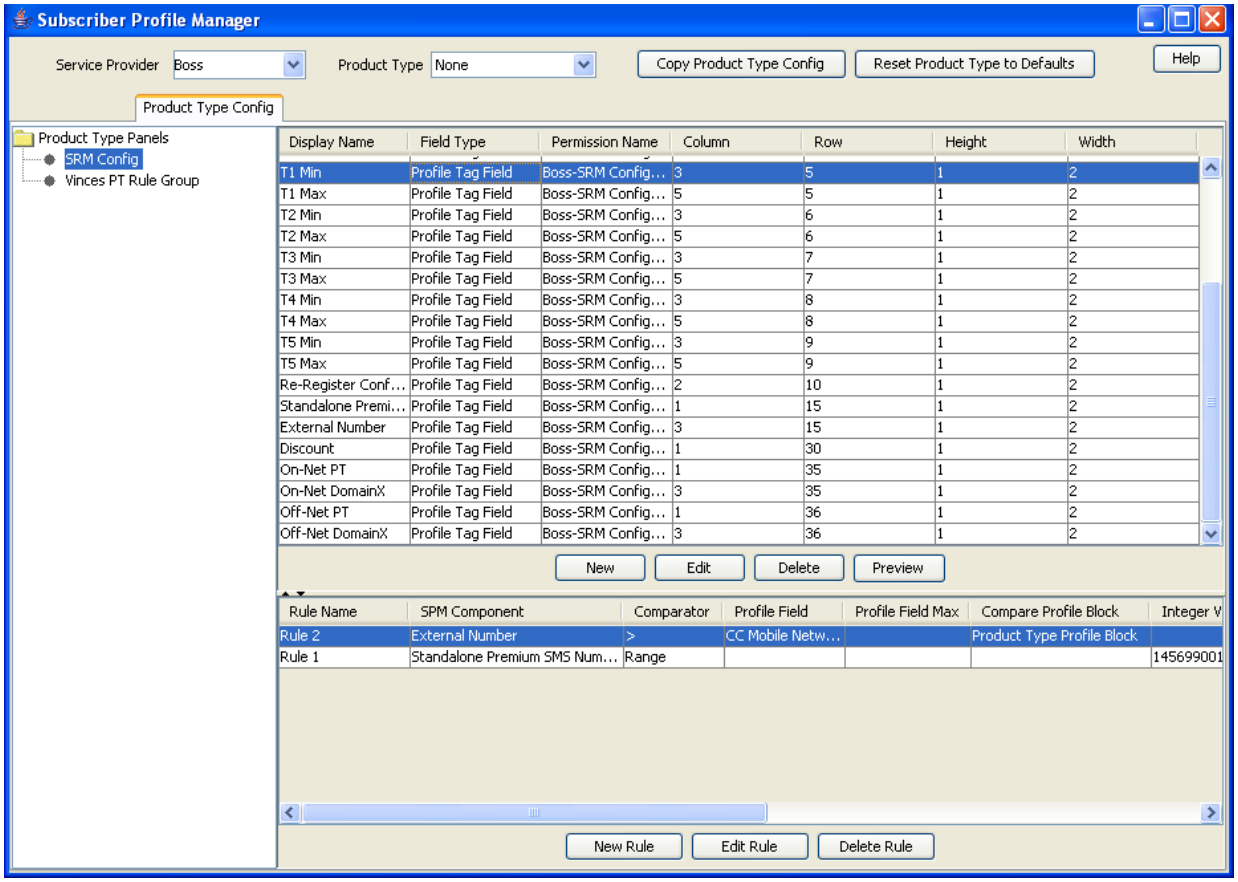
Custom profile fields provide the facility to define profile tag fields where the data type is selected from a list of predefined Custom Types.

You can use custom profile fields to store the following items. The stored values can then be used in control plans:

- Balance Cascade name
- Domain name
- Product Type name
- Tariff Plan name, and
- Voucher Type name.

Product Type Config tab - fields

Here is an example **Product Type Config** tab in the Subscriber Profile Manager screen with the SRM Config group selected.

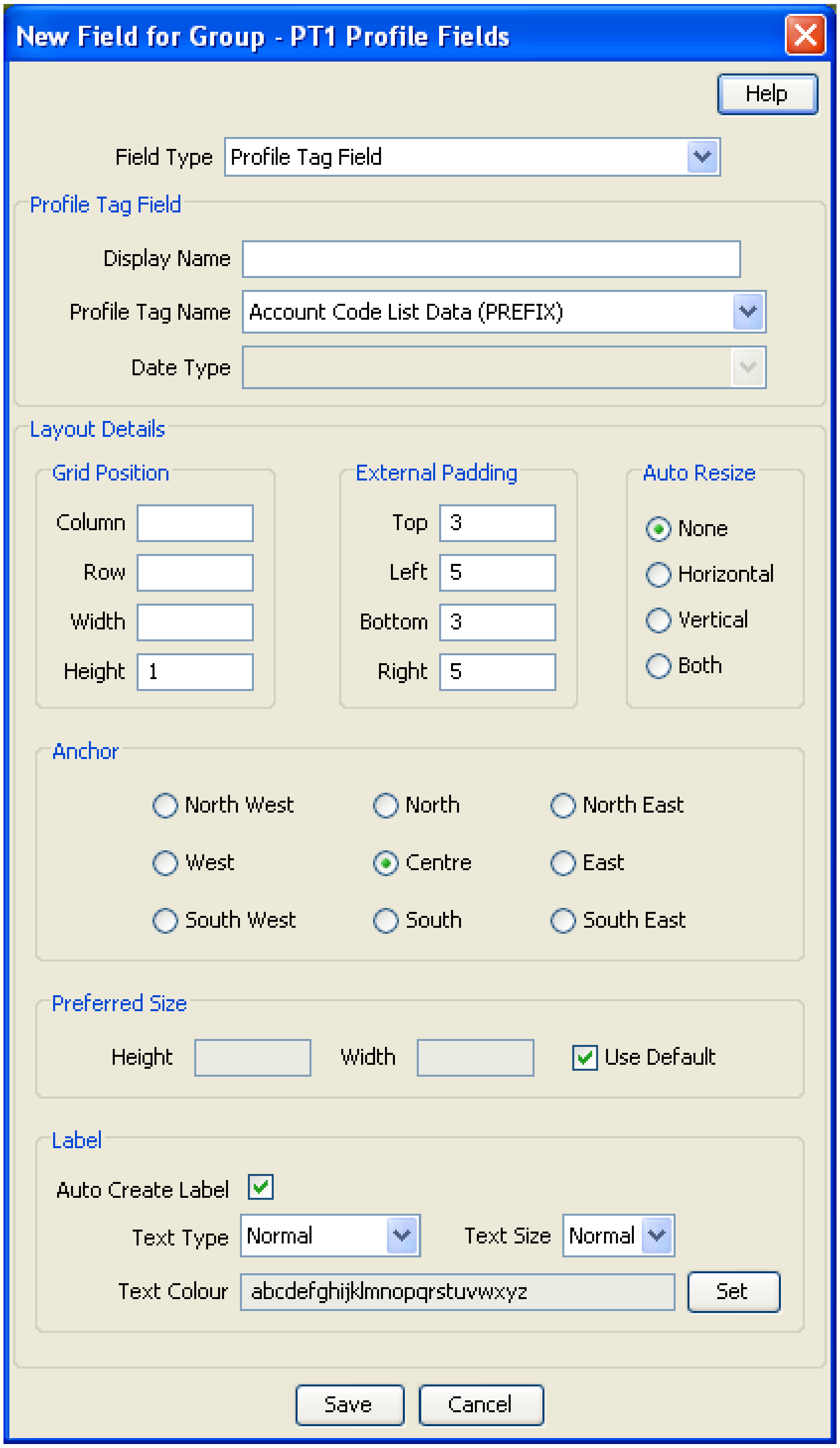


Adding new field for Product Type group

Follow these steps to add a field to a group in the Product Type Config tree.

Step	Action
1	In the Subscriber Profile Manager screen, select the **Service Provider** and **Product Type** you require from the drop down lists.
2	From the Product Type Panels list on left hand side of the **Product Type Config** tab, select the required group. **Tip:** Double click on the Product Type Panels node to see which groups are assigned to it, if these are not currently visible.
3	Click **New**. **Result:** You see the New Field for Group screen. The name of the currently selected group is appended to the screen name.

Step	Action



4 In the **Field Type** drop down box select either:

- Profile Tag Field, or
- Custom Profile Field

5 In the **Display Name** field, type the label you want to appear next to the field in the Edit Product Type screen.

Note: This label is only displayed if **Auto Create Label** is ticked.

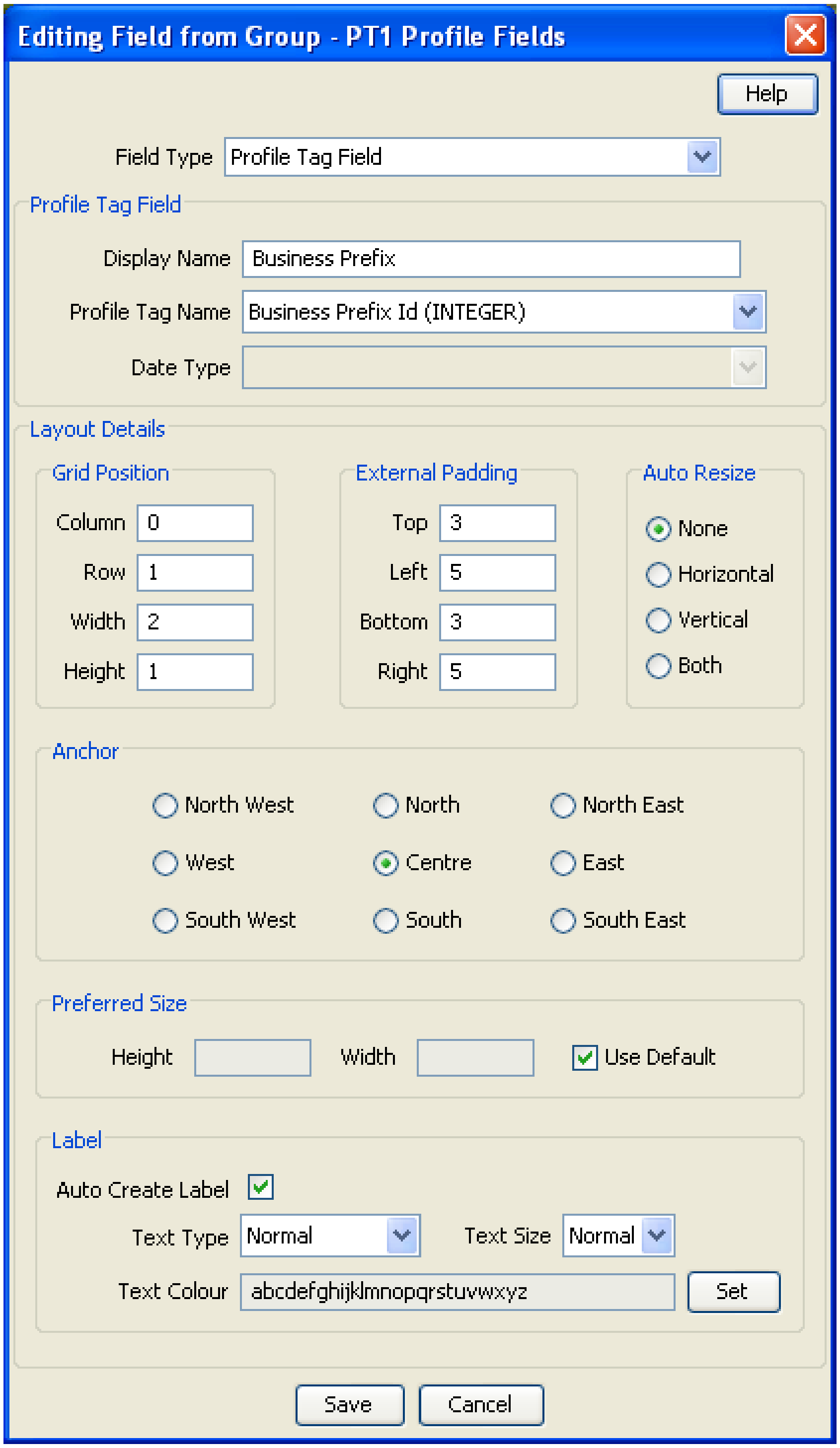
Step	Action
6	From the **Profile Tag Name** drop down list, select the profile tag field you want to add.
7	If you are adding a Custom Profile Field, select the Custom Type from the drop down list of available custom types. If you are adding a DATE type Profile Tag Field, select the Date Type from the drop down list of available date types.
8	Specify the **Layout Details** for the field. This will determine where the field will appear on the group panel in the Edit Product Type screen. For more information on the layout details options, refer to *Layout Details* (on page 18).
9	Click **Save**.

Editing field from Product Type group

Follow these steps to edit a field included in a group in the Product Type Config tree.

Step	Action
1	In the Subscriber Profile Manager screen, select the **Service Provider** and **Product Type** you require from the drop down lists.
2	From the Product Type Panels list on left hand side of the **Product Type Config** tab, select the required group. **Tip:** Double click on the Product Type Panels node to see which groups are assigned to it, if these are not currently visible.
3	Select the field on the table and click **Edit**. **Result:** You see the **Editing Field from Group** screen. The name of the currently selected group is appended to the screen name.

Step	Action



Step	Action
4	Edit the fields to reflect the changes you need to make. For more information about the fields at the top of this screen, see *Field Type fields* (on page 16). For more information about the layout fields on this screen, see *Layout Details* (on page 18).
5	Click **Save**.

Deleting a field

Follow these steps to delete a field from a group in the Subscriber Config tree.

Step	Action
1	In the Subscriber Profile Manager screen, select the **Service Provider** and **Product Type** you require from the drop down lists.
2	From the left hand panel on the **Product Type Config** tab, select the group where the field you want to delete is configured. **Tip:** Double click on the Product Type Panels node to see which groups are assigned to it, if these are not currently visible.
3	Select the field you want to delete on the grid and click **Delete**. **Result:** You see the Delete Confirmation prompt.
4	Click **OK**. **Result:** The field is removed from the grid.

Chapter 7

Profile Rules

Overview

Introduction

This chapter explains how to define profile rules.

In this chapter

This chapter contains the following topics.

Rule Definition

Introduction

You can define sets of profile field rules to associate with the profile tag fields available in the Edit Subscriber and Edit Product Type screens. The rules will be evaluated when you open either the Edit Subscriber or the Edit Product Type screen, and applied immediately prior to saving them.

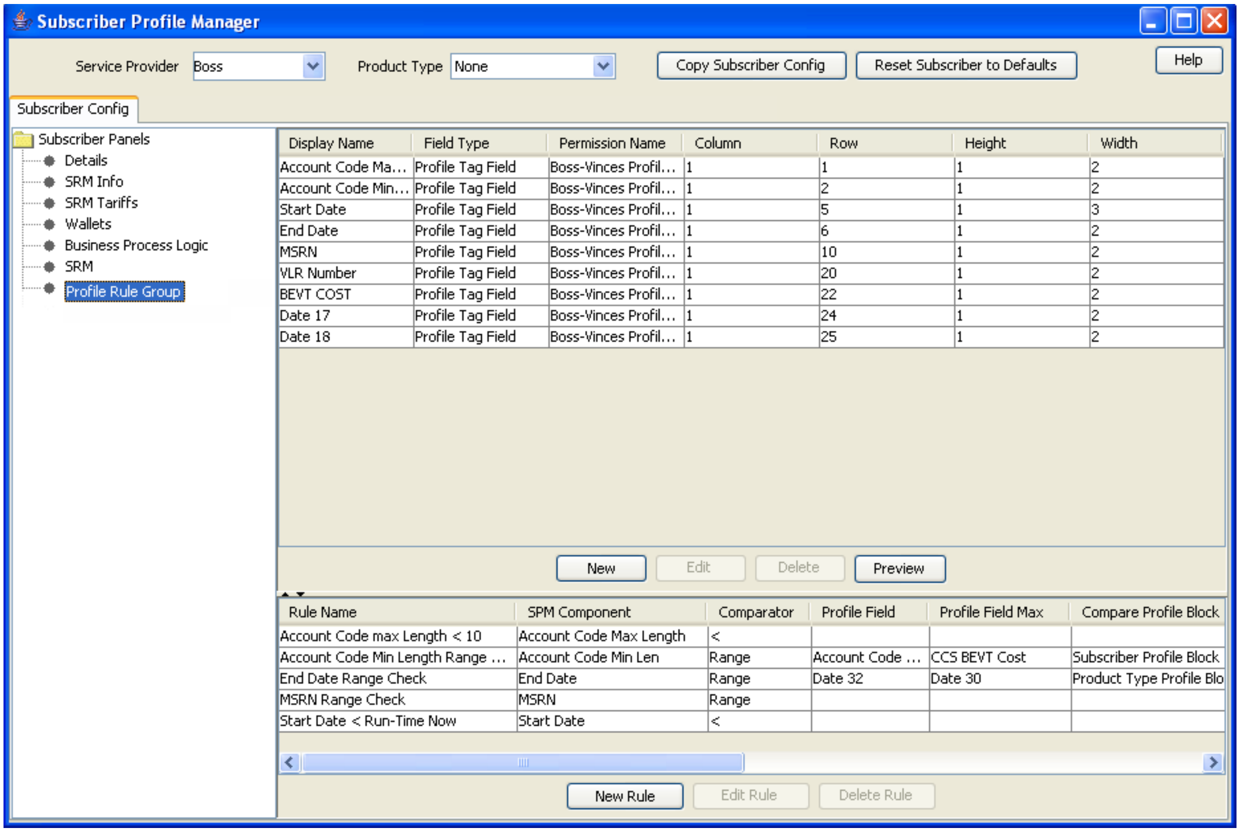
Profile field rules are:

- Defined on the **Subscriber Config** and **Product Type Config** tabs
- Associated with specific profile tag fields that have been configured to appear in either the Edit Subscriber or Edit Product Type screen
- Used in the screens to control the data entered into the profile tag fields. Only data that conforms to the rules will be accepted.

Subscriber Config tab - profile rule example

Here is an example **Subscriber Config** tab on the Subscriber Profile Manager screen. In the bottom half of the screen you see a grid listing the profile rules defined for the group currently selected in the Subscriber Config tree.

Note: The Product Type Config tab also displays the defined profile rules for a group when the group is selected in the Product Type Config tree.



Profile rule fields

This table describes the function of each field.

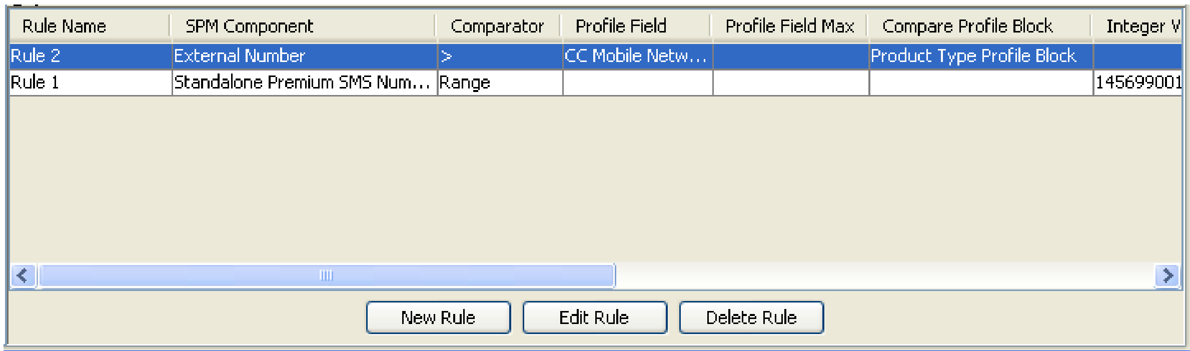
Field	Description
Rule Name	The name of the rule.
SPM Component	The SPM component that this rule applies to. This will be a profile tag field included in the currently selected group of fields. The following types of profile tag field are supported: • DATE • INTEGER • NSTRING • STRING
Comparator	The type of compare operation to perform. Valid values are: = Equal to != Not equal to < Less than <= Less than or equal to > Greater than >= Greater than or equal to Range Range of values

Field	Description
Use Profile fields	Profile fields apply to rules that have been configured to compare the SPM Component against a profile field value or range of values. These fields can be configured when the Use Profile Fields option is selected.
Profile Field	The profile field containing the value to compare against. If the Range comparator is being used, then this will be the minimum value allowed.
Profile Field Max	If the Range comparator is being used, then this profile field contains the maximum value allowed in the range. Otherwise, this field will be disabled.
Compare Profile Block	Identifies the profile block containing the profile fields to use in the compare operation. Valid values are: • Product Type Profile • Subscriber Profile • Service Profile
Allow when profile field value unavailable	When set, the rule will be passed even if the specified profile field data is not available.
Use Fixed Value - Integer fields	Integer fields apply to rules that have been configured to compare the SPM Component against a fixed value or range of fixed values. These fields can be configured when: • the SPM Component field type is either INTEGER or NSTRING, and • the Use Fixed Value option as been selected.
Integer Value	The numeric value to compare against. If the Range comparator is being used, then this sets the minimum value allowed in the range.
Integer Value Max	If the Range comparator is being used, then this sets the maximum value allowed in the range. Otherwise this field is disabled.
Use Fixed Value - Date fields	Date fields apply to rules that have been configured to compare the SPM Component against a specific date or range of dates. These fields can be configured when: • the SPM Component field type is DATE, and • the Use Fixed Value option has been selected.
Date Value	The date to compare against. If the Range comparator is being used, then this sets the start date for the range. Dates may be entered using the following formats: • dd-Mon-yyy hh:mm:ss • dd-Mon-yyyy For details on selecting a date, see Time and Date panels.
Date Value Max	If the Range comparator is being used, then this sets the end date for the range. Otherwise this field is disabled.
Use Date And Time	Allows you to set an exact time for the specified date.
Use Run-Time Date	When set, the SPM Component will be compared against the current system time at run-time. **Note:** Setting this option disables the Compare Against fields.

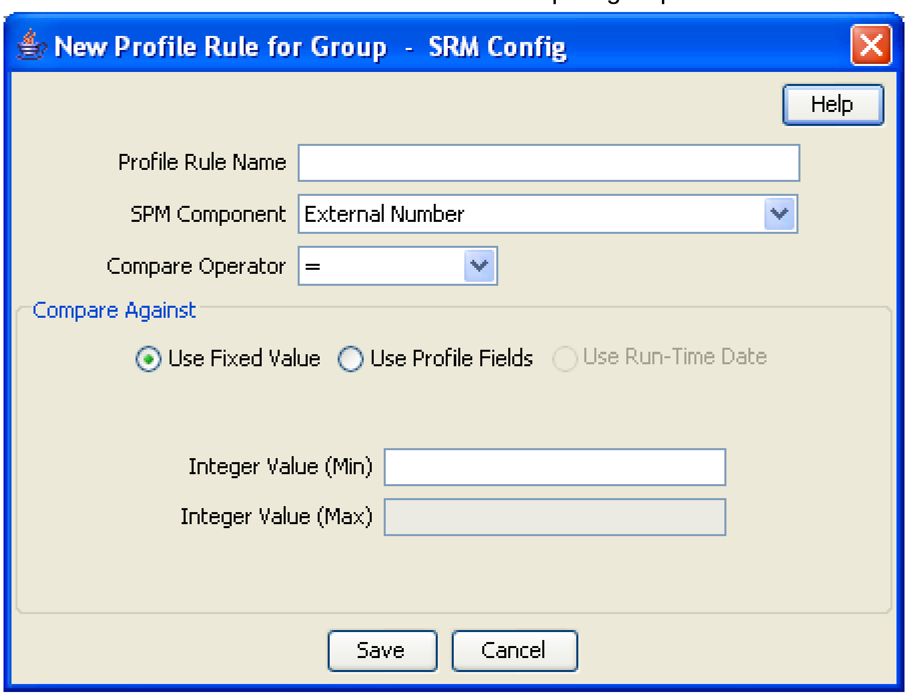
Adding a new rule

Follow these steps to add a new profile rule definition for a Subscriber or Product Type group.

Step	Action
1	Select either the **Subscriber Config** tab, or the **Product Type Config** tab, as required.
2	In the Config tree, select the group you want to add the new rule definition to. **Result:** In the bottom part of the screen you see a grid listing the rules that are currently defined for the group.



Step	Action
3	Click **New Rule**. **Result:** You see the New Profile Rule for Group - <group> screen.



Step	Action
4	Configure this record by entering data in the fields on this screen. For more information about the fields on this screen, see *Profile rule fields* (on page 48).

Note: The fields available in the Compare Against area will depend on the field type of the SPM Component and which of the following options you selected:

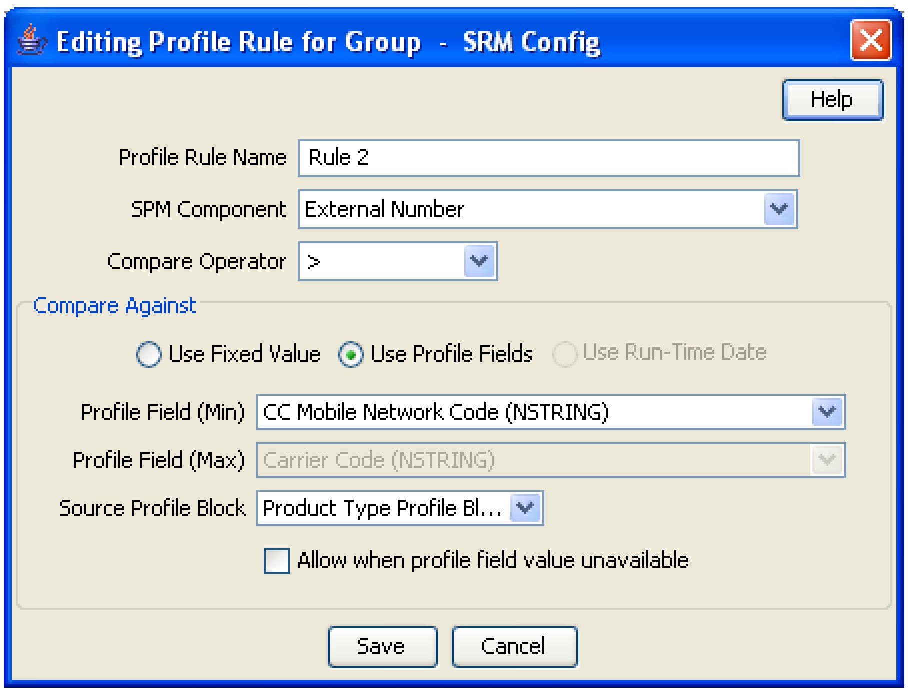
- Use Fixed Value
- Use Profile Fields, or
- Use Run-Time Date

Step	Action
5	If you selected the **Use Profile Fields** option and you want the rule to be passed even if the selected profile fields are not available, then tick the **Allow when profile field value unavailable** check box.
6	Click **Save**.

Editing a rule

Follow these steps to edit a profile rule definition for a Subscriber or Product Type group.

Step	Action
1	Select either the **Subscriber Config** tab, or the **Product Type Config** tab, as required.
2	In the Config tree, select the group where the profile rule to edit is defined. **Result:** In the bottom part of the screen you see a grid listing the rules that are currently defined for the group.
3	Select the rule to edit in the grid, and click **Edit Rule**. **Result:** You see the Editing Profile Rule for Group - *Group* screen.



Step	Action
4	Edit the fields on this screen to reflect the changes you need to make. For more information about the fields on this screen, see *Profile rule fields* (on page 48). **Note:** The fields available in the Compare Against area depend on the field type of the SPM Component and which of the following options have been selected: • Use Fixed Value • Use Profile Fields • Use Run-Time Date
5	If you selected **Use Profile Fields**, to ensure the rule is passed even when the selected profile field is not available, select the **Allow when profile field value unavailable** check box.

Step	Action
6	Click **Save**.

Deleting a rule

Follow these steps to delete a profile rule.

Step	Action
1	Select the **Subscriber Config** tab or the **Product Type Config** tab as required.
2	Select the group in the config tree where the rule to delete is defined. **Result:** In the bottom part of the screen you see the rules currently defined for the group listed in the grid.
3	On the grid, select the rule you want to delete.
4	Click **Delete Rule**. **Result:** You see the Delete Confirmation prompt.
5	Click **OK**.

Chapter 8

CCP Dashboard Configuration

Overview

Introduction

This chapter explains how to configure the CCP Dashboard, using Oracle Communications Network Charging and Control Subscriber Profile Manager.

In this chapter

This chapter contains the following topics.

Subscriber Table

Introduction

The Subscriber Table option on the **CCP Dashboard Config** tab lets you configure the subscriber search panel and search results panel in the CCP Dashboard.

Tip: If more than one Service Provider is using the service, you can specify a different configuration for each one.

Search fields

You select which fields will be available in the Subscriber Search panel from the list of available search fields. The following predefined search fields are provided:

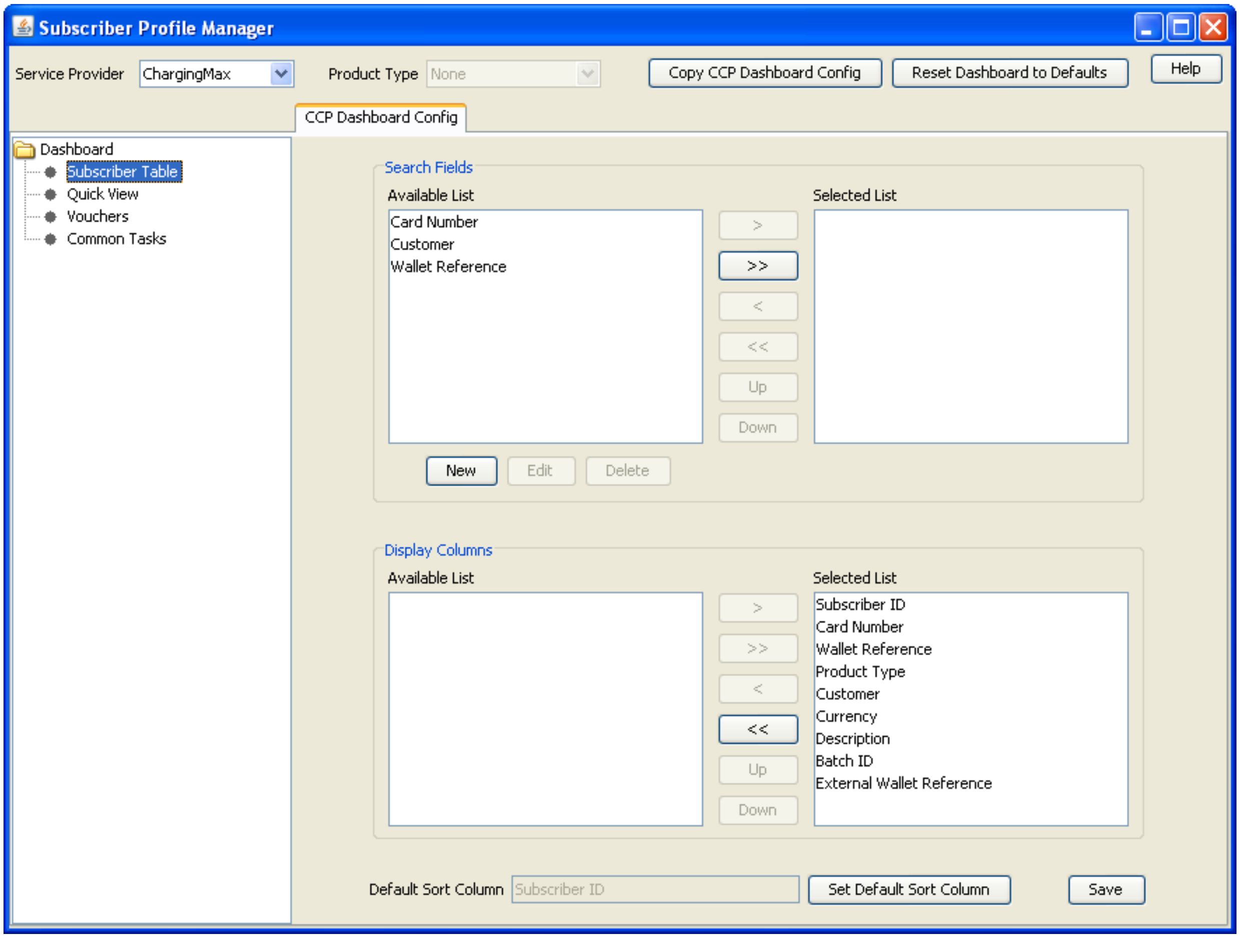
- Card Number
- Customer, and
- Wallet Reference.

You can also define your own subscriber search fields. See *Adding a new search key* (on page 55) for details.

Note: The data needed to locate a subscriber based on a customized search key field must be generated using the PI. For more information see *NCC PI Commands Guide*.

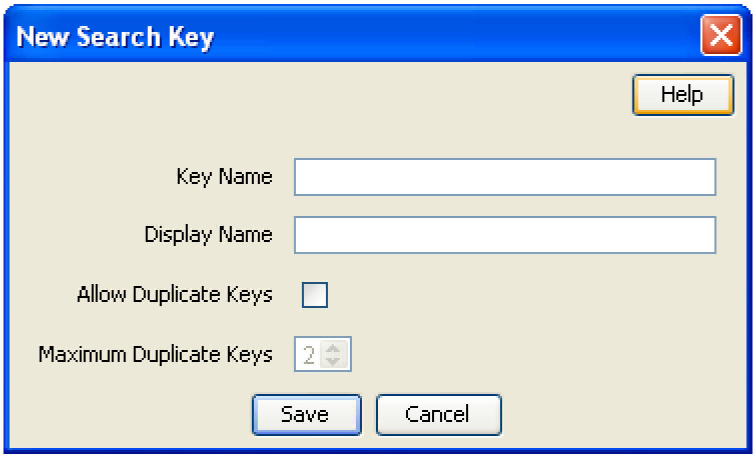
Subscriber Table options

Here is an example of the Subscriber Table configuration options on the **CCP Dashboard Config** tab on the Subscriber Profile Manager screen.



Adding a new search key

Follow these steps to add a new search key field to the Subscriber Table.

Step	Action
1	In the Search Fields area on the Subscriber Table option of the **CCP Dashboard Config** tab, click **New**. **Result:** You see the New Search Key screen. 
2	In the **Key Name** field, type the internal name for the key. This will be used by the search mechanism to locate matching subscriber records. **Note:** Letters must be typed in lower case.
3	In the **Display Name** field, type the name to use to display the key in the screens. **Note:** This name is also used by the PI command.
4	If the key can have multiple values, tick the **Allow Duplicate Keys** check box. For example, an address field used as a Search Key could have a duplicate key for each line in the address.
5	If Allow Duplicate Keys is selected, select the **Maximum Duplicate Keys**. A key may have up to 9 duplicates.
6	Click **Save**.

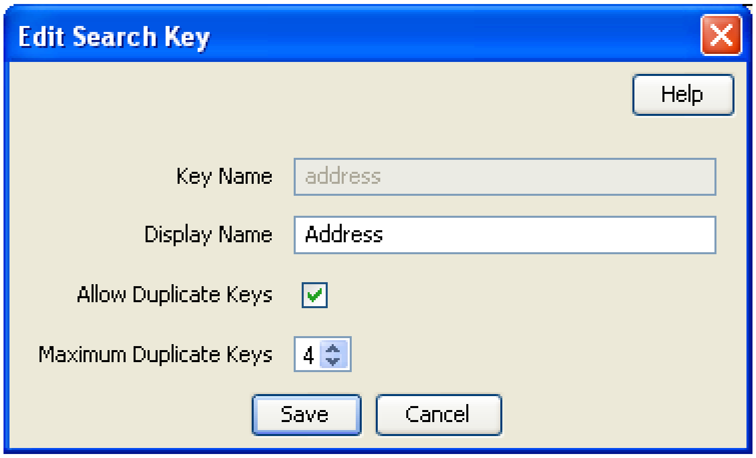
Editing a search key

Follow these steps to edit a search key in the Subscriber Table.

Note: The **Key Name** value cannot be changed.

Step	Action
1	Select the Subscriber Table option on the **CCP Dashboard Config** tab.

Step	Action
2	In the Search Fields area, select the user defined search key to change and click **Edit**. **Note:** You will only be able to edit a search key if it is included in the Available List. To edit a search key from the Selected List, first move it to the Available List. **Result:** You see the Edit Search Key screen.



Step	Action
3	Type a new **Display Name** for the search key if required.
4	Tick or clear the **Allow Duplicate Keys** check box, as required.
5	If Allow Duplicate Keys is selected, edit the **Maximum Duplicate Keys** value as required.
6	Click **Save**.

Deleting a search key

Follow these steps to delete a search key field from the Subscriber Table.

Note: A search key may only be deleted if it is not in use.

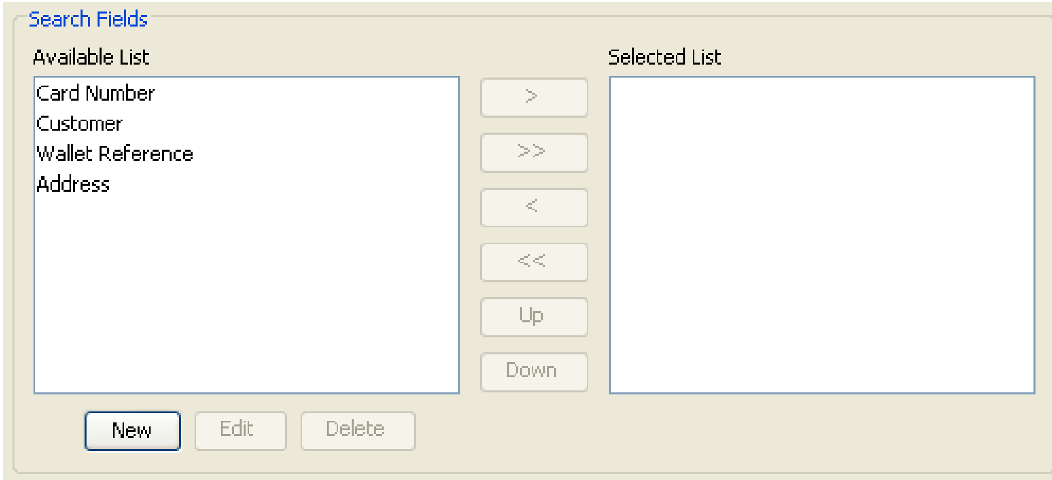
Step	Action
1	Select the Subscriber Table option on the **CCP Dashboard Config** tab.
2	Select the user defined search key you want to delete from the Available List in the Search Fields panel, and click **Delete**. **Result:** You see the Delete Confirmation prompt.
3	Click **OK**. **Result:** The search key is removed from the Available List.

Configuring the subscriber search panel

Follow these steps to configure which fields are displayed in the Subscriber Search Panel in the CCP Dashboard.

Note: You can display a maximum of three search fields in the Search Panel in addition to the Subscriber ID, which is always present.

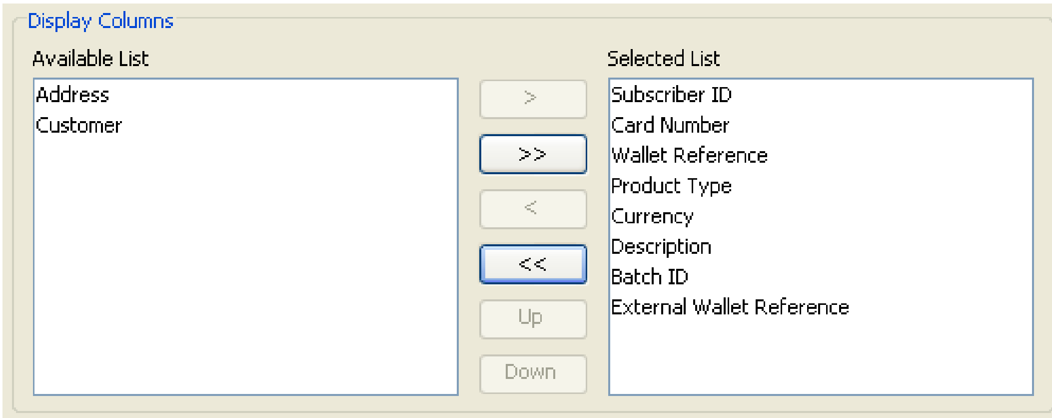
Step	Action
1	In the Subscriber Profile Manager screen, select the **Service Provider** from the drop down list.

Step	Action
2	Select the Subscriber Table option on the **CCP Dashboard Config** tab. **Result:** You see the **Search Fields** area in the top half of the screen. 
3	Edit the **Selected List** as required. To: • Add a field to the list, select the field in the Available List, and click '**>**'. • Remove a field from the list, select the field in the Selected List, and click '**<**'. **Tip:** To remove all the selected fields from the list, click '**<<**'.
4	Order the fields in the Selected List as required. This will determine the order in which the fields appear in the search panel in the CCP Dashboard. To: • Move a field up the list, select it in the Selected List, and click **Up**. • Move a field down the list, select it in the Selected List, and click **Down**.
5	Click **Save**. **Result:** You see the Configuration Saved confirmation.
6	Click **OK**.

Configuring the subscriber search results

Follow these steps to configure which columns appear in the subscriber search results grid in the CCP Dashboard.

Step	Action
1	In the Subscriber Profile Manager screen, select the **Service Provider** from the drop down list.

<table>
<tr><th>Step</th><th>Action</th></tr>
<tr><td>2</td><td>Select the Subscriber Table option on the CCP Dashboard Config tab.
Result: You see the Display Columns panel in the bottom half of the screen.

</td></tr>
<tr><td>3</td><td>Edit the Selected List as required. To:

Add a column to the list, select the column in the Available List, and click '>'.
Add all the available columns to the list, click '>>'.
Remove a column from the list, select the column in the Selected List, and click '<'.
Remove all the selected columns from the list, click '<<'.

Note: The Display Columns panel will include any user defined search key fields.</td></tr>
<tr><td>4</td><td>Order the fields in the Selected List as required. This will determine the order in which columns appear in the subscriber search results grid in the CCP Dashboard.
To:

Move a column up the list, select it in the Selected List, and click Up.
Move a column down the list, select it in the Selected List, and click Down.
</td></tr>
<tr><td>5</td><td>Click Save.
Result: You see the Configuration Saved confirmation.</td></tr>
<tr><td>6</td><td>Click OK.</td></tr>
</table>

Defining the default sort column

Follow these steps to define the default sort column to use to order subscriber search results in the CCP Dashboard screen.

<table>
<tr><th>Step</th><th>Action</th></tr>
<tr><td>1</td><td>Select the Subscriber Table option on the CCP Dashboard Config tab.</td></tr>
<tr><td>2</td><td>In the Selected List in the Display Columns panel, select the column name to sort on.</td></tr>
<tr><td>3</td><td>Click Set Default Sort Column.
Result: The column name appears in the Default Sort Column field.</td></tr>
<tr><td>4</td><td>Click Save.
Result: You see the Configuration Saved confirmation.</td></tr>
<tr><td>5</td><td>Click OK.</td></tr>
</table>

Quick View

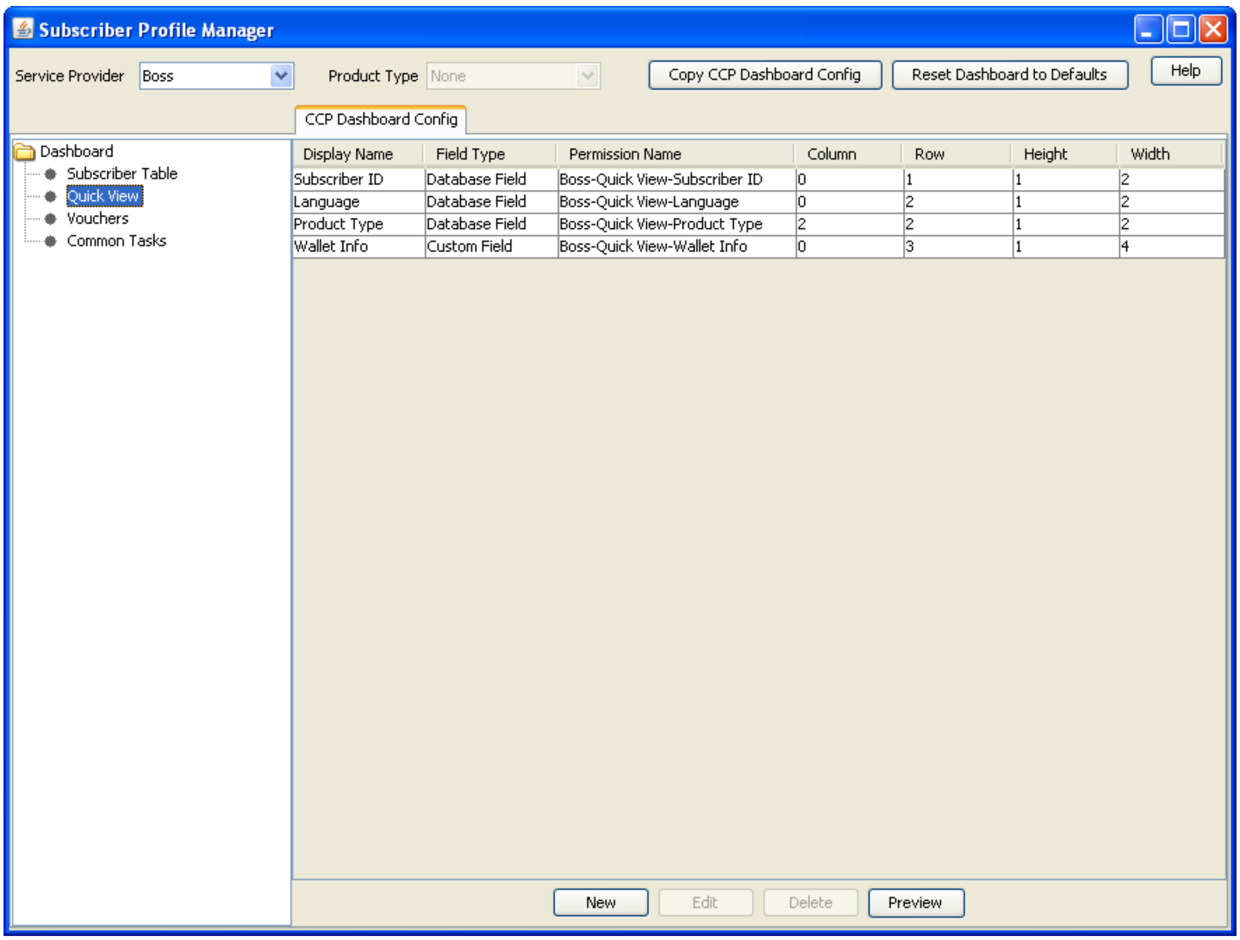
Introduction

The Quick View option on the **CCP Dashboard Config** tab lets you configure which fields are displayed in the Quick View panel in the CCP Dashboard.

Tip: If more than one Service Provider is using the service, you can specify a different configuration for each one.

Quick View option

Here is an example of the Quick View configuration options on the **CCP Dashboard Config** tab on the Subscriber Profile Manager screen.



Quick view field types

This table describes the field types that may be included in the Quick View panel.

Field Type	Description	Additional Information
Custom Field	This is a predefined Group of fields.	
Database Field	This is a standard field defined in the CCS database.	*NCC CCS User's Guide*

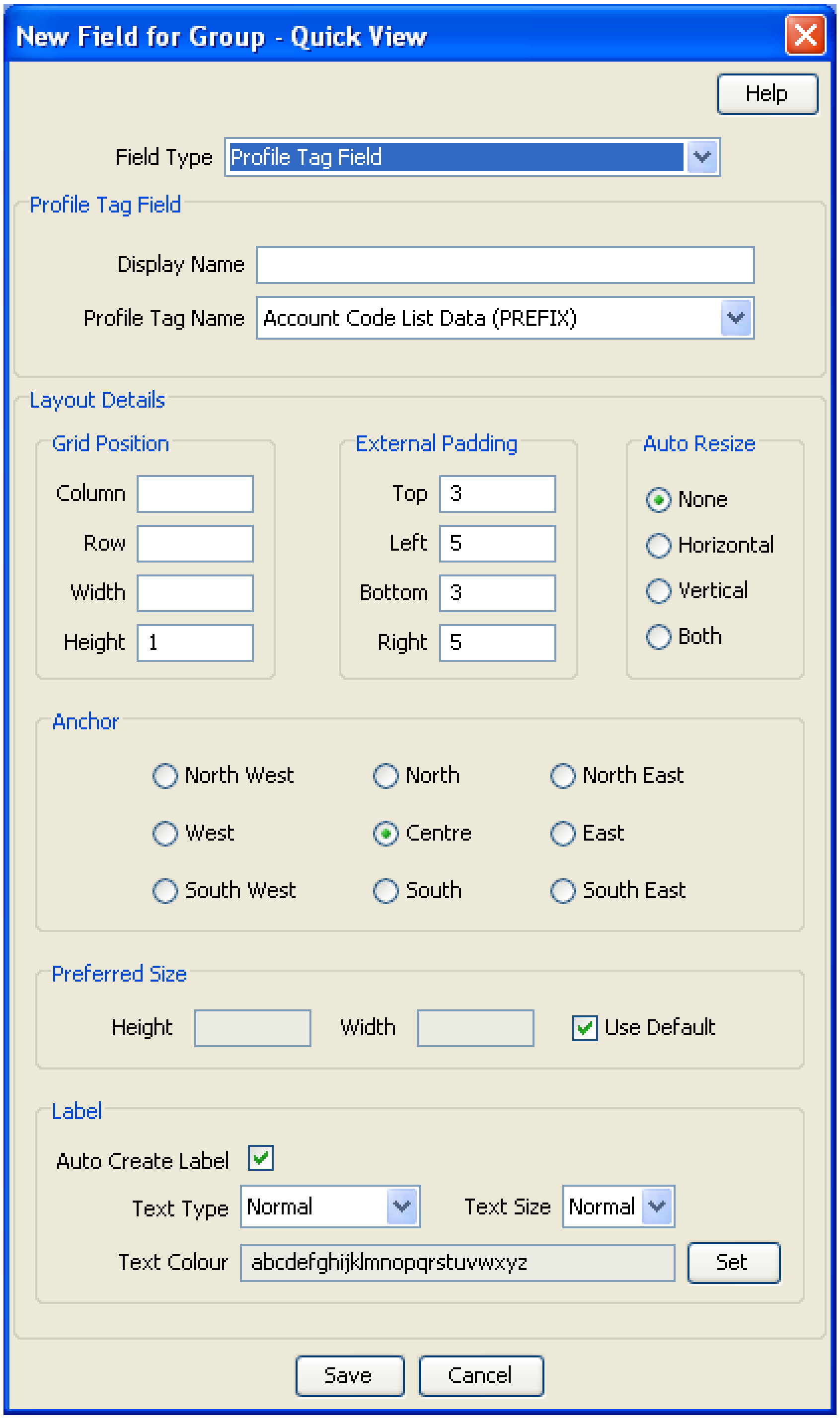
Field Type	Description	Additional Information
Profile Tag Field	This is a profile tag defined in the ACS Configuration screen.	*Profile Tag Fields* (on page 35)
Search Key Field	This is a user defined search field configured in the Search Fields panel.	*Subscriber Table* (on page 53)
Sub-Group	This is a group of fields included in a Sub-Group on the Subscriber Config tree.	*Sub-Group Configuration* (on page 75)

Adding a quick view field

Follow these steps to add a field to the Quick View.

Step	Action
1	Select the Quick View option on the **CCP Dashboard Config** tab and click **New**. **Result:** You see the New Field for Group - Quick View screen.

Step	Action



2 Select the **Field Type** from the drop down box.

Result: You see the field configuration options for the selected field type in the panel below.

3 If you are adding a Database or Search Key field, then specify the:

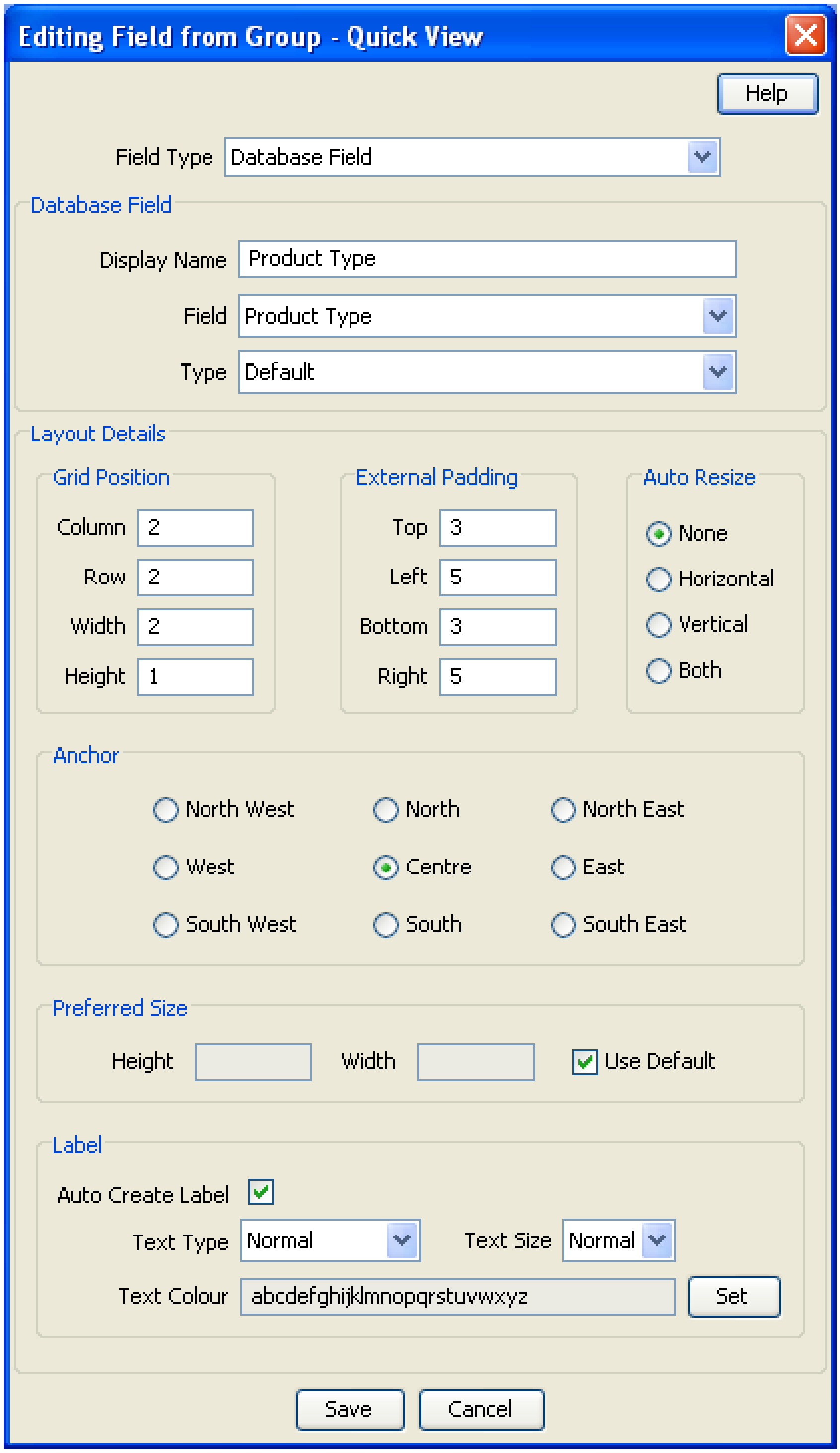
- Display Name
- Field, and

Step	Action
	• Type. If you are adding a Profile Tag Field, then specify the: • Display Name • Profile Tag Name, and • Data Type. If you are adding a Custom Field, then specify the: • Display Name, and • Custom Type. If you are adding a Sub-Group, then specify the: • Display Name, and • Sub-Group. For more information, see *Field Type fields* (on page 16).
4	Specify the **Layout Details** for the field. This will determine where the field will appear in the Quick View panel. For more information on the layout details options, refer to *Screen Layout* (see "*Field Type Definition and Layout*" on page 11, "*Subscriber Profile Manager Screen Layout*" on page 7).
5	Click **Save**.

Editing a quick view field

Follow these steps to edit a field included in the Quick View panel.

Step	Action
1	Select the field you want to edit on the Quick View grid in the **CCP Dashboard Config** tab and click **Edit**. **Result:** You see the Editing Field from Group - Quick View screen.



Step	Action
2	Edit the fields to reflect the changes you need to make. For more information about the: • Fields at the top of this screen, see *Field Type fields* (on page 16) • Layout fields on this screen, see *Layout Details* (on page 18)
3	Click **Save**.

Deleting a quick view field

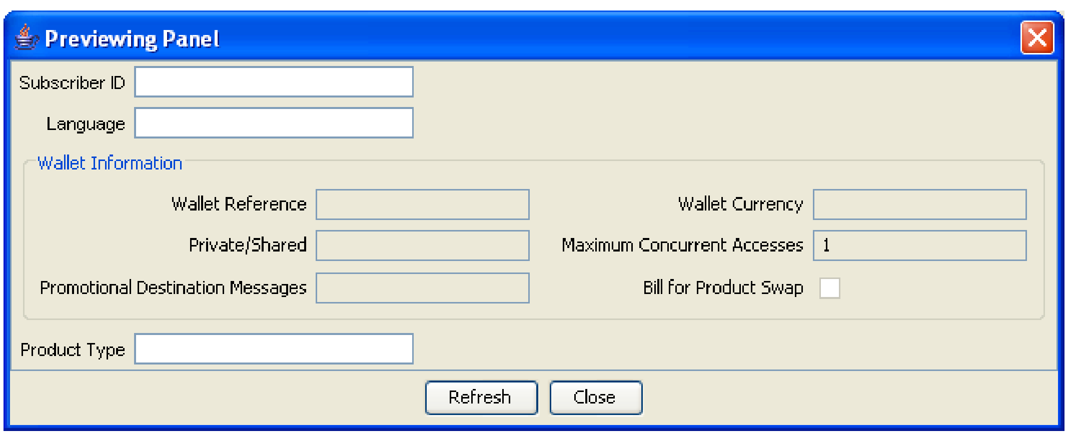
Follow these steps to delete a field from the Quick View panel.

Step	Action
1	Select the field to delete on the quick view grid in the **CCP Dashboard Config** tab and click **Delete**. **Result:** You see the Delete Confirmation prompt.
2	Click **OK**.

Previewing the quick view panel

Follow these steps to preview how the configured fields will appear in the Quick View panel in the CCP Dashboard.

Step	Action
1	Select the Quick View option of the **CCP Dashboard Config** tab.
2	Click **Preview**. **Result:** You see the Previewing Panel screen for the Quick View.



Step	Action
3	When you have finished previewing the screen, click **Close**. **Result:** The Preview Panel closes and you are returned to Quick View. **Tip:** To see an updated Preview Panel at any stage during the editing process, keep the Preview Panel open and click **Refresh**.

Vouchers

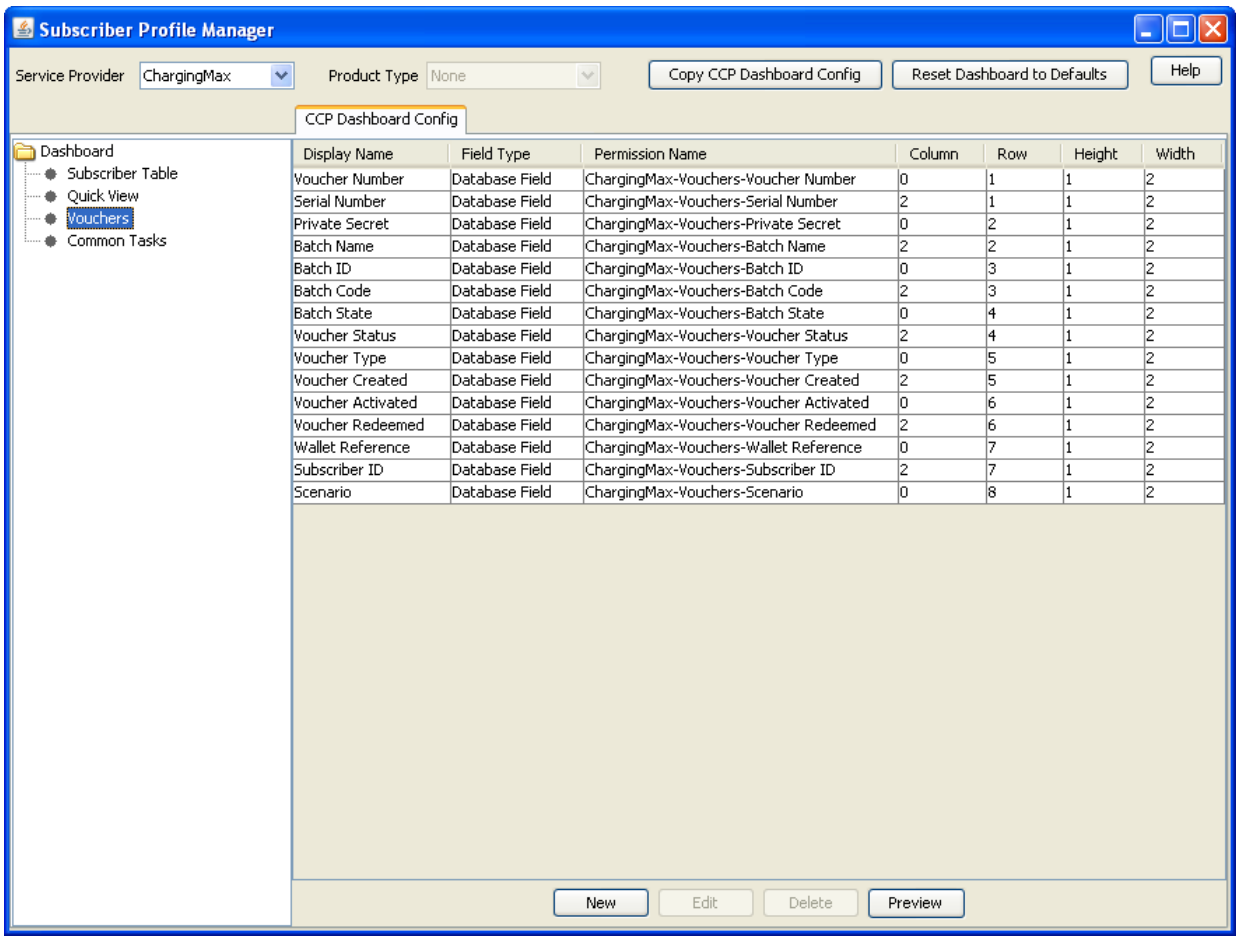
Introduction

The Vouchers option in the **CCP Dashboard Config** tab lets you configure the contents and layout of the Vouchers panel in the CCP Dashboard.

Tip: If more than one Service Provider is using the service, you can specify a different configuration for each one.

Vouchers configuration option

Here is an example of the Vouchers option on the **CCP Dashboard Config** tab on the Subscriber Profile Manager screen.



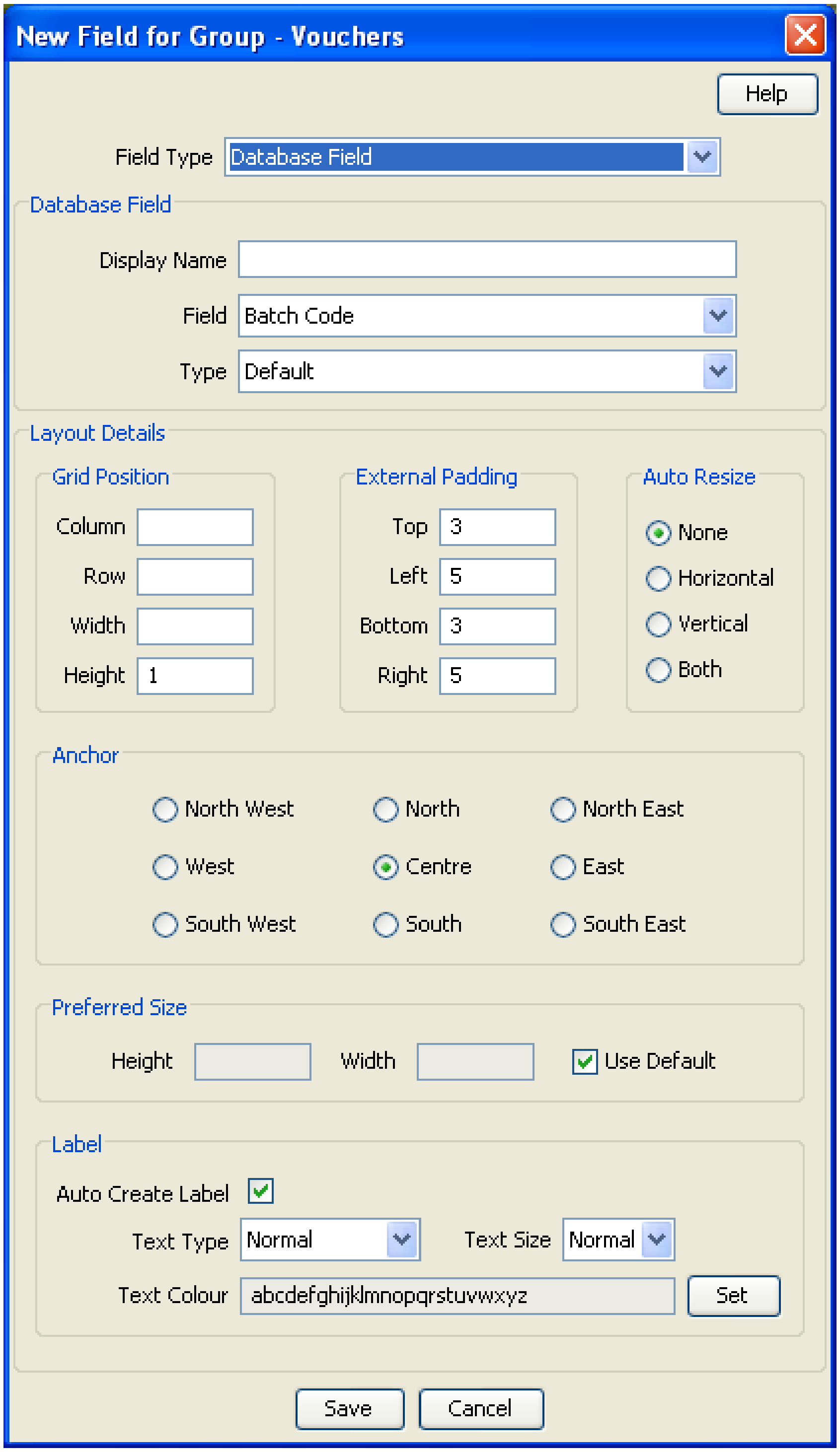
Adding vouchers panel fields

Follow these steps to add a field to the Vouchers panel.

Note: You may only add database fields to the Vouchers panel.

Step	Action
1	Select the Vouchers option from the left hand panel on the **CCP Dashboard Config** tab and click **New**. **Result:** You see the New Field for Group - Vouchers screen.

Step	Action



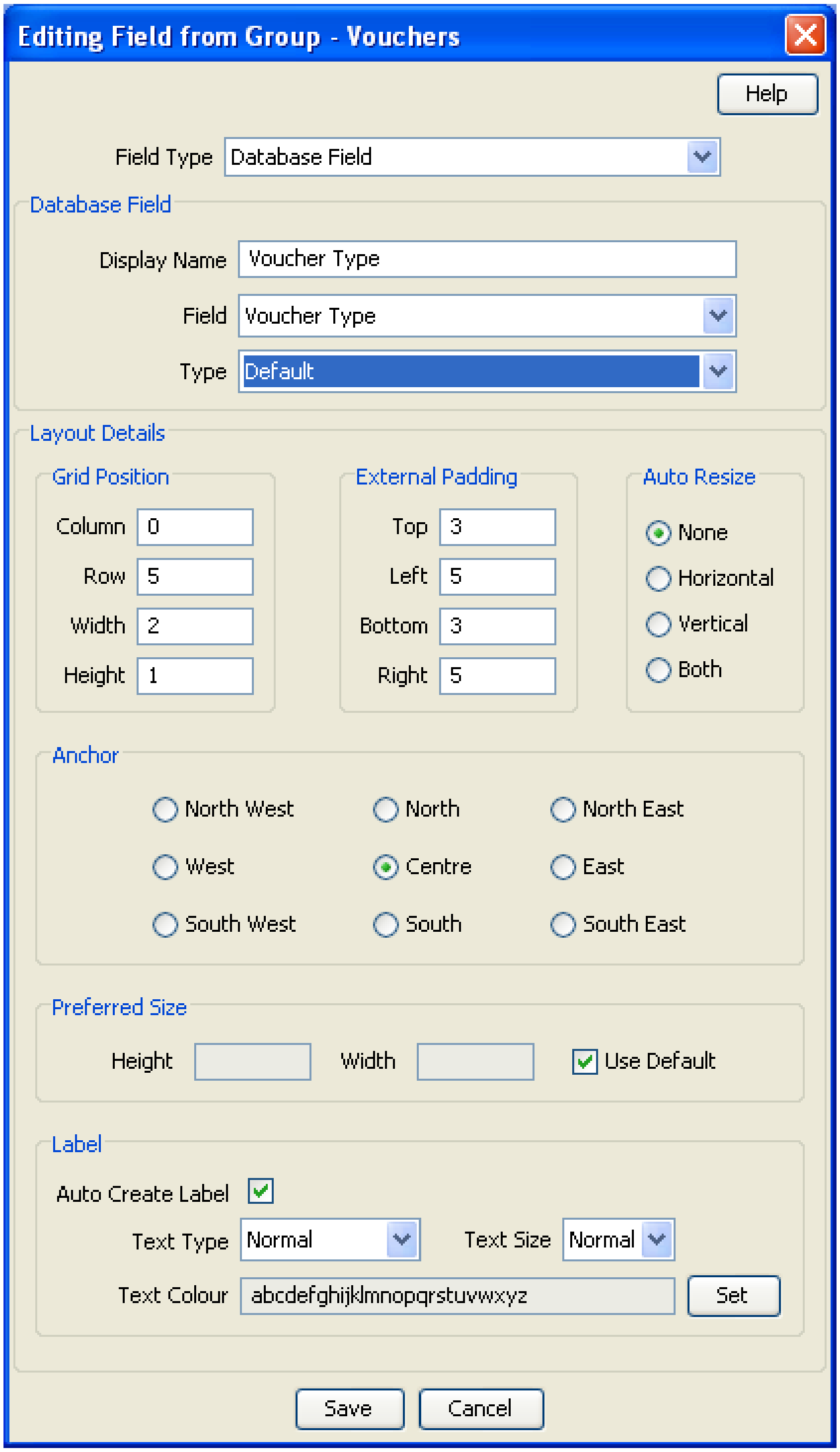
Step	Action
2	In the **Display Name** field, type the label you want to appear next to the field in the Vouchers panel.
	Note: This label is only displayed if Auto Create Label is selected.
3	Select the Database Field you want to add from the **Field** drop down list.
	Note: Only fields relevant to the Vouchers panel will be available.

Step	Action
4	Select the data entry **Type** method from the drop down list. This determines the type of data entry box used to display the field in the Preview panel.
5	Specify the **Layout Details** for the field. This will determine where the field will appear on the Vouchers panel.
	For more information on the layout details options, refer to *Layout Details* (on page 18).
6	Click **Save**.

Editing vouchers panel fields

Follow these steps to edit the configuration of a vouchers field in the Vouchers panel in the CCP Dashboard.

Step	Action
1	Select the field you want to edit on the vouchers grid in the **CCP Dashboard Config** tab and click **Edit**.
	Result: You see the Editing Field from Group - Vouchers screen.

Step	Action
	
2	Modify the **Display Name** as required.
3	Select a different **Field** from the drop down list if required.
4	Modify the **Layout Details** as required. For more information on the layout details options, refer to *Layout Details* (on page 18).
5	Click **Save**.

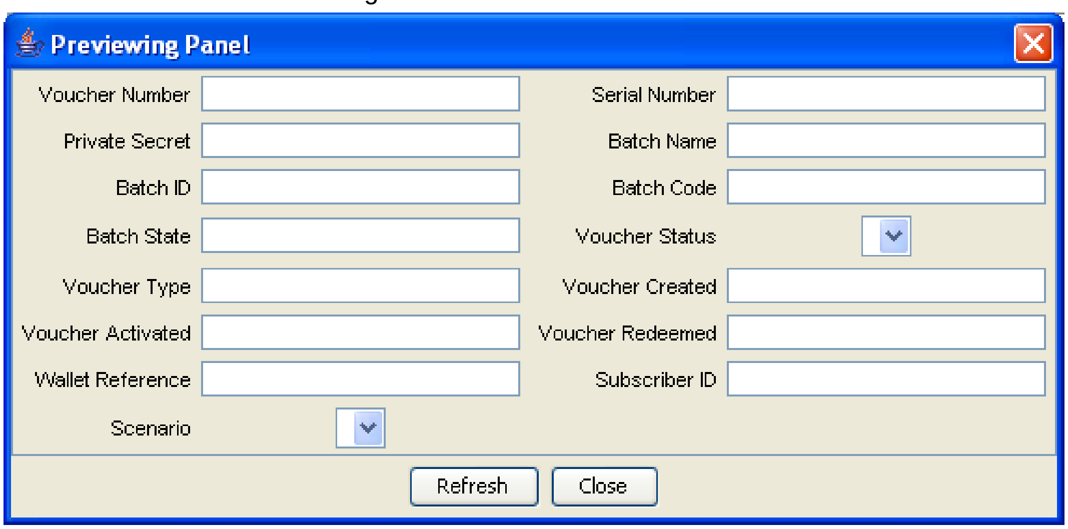
Deleting a vouchers field

Follow these steps to delete a field from the Vouchers panel in the CCP Dashboard.

Step	Action
1	Select the field to delete on the vouchers grid in the **CCP Dashboard Config** tab and click **Delete**. **Result:** You see the Delete Confirmation prompt.
2	Click **OK**.

Previewing vouchers

Follow these steps to preview how the configured fields will appear in the Vouchers panel in the CCP Dashboard.

Step	Action
1	Select the Vouchers option of the **CCP Dashboard Config** tab.
2	Click **Preview**. **Result:** You see the Previewing Panel screen for Vouchers. 
3	When you have finished previewing the screen, click **Close**. **Result:** The Preview Panel closes and you are returned to Vouchers configuration.

Common Tasks

Introduction

The Common Tasks option in the **CCP Dashboard Config** tab lets you add, edit and delete the Common Tasks (BPLs) available in the Common Tasks panel in the CCP Dashboard.

Tip: If more than one Service Provider is using the service, you can specify a different configuration for each one.

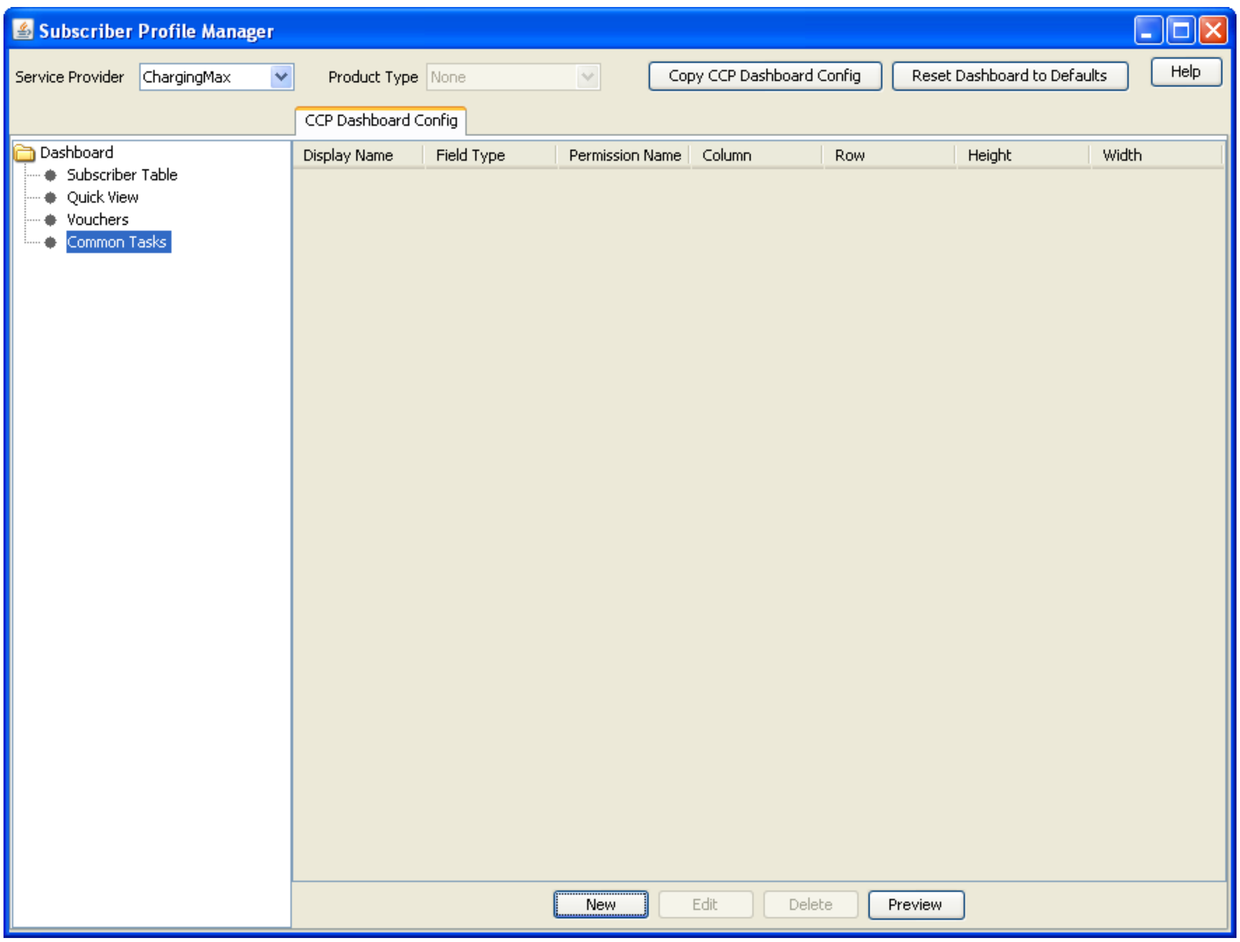
Accessing the Common Tasks option

Follow these steps to access the Common Tasks option on the **CCP Dashboard Config** tab.

Step	Action
1	In the Subscriber Profile Manager screen, select the **Service Provider** from the drop down list.
2	Select the **CCP Dashboard Config** tab. **Result:** You see the list of Dashboard options in the left hand panel.
3	Select the Common Tasks option. **Result:** You see the BPL tasks currently defined for the Common Tasks panel listed on the table.

Common Tasks configuration screen

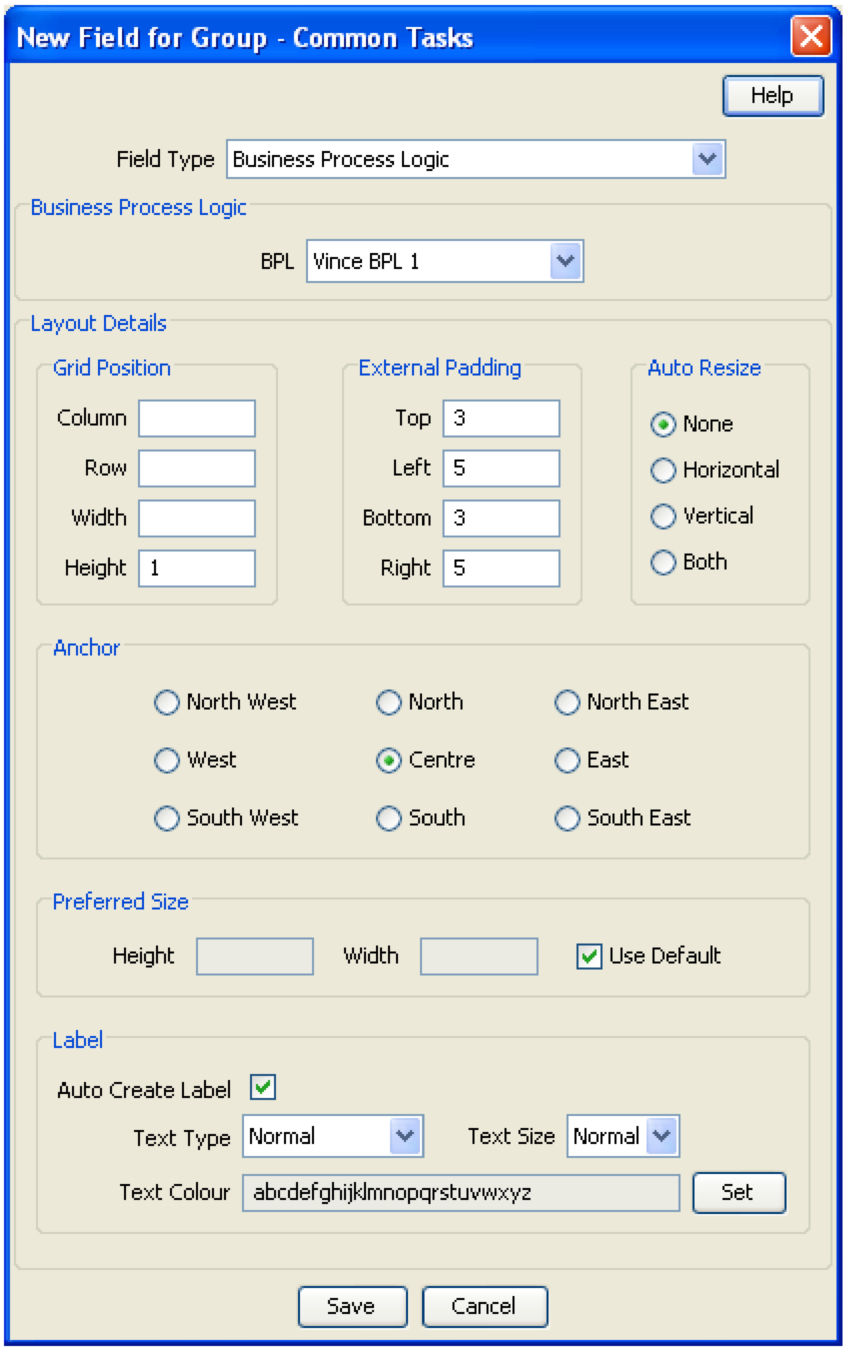
Here is an example of the Common Tasks option on the **CCP Dashboard Config** tab on the Subscriber Profile Manager screen.



Adding common tasks

Follow these steps to add a BPL to the Common Tasks panel in the CCP Dashboard.

Step	Action
1	Select the Common Tasks option from the left hand panel on the **CCP Dashboard Config** tab and click **New**. **Result:** You see the New Field for Group - Common Tasks screen.

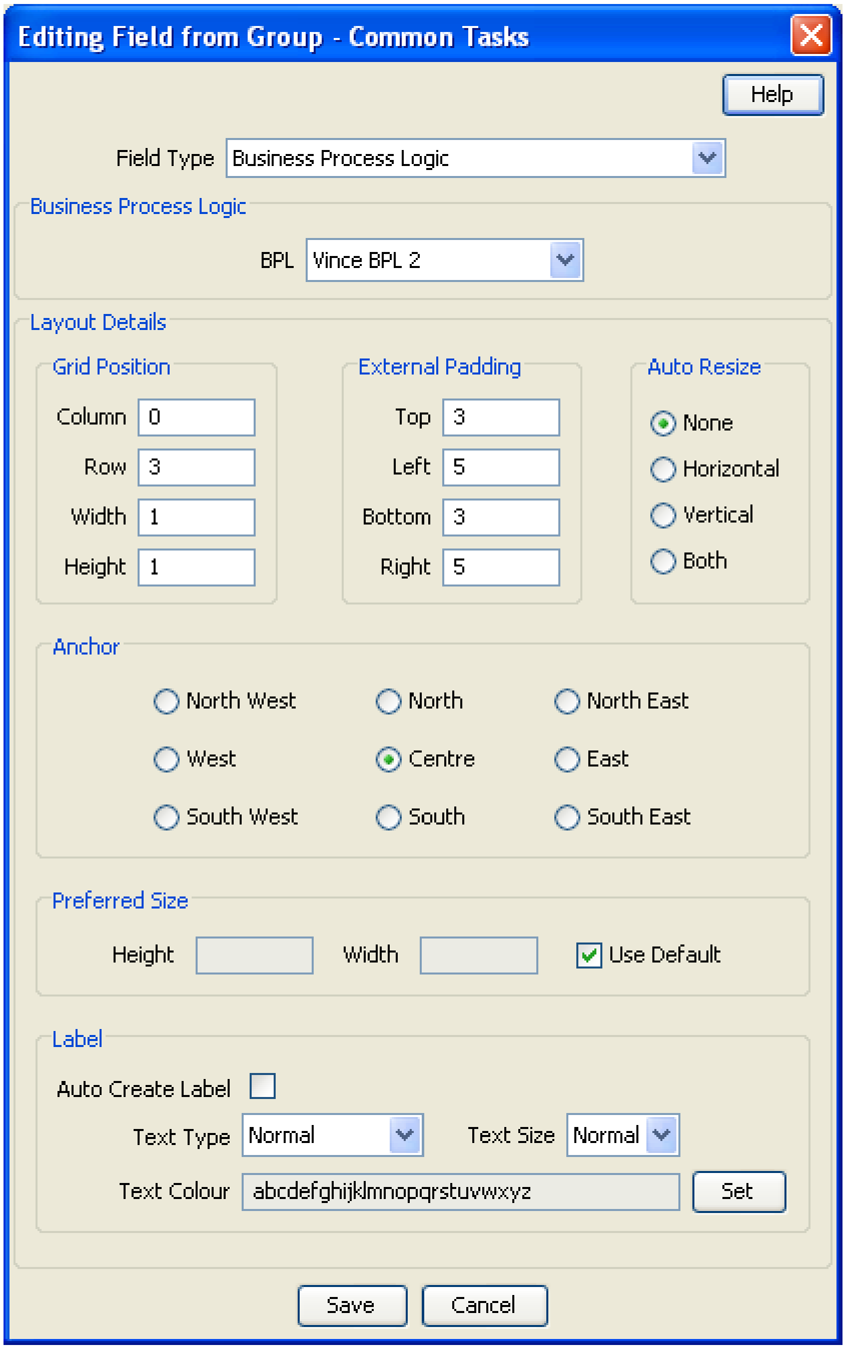


Step	Action
2	Select the **BPL** you want to add from the drop down list. **Note:** Business Process Logic is the preselected Field Type for the Common Tasks group and this cannot be changed.
3	Specify the **Layout Details** for the BPL. This will determine where the field will appear on the Common Tasks panel. For more information on the layout details options, refer to *Screen Layout* (see "*Field Type Definition and Layout*" on page 11, "*Subscriber Profile Manager Screen Layout*" on page 7). **Note:** If Auto Create Label is selected then the BPL name will be displayed next to the BPL button.
4	Click **Save**.

Editing common tasks

Follow these steps to edit the available BPL tasks in the Common Tasks panel in the CCP Dashboard.

Step	Action
1	Select the BPL field to edit on the common tasks grid in the **CCP Dashboard Config** tab and click **Edit**. **Result:** You see the Editing Field from Group - Common Tasks screen.

Step	Action
	
2	Select a different **BPL** from the drop down list if required.
3	Modify the **Layout Details** as required. For more information on the layout details options, refer to *Layout Details* (on page 18).
4	Click **Save**.

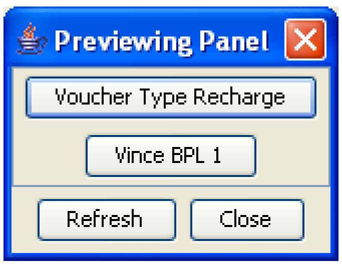
Deleting common tasks

Follow these steps to delete a BPL from the Common Tasks panel in the CCP Dashboard.

Step	Action
1	Select the BPL to delete on the common tasks grid in the **CCP Dashboard Config** tab and click **Delete**. **Result:** You see the Delete Confirmation prompt.
2	Click **OK**.

Previewing common tasks

Follow these steps to preview how the configured BPLs will appear in the Common Tasks panel in the CCP Dashboard.

Step	Action
1	Select the Common Tasks option in the left hand panel of the **CCP Dashboard Config** tab.
2	Click **Preview**. **Result:** You see the Previewing Panel screen for Common Tasks. 
3	When you have finished previewing, click **Close**. **Result:** The Previewing Panel screen closes and you are returned to Common Tasks.

Chapter 9

Sub-Group Configuration

Overview

Introduction

This chapter explains how to configure sub-groups.

In this chapter

This chapter contains the following topics.

Sub-Groups

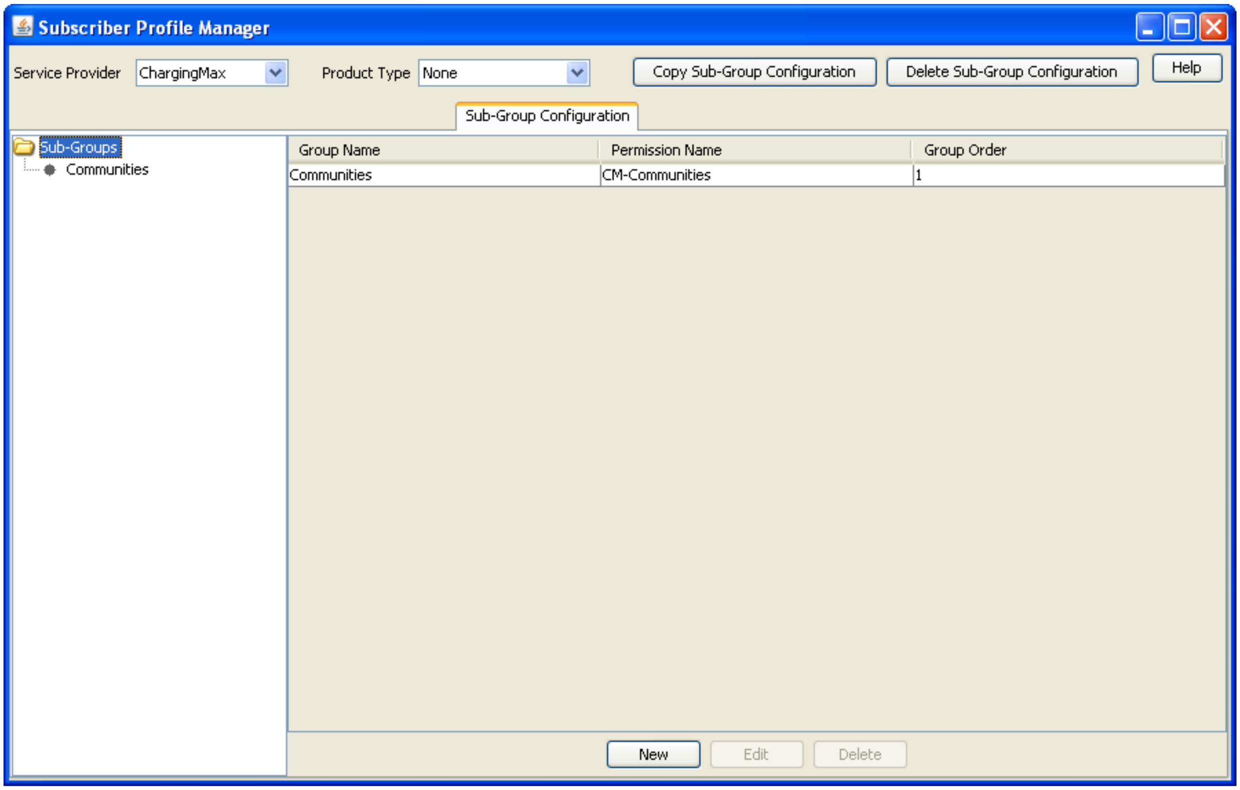
Introduction

Sub-groups groups are used to define a set of fields which can be displayed on the Edit Subscriber screen and/or the CCP Dashboard.

Sub-groups can be used as templates in the **Subscriber Config** and CCP Dashboard **Config** tabs.

Sub-Group Configuration tab

Here is an example **Sub-Group Configuration** tab on the Subscriber Profile Manager screen.



Sub-group Group fields

This table describes the function of each field.

Field	Description
Group Name	The name of the group. This drop down list is populated by the **Group Configuration** tab, and defines the label of the group which will appear on the Edit Subscriber screen or CCP Dashboard.
Group Order	This number controls the order the sub-groups will be displayed in in the **Sub-Group Configuration** tab. **Note:** Groups that have the same group order number will be ordered alphabetically.

Assigning a group

To assign a group to a node in the Sub-Groups tree, follow the procedure detailed in *Assigning a group to a node* (on page 8).

Editing a group assignment

To edit the assignment of a group to a node in the Sub-Groups tree, follow the procedure detailed in *Editing a group assignment* (on page 9).

Deleting sub-group groups

To delete a group assigned to a node in the Sub-Groups tree, follow the procedure detailed in *Deleting a group* (on page 10).

Warning: You cannot delete a group that has had fields added to it. Any fields included in the group must be removed from the group before you attempt to delete it.

Sub-Group Field Configuration

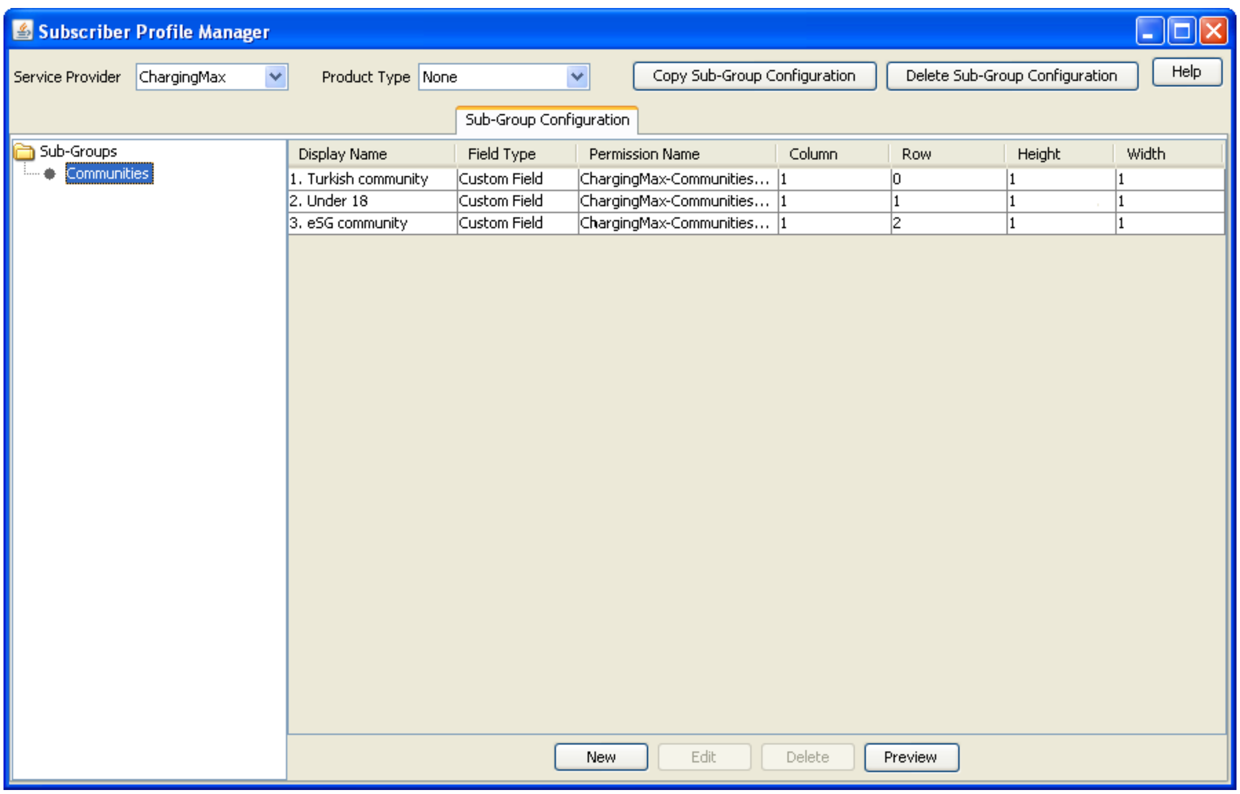
Introduction

You can add, edit and delete the fields belonging to a sub-group assigned to a node in the **Sub-Group Configuration** tab. These fields will be displayed in the sub-group when it is displayed on the Edit Subscriber screen or the CCP Dashboard screen.

Note: To display the sub-group on the Edit Subscriber screen, you must add the sub-group as a field on the **Subscriber Config** tab. For more information, see Adding a new field. To display the sub-group on the CCP Dashboard screen, you must add the sub-group as a field on the CCP Dashboard **Config** tab. For more information, see *Quick View* (on page 59).

Sub-Group Configuration tab - fields

Here is an example of the **Sub-Group Configuration** tab showing fields in the grid.

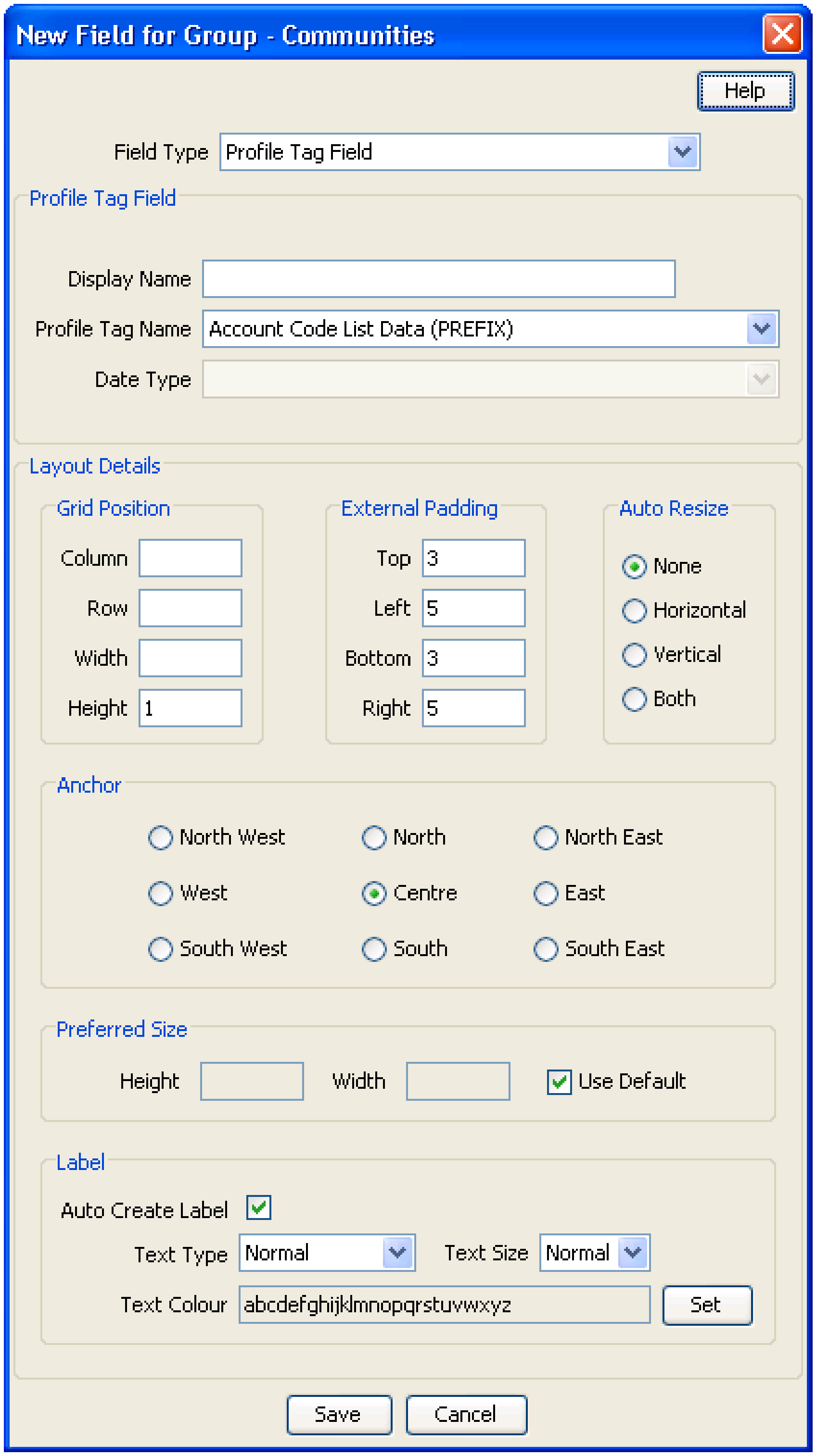


Adding new field for Sub-Group group

Follow these steps to add a field for a sub-group group.

Step	Action
1	In the Subscriber Profile Management screen, select the Service Provider and Product Type this sub-group will be available for.
2	Select the **Sub-Group Configuration** tab.
3	In the Sub-Groups config tree on the left-hand side of the screen, select the sub-group to add a field to. **Result:** The grid will display the fields which have been configured for the sub-group you have selected. For an example of this screen, see *Sub-Group Configuration tab - fields* (on page 77). **Note:** The grid will only display the fields which have been configured for the selected sub-group for the service provider and product type combination selected in step 1.
4	Click **New**. **Result:** You see the **New Field for Group** screen. The name of the currently selected group is appended to the screen name.

Step	Action



Step	Action
5	Select the **Field Type** from the drop down box. **Result:** You see the field configuration options for the selected field type in the panel below.
6	If you are adding a database field, specify:

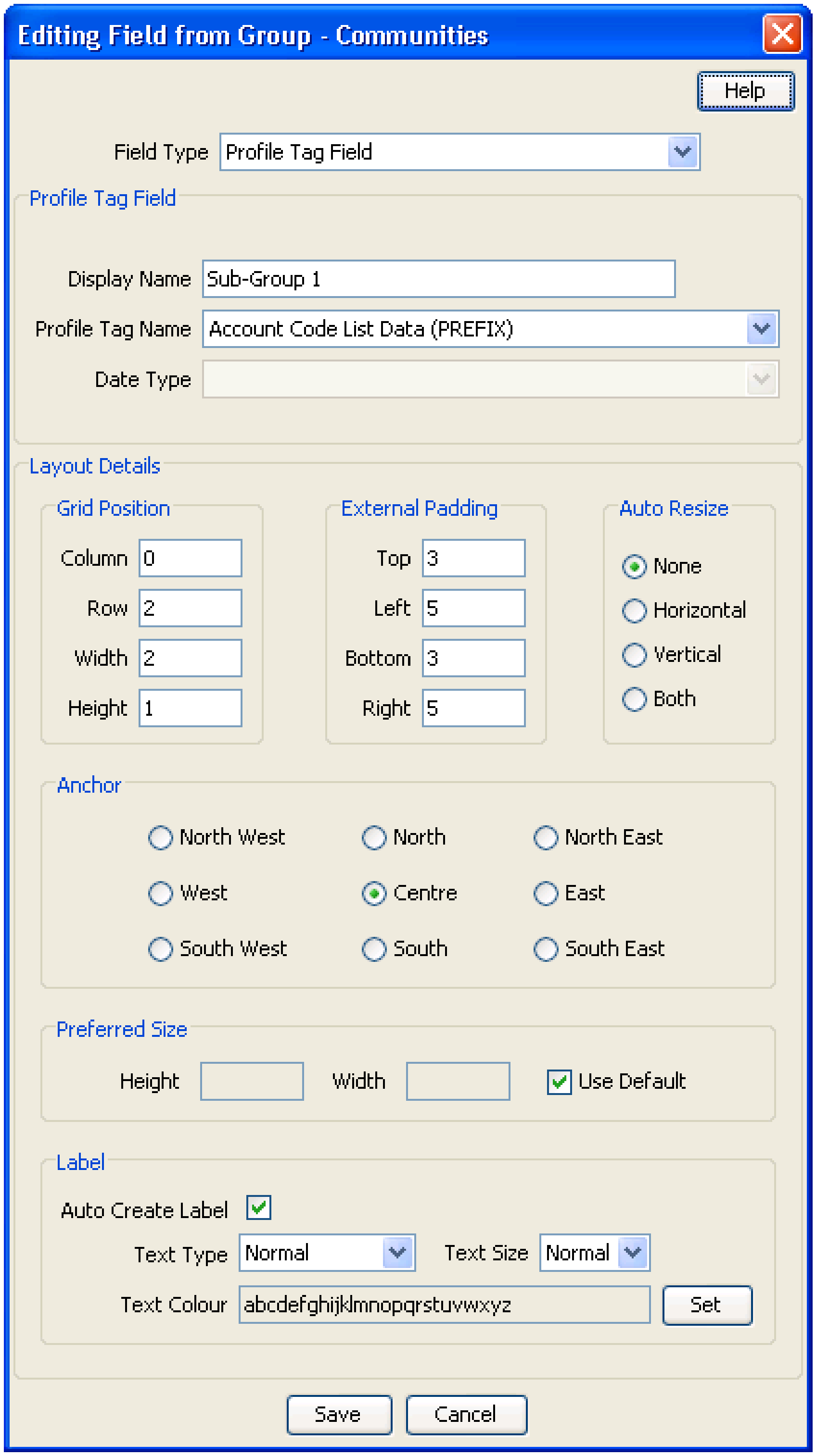
Step	Action
	• **Display Name** • **Field** • **Type** If you are adding a BPL task, then select the BPL task name. If you are adding a profile tag field, then specify: • **Display Name** • **Profile Tag Name** • **Data Type** **Note:** You can add the following types of profile field to a sub-group: DATE, BOOLEAN, BYTE, INTEGER, PREFIX, OPREFIX, STRING, NSTRING, DISCOUNT, PATTERNS, ZONE (the profile tag must be in the range 4128770 to 4194303). You cannot add LOPREFIX profile fields to a sub-group configuration. If you are adding a custom field, then specify: • **Display Name** • **Custom Type** If you are adding a Periodic Charge, then specify: • **Display Name** • **Periodic Charge** • **Show Date Fields** For more information, see *Field Type fields* (on page 16).
7	Specify the **Layout Details** for the field. This will determine where the field will appear on the group panel in the Edit Subscriber screen. For more information on the layout details options, refer to *Layout Details* (on page 18).
8	Click **Save**.

Editing field from Sub-Group group

Follow these steps to edit a field in a sub-group.

Step	Action
1	In the Subscriber Profile Management screen, select the Service Provider and Product Type the sub-group to change is associated with.
2	Select the **Sub-Group Configuration** tab.
3	In the Sub-Groups config tree on the left-hand side of the screen, select the sub-group which contains the field to edit. **Result:** The grid will display the fields which have been configured for the sub-group you have selected. For an example of this screen, see *Sub-Group Configuration tab - fields* (on page 77).
4	Select the field on the grid and click **Edit**. **Result:** You see the Editing Field from Group screen. The name of the currently selected group is appended to the screen name.

Step	Action



5 Edit the fields to reflect the changes you need to make.

For more information about the fields at the top of this screen, see *Field Type fields* (on page 16).

Step	Action
	For more information about the layout fields on this screen, see *Layout Details* (on page 18).
6	Click **Save**.

Deleting a field

Follow these steps to delete a field from a sub-group.

Step	Action
1	In the Subscriber Profile Management screen, select the Service Provider and Product Type the sub-group to remove is associated with.
2	Select the **Sub-Group Configuration** tab.
3	In the Sub-Groups config tree on the left-hand side of the screen, select the sub-group which contains the field to delete.
	Result: The grid will display the fields which have been configured for the sub-group you have selected. For an example of this screen, see *Sub-Group Configuration tab - fields* (on page 77).
4	Select the field to delete on the grid and click **Delete**.
	Result: You see the Delete Confirmation prompt.
5	Click **OK**.
	Result: The field is removed from the grid.

Chapter 10

Copying and Deleting Configuration

Overview

Introduction

This chapter explains how to copy and delete configuration.

In this chapter

This chapter contains the following topics.

Copying Configuration

Introduction

The Copy function allows you to copy the SPM configuration defined for the currently selected service provider and product type to a new service provider and/or product type.

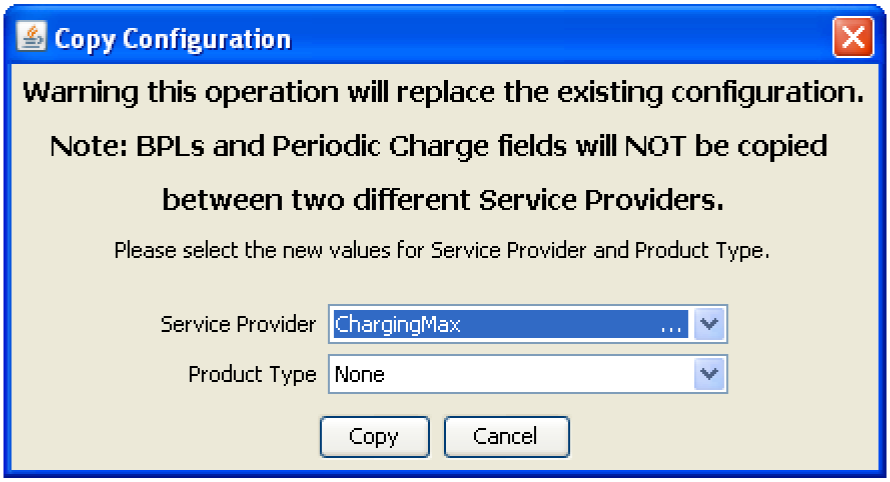
Note: You can only copy periodic charges to a new product type with the same service provider, not to a new service provider.

Copying configuration

Follow these steps to copy the configuration for a selected Service Provider and Product Type.

Note: The copy operation will only copy the configuration for the tab you have selected.

Step	Action
1	In the Subscriber Profile Manager screen, select the **Service Provider** that you want to copy from.
2	From the drop down list, select the **Product Type** you want to copy from. **Note:** Product type selection is disabled from the CCP Dashboard and Group Configuration tabs. To enable product type selection, click on the **Subscriber Config**, **Product Type Config**, or **Sub-Group Configuration** tabs.
3	Select the tab of the records to copy. To copy: • Edit Subscriber screen configuration, select the **Subscriber Config** tab. • Edit Product Type screen configuration, select the **Product Type Config** tab. • Sub-Groups, select the **Sub-Group Configuration** tab.
4	Click the **Copy <data>** button at the top of the screen. **Result:** You see the Copy Configuration screen showing details of the records you can copy with this operation.



Step	Action
5	To copy the configuration to a different Service Provider, select the new **Service Provider** from the drop down list. **Note:** Selecting a new Service Provider means that the CCP Dashboard configuration will also be copied.
6	Select the **Product Type** from the drop down list to which the configuration will be copied. **Warning:** You will not be able to copy configuration to a Product Type for which configuration has already been defined.
7	Click **Copy**.

Deleting Configuration

Introduction

The Delete Configuration function allows you to return some of the configuration for the currently selected Service Provider to the initial defaults.

Notes:

- There are no defaults for product type and sub-group configuration, so returning to defaults will delete all existing configuration for those types of records.
- You cannot delete the configuration defined for the Boss Service Provider.

Returning subscriber configuration to defaults

Follow these steps to return the subscriber configuration for a selected Service Provider to the defaults.

Note: Returning subscriber configuration does not delete any sub-groups which are used by the subscriber configuration.

Step	Action
1	In the Subscriber Profile Manager screen, select the **Service Provider** whose configuration you want to delete.
2	Select the **Subscriber Config** tab.
3	Click **Reset Subscriber to Defaults**. **Result:** You see the Reset to Defaults Confirmation prompt.

Step	Action
4	Click **OK**. **Result:** The unique Edit Subscriber screen configuration defined for the Service Provider and all its associated Product Types is deleted.

Deleting product type configuration

Follow these steps to delete the Edit Product Type screen configuration for a selected Service Provider.

Step	Action
1	In the Subscriber Profile Manager screen, select the **Service Provider** whose configuration you want to delete.
2	Select the **Product Type Config** tab.
3	Click **Reset Product Type to Defaults**. **Result:** You see the Reset to Defaults Confirmation prompt.
4	Click **OK**. **Result:** The Edit Product Type screen configuration defined for the Service Provider and all its associated Product Types is deleted.

Deleting sub-group configuration

Follow these steps to delete the Sub-groups configuration for a selected Service Provider.

Note: If the sub-groups are used for either Edit Subscriber screen configuration or CCP Dashboard screen configuration, you will not be able to delete them.

Step	Action
1	In the Subscriber Profile Manager screen, select the **Service Provider** whose configuration you want to delete.
2	Select the **Sub-Group Configuration** tab.
3	Click **Delete Sub-Group Configuration**. **Result:** You see the Reset to Defaults Confirmation prompt.
4	Click **OK**. **Result:** The Sub-Group configuration defined for the Service Provider and all its associated Product Types is deleted.

Chapter 11

User Access

Overview

Introduction

This chapter explains the access permissions that must be given to a CSR or other user before they will be able to access the CCP Dashboard and Edit Subscriber screens through the CCP or CCS.

In this chapter

This chapter contains the following topics.

Access Permissions

Introduction

Before a CSR or other user can view or edit subscribers in the CCP Dashboard and Edit Subscriber screens, they must be given appropriate screen access permissions. Access for an individual user must be set at the following levels:

- Service Provider
- Product Type.

Service provider access

For each Service Provider, you must assign appropriate access permissions to each eligible user. This gives the user access to the CCP Dashboard screen as configured for the specific Service Provider. In addition it will give them access to the Edit Subscriber screen as configured for the default product type, `None`.

Product type access

Where the Edit Subscriber screen has been configured for a specific product type, you must assign appropriate access permissions to each eligible user on a product type basis. This gives the user access to the Edit Subscriber screen as configured for the specific product type for subscribers with this product type.

Default product type

The default product type is `None`. The configuration defined for this product type is used where no specific configuration has been defined for the subscriber's product type.

Set the default product type by selecting a product type from the **Product Type** drop down list at the top of the Subscriber Profile Manager screen.

User Management

Introduction

User access permissions are managed through the User Templates defined in the SMS User Management screen.

Note: For details on defining user templates, see the *SMS User's Guide*.

Permission groups

This table describes the permission groups that will give a user access to the information in the CCP Dashboard and Edit Subscriber screens when included in their user template.

Access permissions	Description
CCP_Dashboard	Provides access to the contents of the CCP Dashboard screen.
SPM	Provides access to the CCP Dashboard and Edit Subscriber screens. Access to individual fields must be defined at the service provider level, and may also be defined for individual product types.

Privileges

This table describes the privileges that may be assigned to items in the SMS User Management screen.

Privilege	Description
Access	The item (screen, panel or field) will be visible to the user through the screens.
Read/Only	The field's value (if present) will be visible to the user through the screens, but they will not be able to edit, create, or delete it.
Read/Modify	The field's value (if present) will be visible to the user through the screens, and they will be able to edit it, but they will not be able to create or delete it.
Create/Delete	The field's value (if present) will be visible to the user through the screens, and they will be able to edit, create and delete it.
Execute	Valid for BPL tasks/Common Tasks. The button will be visible to the user through the screens, and they will be able to execute it. Execute privilege is also required for the Voucher Redeem and Voucher Recharge buttons in the CCP Dashboard screen.

Read Only Access

Introduction

You can define a user template that provides the user with read only screen access by setting all SPM permissions to Access or ReadOnly.

Note: A read only user may be able to execute common tasks and credit transfers. However, it is important to ensure that the option to save prior to executing a common task or credit transfer is disabled since this action is not relevant for read only users.

Disabling save and execute

To ensure the **Save & Execute** button is disabled in the Confirm Execute <task> dialog box, set the following CCS permissions to ReadOnly:

- Account Edit *balance*
- Account Edit *bpl*
- Account Edit *Service*
- Account Edit tab

Chapter 12

Best Friend Configuration Example

Overview

Introduction

This chapter explains all the necessary configuration required to set up a Best Friend option for Subscribers. It is intended to provide you with an example of how the Oracle Communications Network Charging and Control Subscriber Profile Manager may be used to customize the features available to Subscribers within the CCP Dashboard and CCS.

In this chapter

This chapter contains the following topics.

Best Friend Option

Introduction

The following topics provide an example of how you can use the SPM to customize the CCP Dashboard and CCS screens to add a Best Friend option. This option gives you the ability to specify a best friend number for Subscribers, which when dialed may be charged at a preferential rate.

Configuration procedure

Here are the basic steps required to provide the facility for a CSR to manage Best Friend numbers through the CCP Dashboard and Edit Subscriber screens.

Step	Action
1	Define the Best Friend profile tag in ACS.
2	Map the Best Friend profile tag to the App Specific 1 profile block type in ACS.
3	Define the Product Type that will include the Best Friend configuration in CCS.
4	Configure the Quick View and Edit Subscriber screens to include the Best Friend field in the SPM.
5	Define what limits will be placed on the Best Friend number on a Product Type basis.
6	Add screen and field access permissions to the user templates.
7	Configure the control plan used for routing a Subscriber's calls to handle calls to the Best Friend number.

Profile Tag Configuration

Introduction

To provide Subscribers with the ability to specify a best friend number you must first configure a best friend profile tag in ACS.

Adding best friend profile tag

Follow these steps to add a best friend profile tag in ACS.

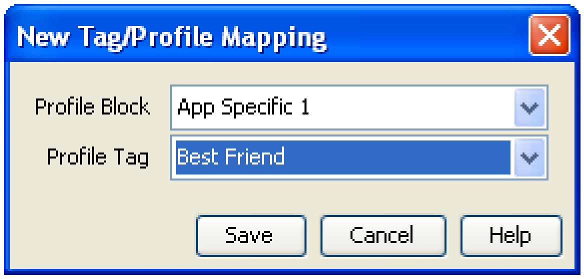
Step	Action
1	Select the **Profile Tag Details** tab on the ACS Configuration screen.
2	In the grid on the tab, check the numbers listed in the Profile Tag column to determine what the next free number is.
3	Click **New**.
	Result: You see the New Profile Tag screen. In this example the screen has been filled in with the details for a Best Friend profile tag.

4	In the **Profile Tag Name** field, type the name for the best friend profile tag.
5	From the **Profile Tag Type** drop down list, select `Limited Numeric String`.
6	In the **Profile Tag** field, type in the unique number determined at step 2.
7	Leave the **Parent Profile Tag** field blank.
8	Leave the **Parameter Type** as `Input`, and click **Save**.

Mapping best friend profile tag

Follow these steps to map the best friend profile tag to the profile block associated with Subscribers.

Step	Action
1	Select the **Profile Tag Mapping** tab on the ACS Configuration screen.
2	Click **New**.
	Result: You see the New Tag/Profile Mapping screen.

Step	Action
	
3	From the **Profile Block** drop down list, select `App Specific 1`. This is the profile block associated with the subscriber.
4	From the **Profile Tag** drop down list, select the `Best Friend` profile tag you created earlier.
5	Click **Save**.

Product Type Configuration

Introduction

You may want to define a specific Product Type for Subscribers who will be given the option to have a best friend number. First you add the Product Type configuration in the Subscriber Management screen. Then you can configure the CCP Dashboard and Edit Subscriber screens to include the Best Friend Profile Tag field.

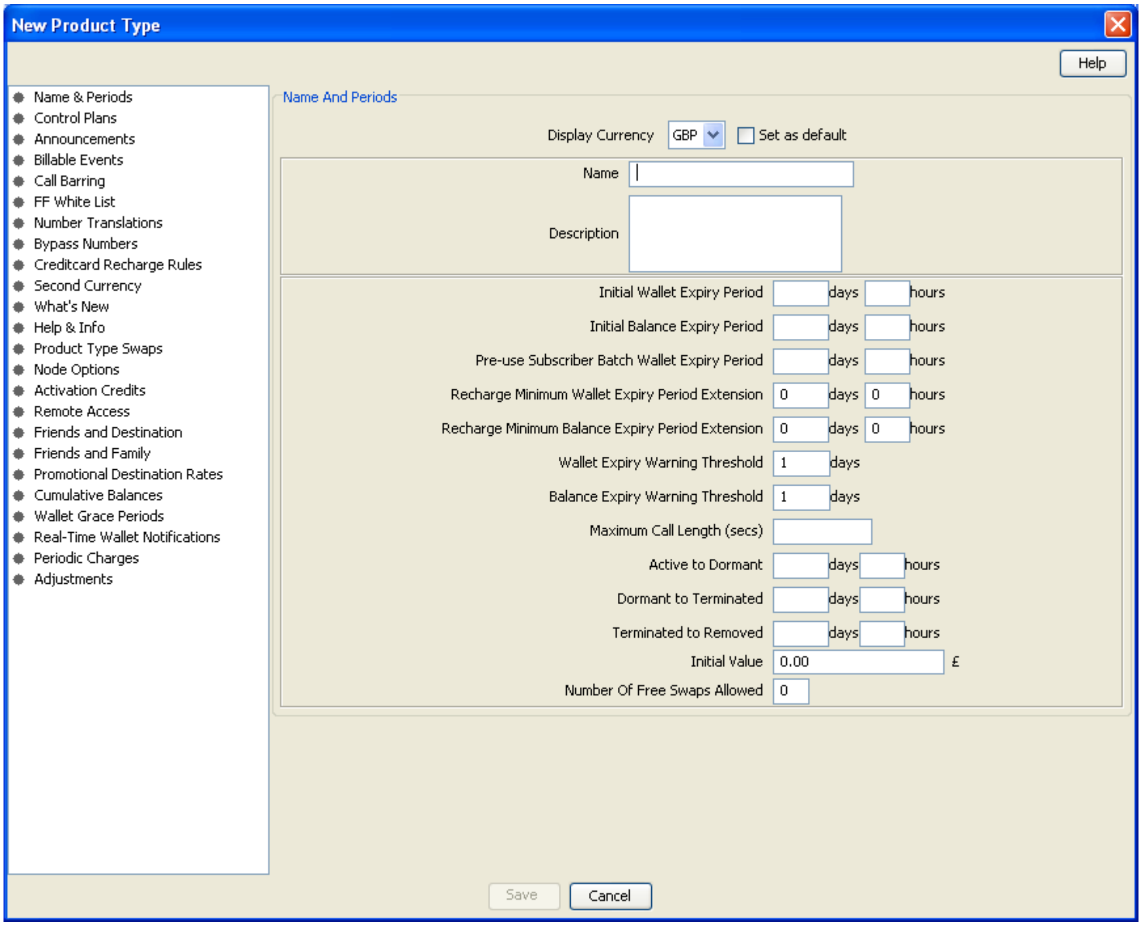
Adding a product type

Follow these steps to add a Product Type for the best friend option.

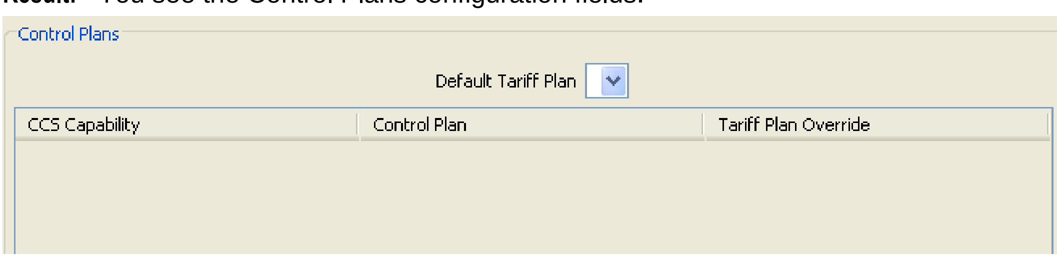
Note: This procedure describes the minimum steps required to configure the Product Type. For more information on configuring Product Types, see the *NCC CCS User's Guide*.

Step	Action
1	Open the **Subscriber Management** screen.
2	From the **Service Provider** drop down list, select the Service Provider you want.
3	Select the **Product Type** tab and click **New**. **Result:** You see the New Product Type screen, Name And Periods configuration fields.

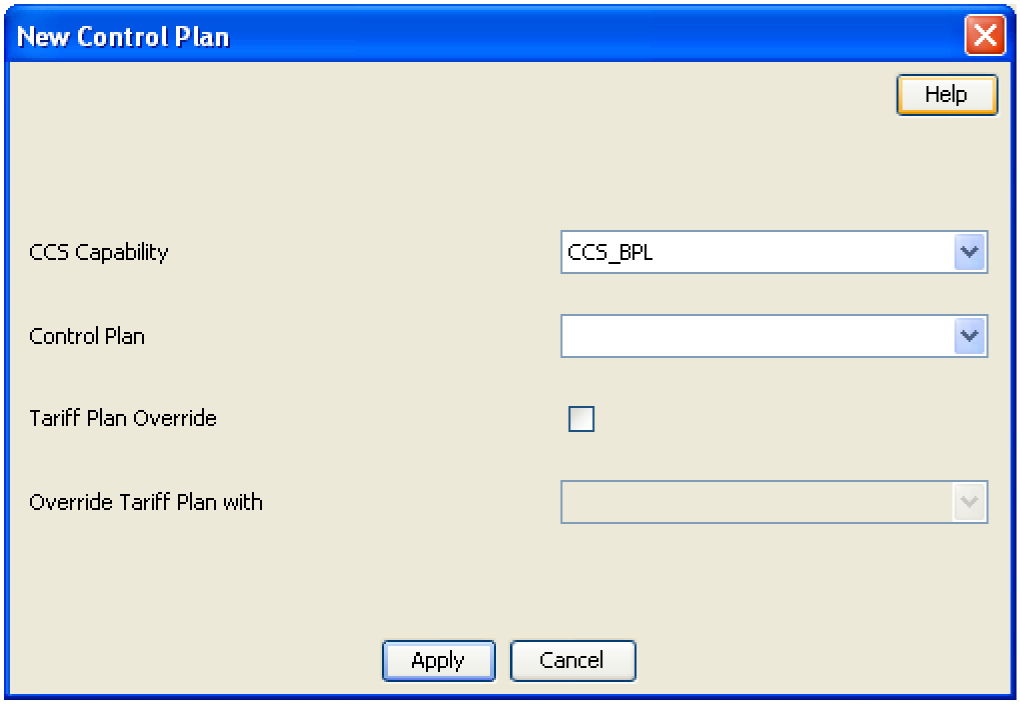
Step	Action



Step	Action
4	In the **Name** field, type a name for the best friend Product Type.
5	In the **Description** field, type a description for the Product Type.
6	Select the Control Plans option on the left hand panel. **Result:** You see the Control Plans configuration fields.



Step	Action
7	Click **New**.
	Result: You see the New Control Plan screen.



Step	Action
8	From the **CCS Capability** drop down list, select the CCS Capability for the Product Type.
9	Click **Apply**.
	Result: You are returned to the New Product Type screen.
10	Click **Save**.

SPM Configuration

Introduction

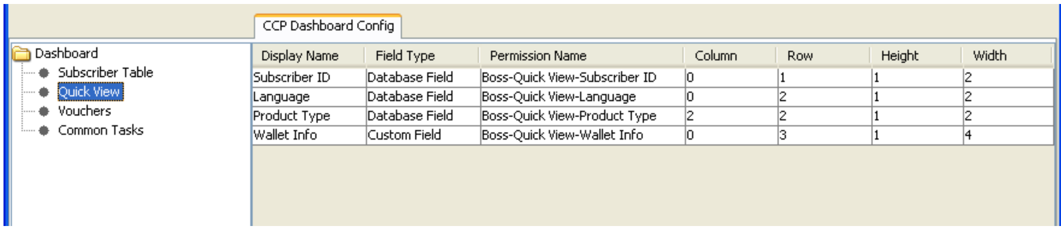
In the SPM configure the CCP Dashboard and Edit Subscriber screens so that they include the Best Friend profile tag field.

Configuring quick view in SPM

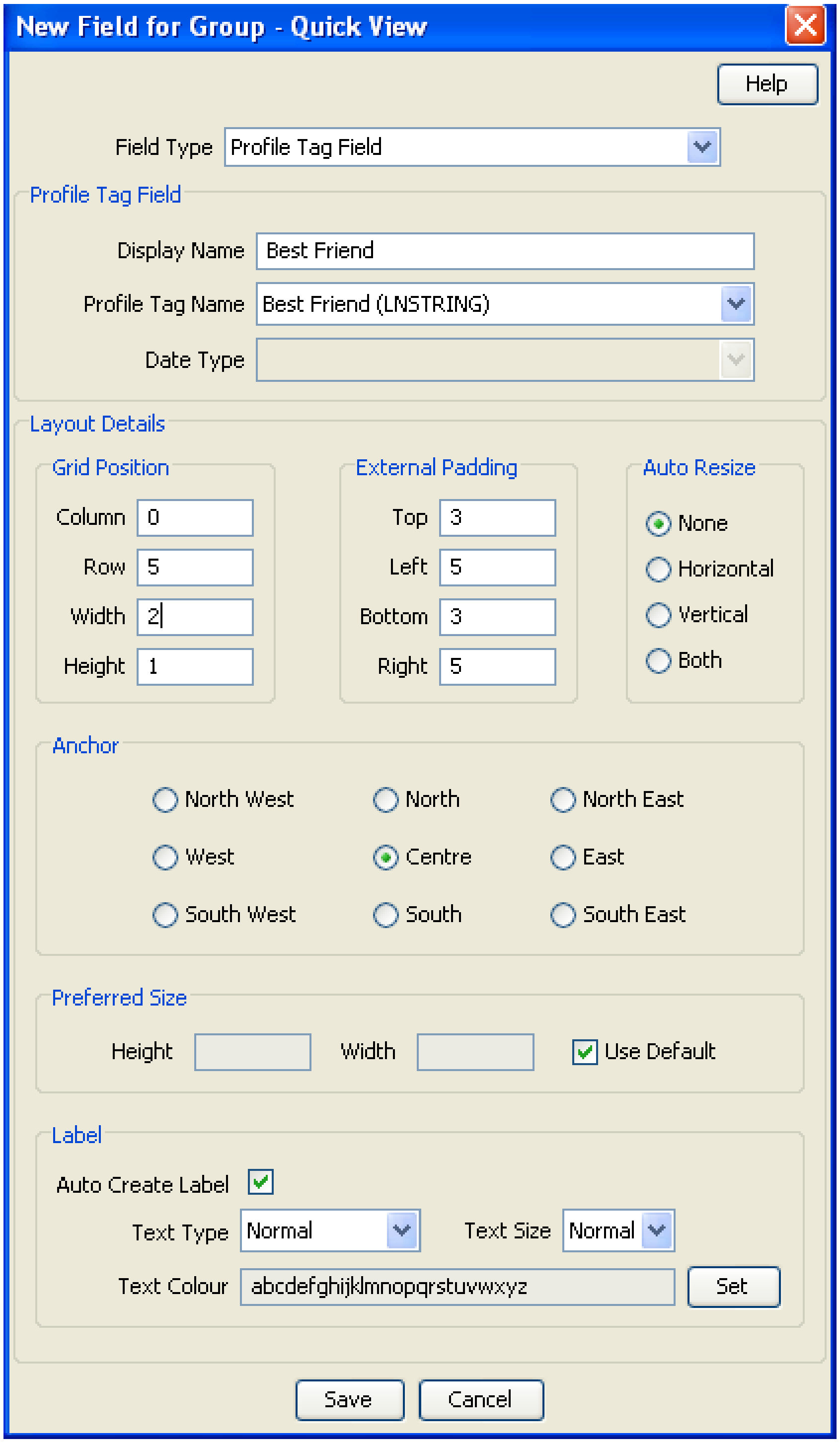
Follow these steps to add the Best Friend profile tag field to the Quick View screen in the SPM.

Step	Action
1	In the Subscriber Profile Manager screen, select the Service Provider you want from the drop down list.
2	From the left hand menu on the **CCP Dashboard Config** tab, select the Quick View option.
	Result: You see the list of fields included in the Quick View default configuration.

Step	Action



Step	Action
3	Click **New**. **Result:** You see the New Field for Group - Quick View screen. In this example the screen has been filled in with the Best Friend profile tag details.

Step	Action
	

4	From the **Field Type** drop down list, select `Profile Tag Field`.
5	In the **Display Name** field type `Best Friend`.
6	From the **Profile Tag Name** drop down list, select the `Best Friend (LNSTRING)` profile tag you added in ACS *Adding best friend profile tag* (on page 92).

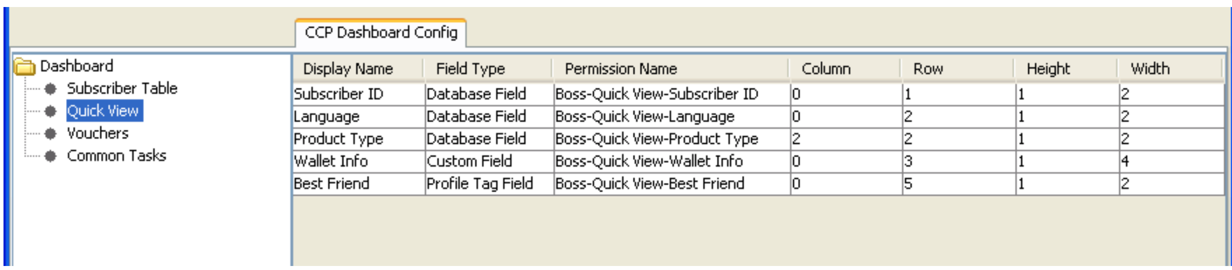
Step	Action
7	In the Layout Details section, specify the Grid Position for the field. Set the: • **Column** to `0` • **Row** to the next available row number • **Width** to `2` • **Height** to `1`
8	Click **Save**.

Adjusting quick view layout

This procedure assumes that the Quick View screen has been configured to include the following fields:

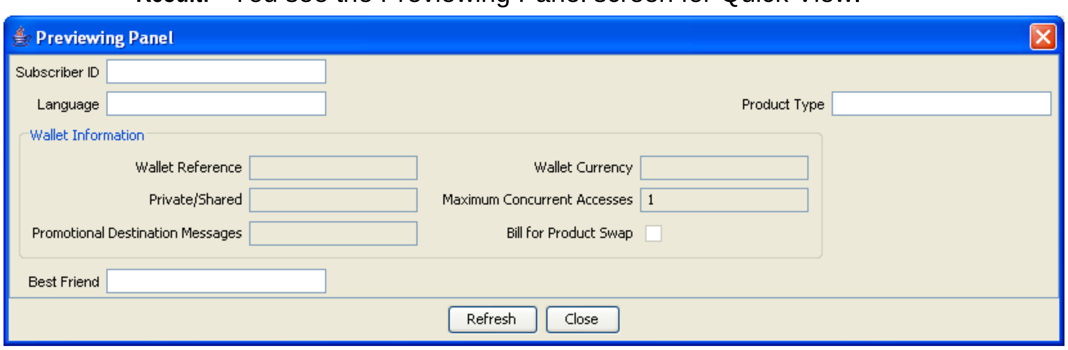
- Language
- Product Type
- Wallet Information Panel
- Best Friend

Here is an example screen showing how the fields have been configured.

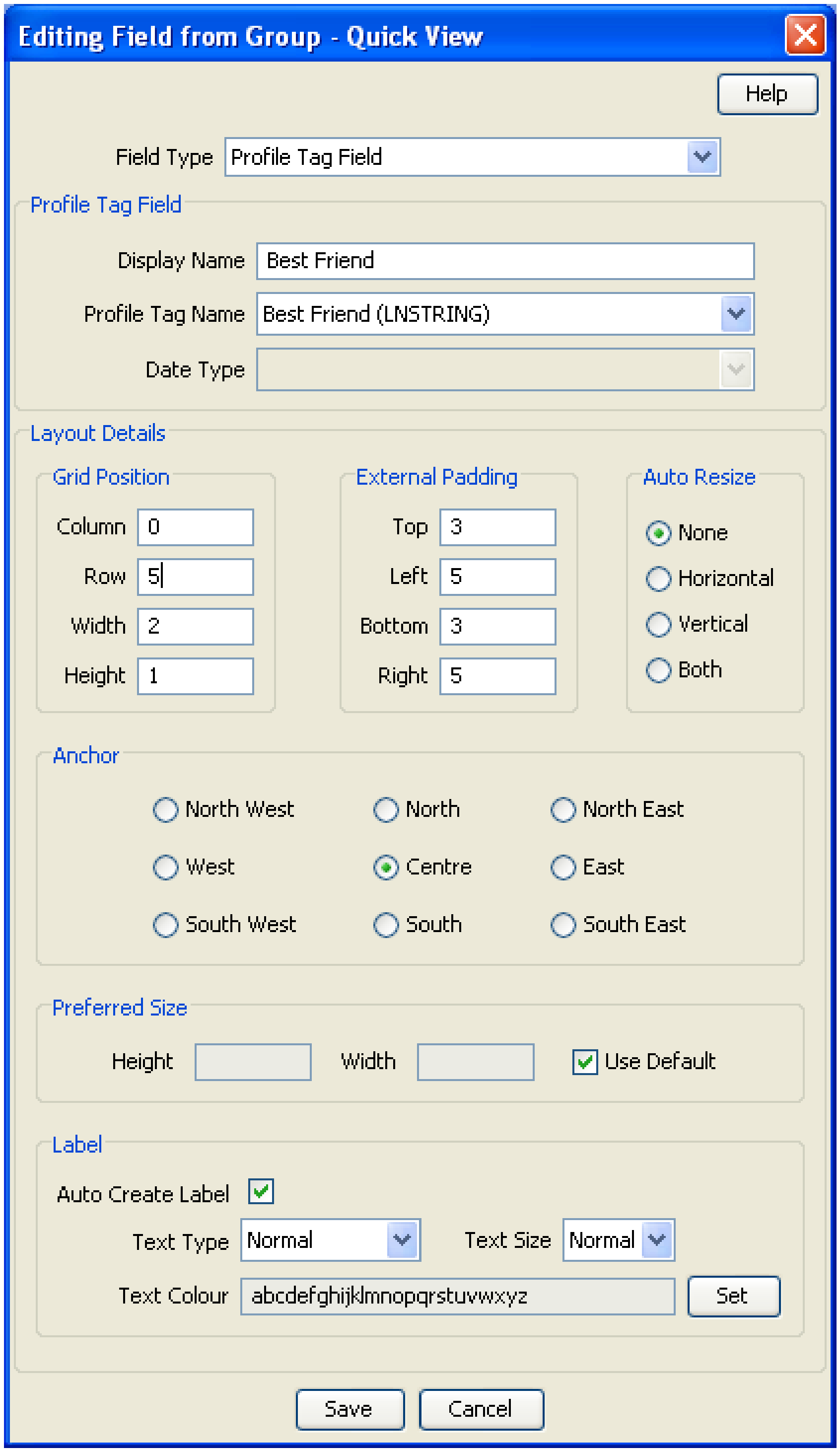


Follow these steps to adjust the Quick View screen layout to put the Best Friend and Product Type fields on the same row.

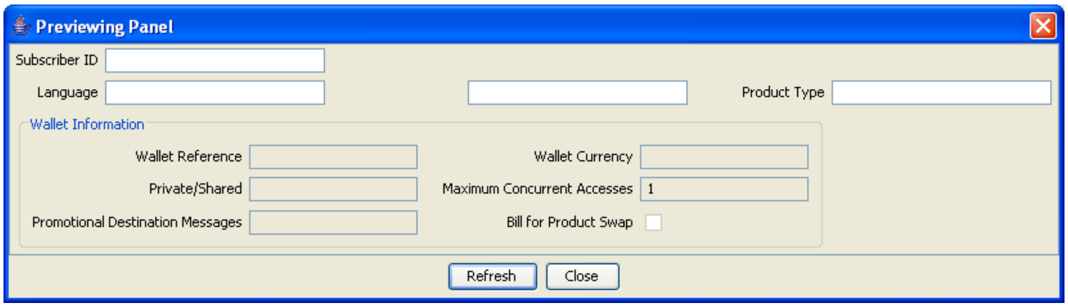
Step	Action
1	Select the Quick View option on the **CCP Dashboard Config** tab.
2	Click **Preview**.
	Result: You see the Previewing Panel screen for Quick View.



Step	Action
3	Leaving the Previewing Panel open, on the **CCP Dashboard Config** tab, select the Best Friend field in Quick View grid and click **Edit**. **Result:** You see the Editing Field from Group - Quick View screen.

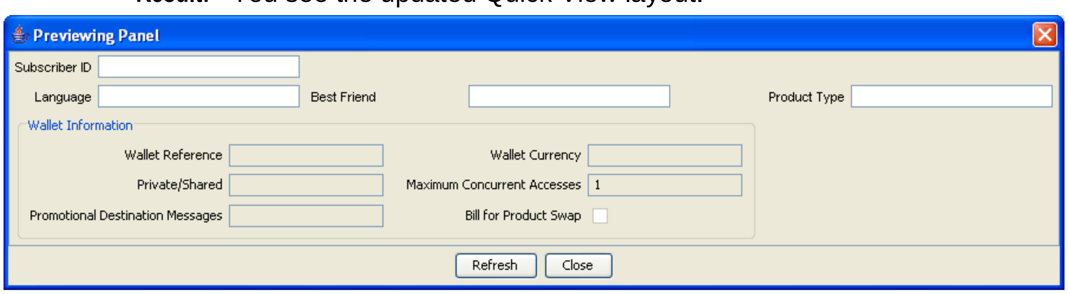


Step	Action
4	Edit the Grid Position. Set the: • **Column** to 1 • **Row** to 2.
5	Click **Save**.
6	In the Previewing Panel screen, click **Refresh**. **Result:** You see the updated Quick View layout.



Note: In this example, the Best Friend field is displayed without a label. This is because it needs 2 columns to display the label and the data entry box, and there is only 1 column available between the Language and Product Type fields.

Step	Action
7	To improve the screen layout, edit the Wallet Information Panel Grid Position as above. Set the: **Width** to 4.
8	Edit the Product Type field Grid Position as above. Set the: **Column** to 4.
9	Edit the Best Friend field Grid Position as above. Set the: **Column** to 2.
10	In the Previewing Panel screen, click **Refresh**. **Result:** You see the updated Quick View layout.

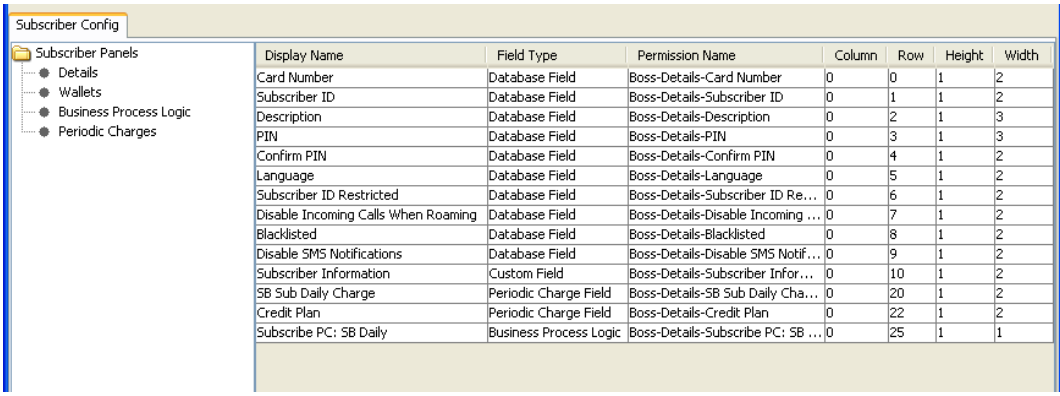


Configuring subscriber details in SPM

Follow these steps to add the Best Friend profile tag field to a Subscriber Panel in the SPM.

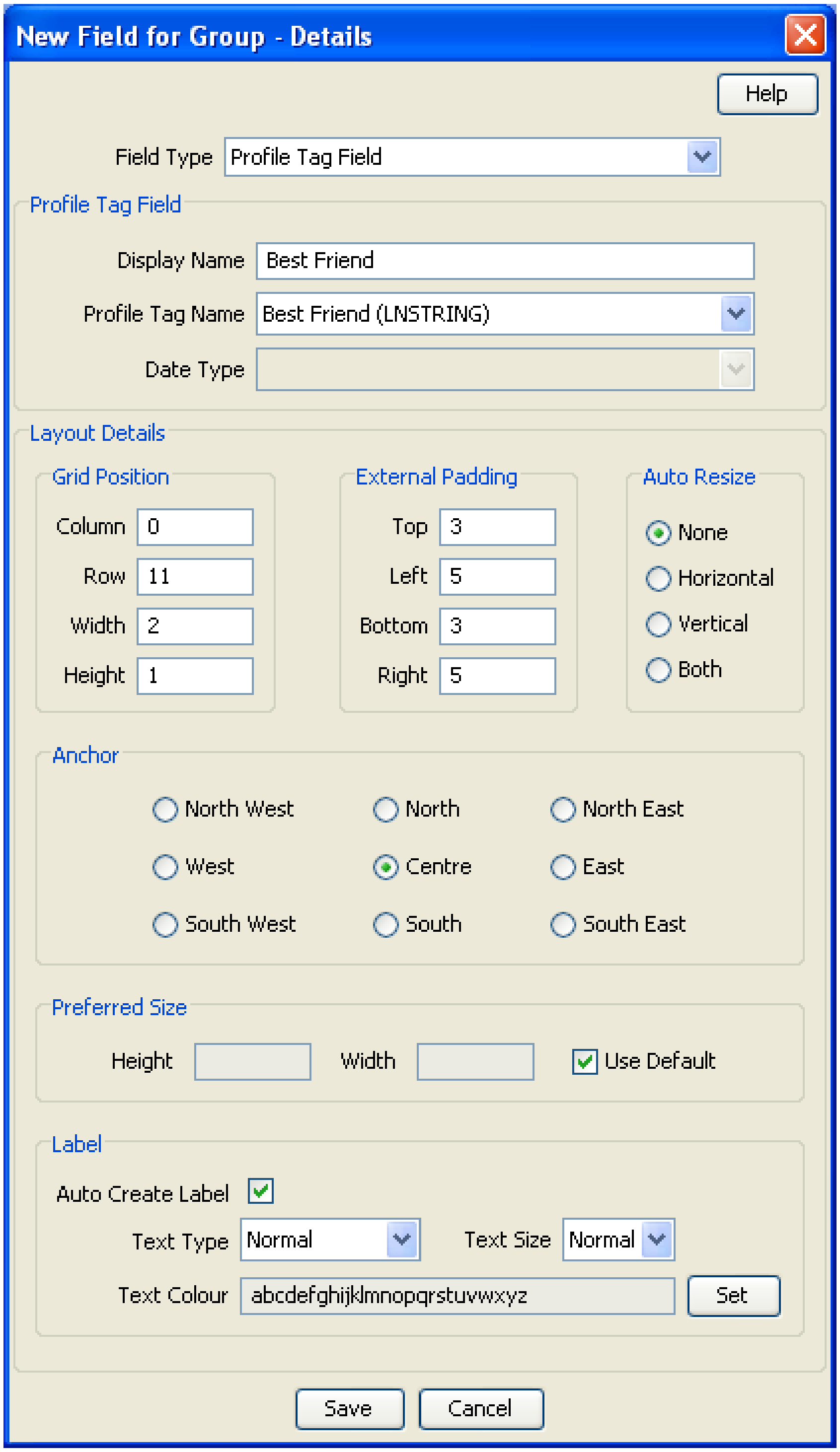
Step	Action
1	In the Subscriber Profile Manager screen and select the Service Provider you want from the drop down list.
2	From the drop down list, select the **Product Type** for the Best Friend option.

Step	Action
3	From the left hand menu on the **Subscriber Config** tab, select the Subscriber Panels option where you want the Best Friend field to appear.
	Result: You see the list of fields included in the Subscriber Panels configuration for the selected option.



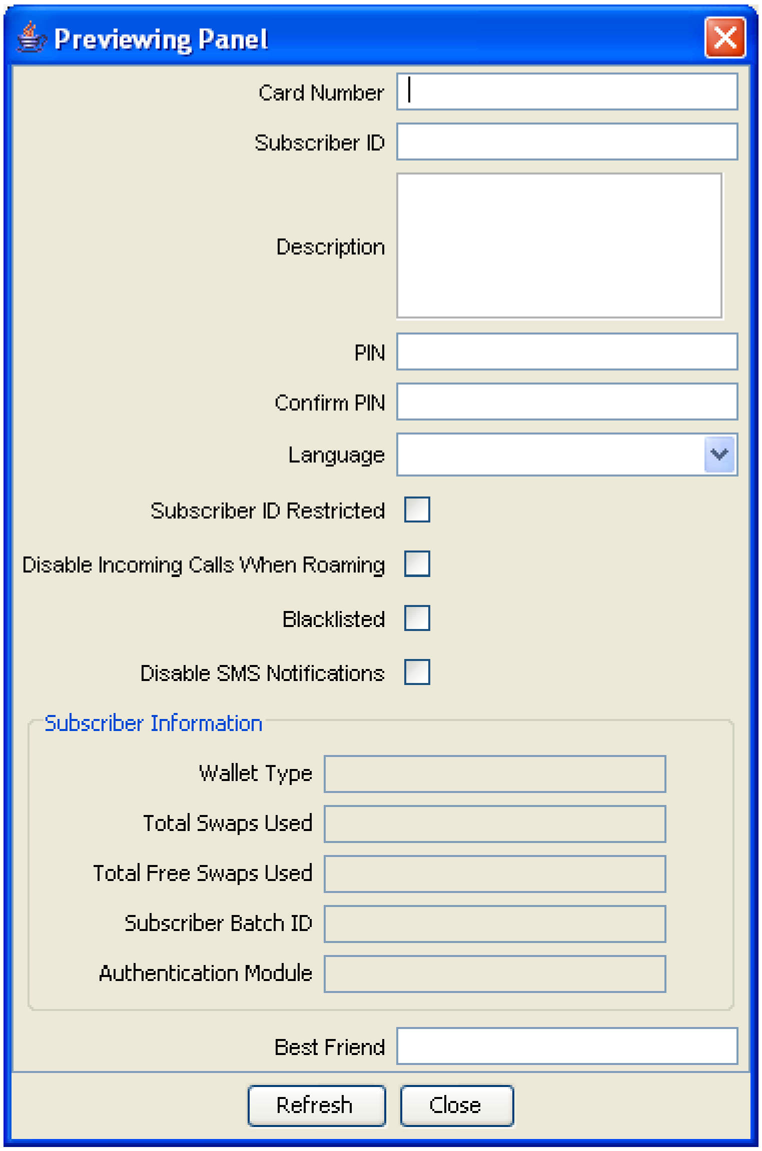
Display Name	Field Type	Permission Name	Column	Row	Height	Width
Card Number	Database Field	Boss-Details-Card Number	0	0	1	2
Subscriber ID	Database Field	Boss-Details-Subscriber ID	0	1	1	2
Description	Database Field	Boss-Details-Description	0	2	1	3
PIN	Database Field	Boss-Details-PIN	0	3	1	3
Confirm PIN	Database Field	Boss-Details-Confirm PIN	0	4	1	2
Language	Database Field	Boss-Details-Language	0	5	1	2
Subscriber ID Restricted	Database Field	Boss-Details-Subscriber ID Re...	0	6	1	2
Disable Incoming Calls When Roaming	Database Field	Boss-Details-Disable Incoming ...	0	7	1	2
Blacklisted	Database Field	Boss-Details-Blacklisted	0	8	1	2
Disable SMS Notifications	Database Field	Boss-Details-Disable SMS Notif...	0	9	1	2
Subscriber Information	Custom Field	Boss-Details-Subscriber Infor...	0	10	1	2
SB Sub Daily Charge	Periodic Charge Field	Boss-Details-SB Sub Daily Cha...	0	20	1	2
Credit Plan	Periodic Charge Field	Boss-Details-Credit Plan	0	22	1	2
Subscribe PC: SB Daily	Business Process Logic	Boss-Details-Subscribe PC: SB ...	0	25	1	1

Step	Action
4	Click **New**.
	Result: You see the New Field for Group - *Subscriber_Panel* screen. In this example the screen has been filled in with the Best Friend profile tag details.



Step	Action
5	From the **Field Type** drop down list, select `Profile Tag Field`.
6	In the **Display Name** field type `Best Friend`.
7	From the **Profile Tag Name** drop down list, select the `Best Friend (LNSTRING)` profile tag you added in ACS, *Adding best friend profile tag* (on page 92).

Step	Action
8	In the Layout Details section, specify the Grid Position for the field. Set the: • **Column** to '0' • **Row** to the next available row number • **Width** to 2 • **Height** to 1.
9	Click **Save**.
10	Preview the screen layout. Click **Preview**. **Result:** You see the Previewing Panel screen for the Subscriber Panel.



Product Type Limitations

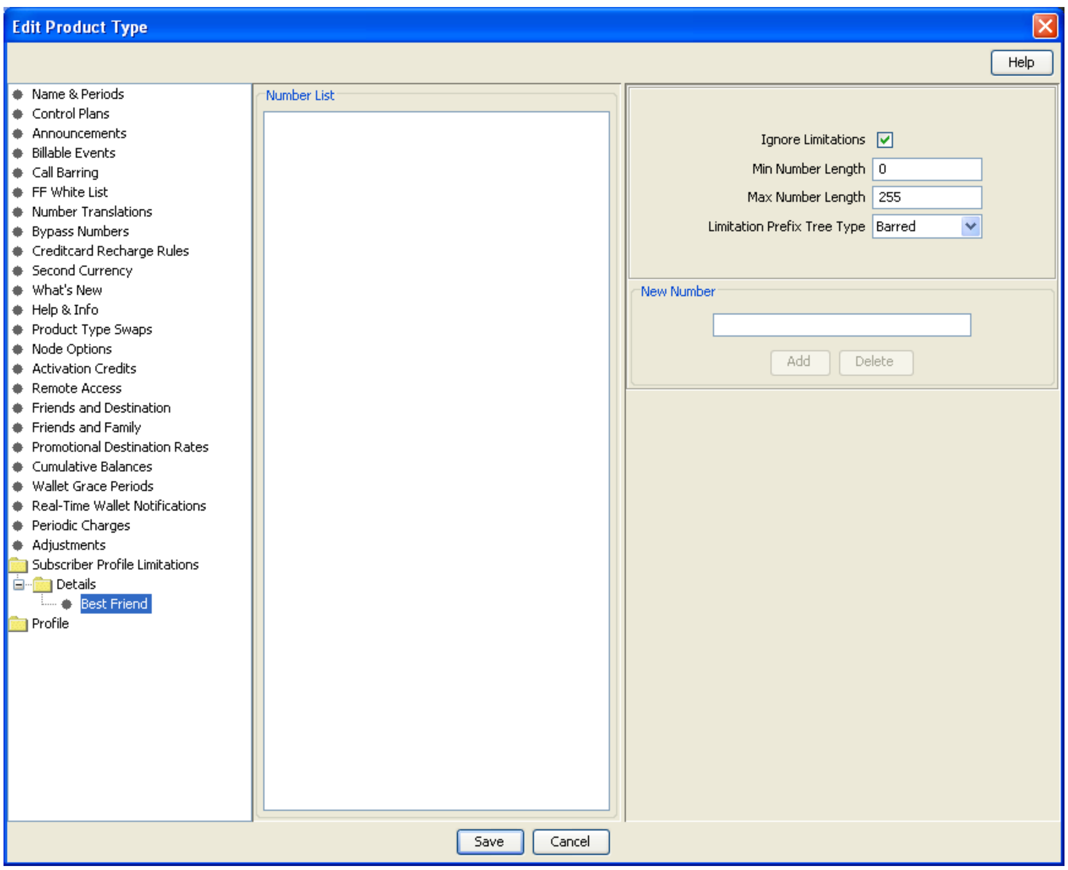
Introduction

You set the limitations for the Best Friend numbers by Product Type. For example, you can set the minimum length allowed for the Best Friend number.

Configuring product type limitations

Follow these steps to configure the Product Type limitations for the Best Friend number.

Step	Action
1	Open the **Subscriber Management** screen.
2	From the **Service Provider** drop down list, select the Service Provider.
3	On the **Product Type** tab, select the Best Friend Product Type you added previously and click **Edit**. **Result:** You see the Edit Product Type screen.
4	From the left hand menu, open the Subscriber Profile Limitations group that includes the Best Friend option.
5	Select `Best Friend`. **Result:** You see the Best Friend configuration options in the Edit Product Type screen, such as in this example.



Step	Action
6	Specify Best Friend number limitations and click **Save**.

User Permissions

Introduction

You must update the user templates defined in SMS to give CSR operators sufficient privileges to be able to edit Subscriber details and specify Best Friend numbers.

Defining user access

You must define access permissions on a Service Provider and Product type basis for the following:

- Any profile fields you have created
- All panels and screens that should be available from the CCP Dashboard
- Individual fields and groups of fields configured to be available in the CCP Dashboard, Edit Subscriber and Edit Product Type screens

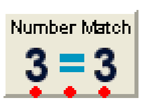
Note: For information on how to set up user templates, refer to the *NCC SMS User's Guide*.

Control Plan Configuration

Introduction

The Number Matching feature node must be included in the Subscriber's control plan to determine what action to take when the Subscriber calls their best friend. For example you can apply a discount to the call when the Best Friend number is called.

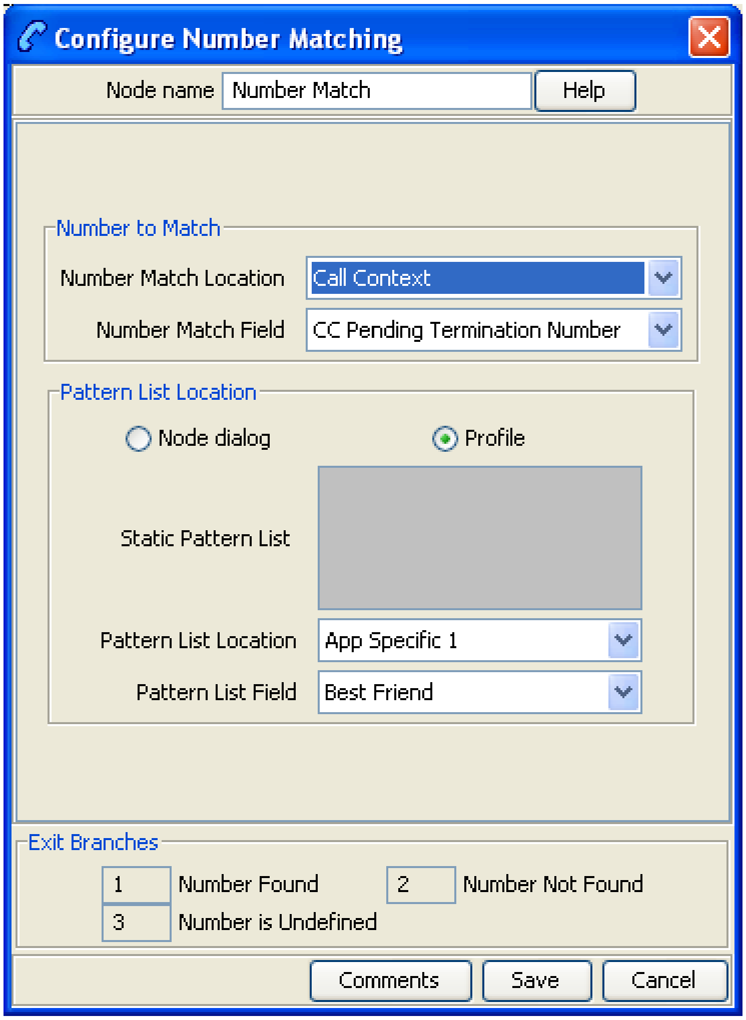
Node icon



Configuring number matching

Follow these steps to configure the Number Matching node to handle calls to a Best Friend number.

Step	Action
1	Expand the Number menu in the Control Plan Editor screen.
2	Click and drag the Number Matching node on to the Control Plan Editor screen.
3	Open the Number Matching node. **Result:** You see the Configure Number Matching screen.

Step	Action
	
4	From the **Number Match Location** drop down list, select `Call Context`.
5	From the **Number Match Field** drop down list, select `CC Pending Termination Number`.
6	In the **Pattern List Location** panel, select the `Profile` option.
7	From the **Pattern List Location** drop down list, select `App Specific 1`.
8	From the **Patter List FIeld** drop down list, select the `Best Friend` tag created previously.
9	Click **Save**.