# CONTENTS

## Preface
- About this guide
- Audience
- Additional Support
- Conventions (all documentation)
- Obtaining Documentation and Submitting a Service Request

## Chapter 1: Subscriber Screens
- Subscriber Screens Overview
- Find a Subscriber
- Subscriber Screens Definitions
- Overview Screen
- Details Screens
  - General Screen
  - Credentials Screen
  - Services Screen
  - Notifications Screen
  - Subaccount Screen
- Sessions Screen
  - Session Details Table
- Balance Screen
  - Balances
  - Quotas
  - View Quotas and Balances
  - Check the History of Balances

## Chapter 2: Session Tracing

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*CPS CCI Guide for View-Only Administrators, Release 10.0.0*
Chapter 3: Custom Reference Data Tables 15

- Concepts for Custom Reference Data Tables 15
- Typical Tasks for Everyday 15
  - Refresh the Screen 15
  - Navigate the Table Screens 16
  - Navigate in a Row 16
Preface

- About this guide, page v
- Audience, page v
- Additional Support, page v
- Conventions (all documentation), page vi
- Obtaining Documentation and Submitting a Service Request, page vii

About this guide

This guide describes the functions and uses of the Control Center 3.6 for administrators with read only or view only privileges.

Audience

This guide is best used by these readers:
- Network administrators
- Network engineers
- Network operators
- System administrators

This document assumes a general understanding of network architecture, configuration, and operations.

Additional Support

For further documentation and support:
- Contact your Cisco Systems, Inc. technical representative.
- Call the Cisco Systems, Inc. technical support number.
• Write to Cisco Systems, Inc. at support@cisco.com.

• Refer to support matrix at http://www.support.cisco.com and to other documents related to Cisco Policy Suite.

Conventions (all documentation)

This document uses the following conventions.

<table>
<thead>
<tr>
<th>Conventions</th>
<th>Indication</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>bold</strong> font</td>
<td>Commands and keywords and user-entered text appear in <strong>bold</strong> font.</td>
</tr>
<tr>
<td><em>italic</em> font</td>
<td>Document titles, new or emphasized terms, and arguments for which you supply values are in <em>italic</em> font.</td>
</tr>
<tr>
<td>[ ]</td>
<td>Elements in square brackets are optional.</td>
</tr>
<tr>
<td>{x</td>
<td>y</td>
</tr>
<tr>
<td>[ x</td>
<td>y</td>
</tr>
<tr>
<td><strong>string</strong></td>
<td>A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.</td>
</tr>
<tr>
<td><strong>courier font</strong></td>
<td>Terminal sessions and information the system displays appear in courier font.</td>
</tr>
<tr>
<td>&lt;&gt;</td>
<td>Nonprinting characters such as passwords are in angle brackets.</td>
</tr>
<tr>
<td>[ ]</td>
<td>Default responses to system prompts are in square brackets.</td>
</tr>
<tr>
<td>!, #</td>
<td>An exclamation point (!) or a pound sign (#) at the beginning of a line of code indicates a comment line.</td>
</tr>
</tbody>
</table>

**Note**

Means reader take note. Notes contain helpful suggestions or references to material not covered in the manual.
Means reader be careful. In this situation, you might perform an action that could result in equipment damage or loss of data.

**Caution**

**IMPORTANT SAFETY INSTRUCTIONS.**

Means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. Use the statement number provided at the end of each warning to locate its translation in the translated safety warnings that accompanied this device.

SAVE THESE INSTRUCTIONS

**Warning**

Provided for additional information and to comply with regulatory and customer requirements.

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**Obtaining Documentation and Submitting a Service Request**

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see What's New in Cisco Product Documentation.

To receive new and revised Cisco technical content directly to your desktop, you can subscribe to the What's New in Cisco Product Documentation RSS feed. RSS feeds are a free service.
Subscriber Screens

- Subscriber Screens Overview, page 1
- Find a Subscriber, page 1
- Subscriber Screens Definitions, page 2
- Overview Screen, page 2
- Details Screens, page 2
- Sessions Screen, page 8
- Balance Screen, page 9

Subscriber Screens Overview

This section provides discussion and examples for an administrator with view only privileges. As a view only admin, you can see subscriber and session information, monitoring and configuration data, but will not be able to make any changes.

After you log in, the default page of the Quantum Control Center interface displays the Subscribers tab > Find Subscriber screen.

The Subscribers tab lets you look at details for a subscriber, any subaccounts under a subscriber, and any sessions a subscriber may have.

From the menu tree on the left, you have access to session information screens at the subscriber level and the network level.

Find a Subscriber

Finding a subscriber is often the first step in performing other tasks for a subscriber.

Note

To list all subscribers, leave the Credential Name field blank. The maximum number of records returned is 1000.
Enter search criteria into either the Credential or Name field. You can use any portion of a subscriber's name, but when searching on a credential ID, you must use the full credential. No wild cards are permitted.

**Step 1**
Click **Subscribers tab > Subscribers node > Find Subscriber** item in the menu tree.

**Step 2**
Enter your search criteria in the Credential or Name field and click **Search**.

**Step 3**
Matches to your search criteria appear in the Results table.
Use the open link on the right to display more information about the subscriber

**Note**
As you find and use subscriber screens, the menu tree keeps track of the most recent finds. Dismiss these items from the tree with the X icon.

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**Subscriber Screens Definitions**

This section describes the screens used to support subscribers. After you find a subscriber you can access these screens.

**Overview Screen**

When you find a subscriber and open their record, the Overview screen opens.
The menu tree on the left displays the subscriber name and four submenus (Overview, Details, Sessions, Balance).
The Overview screen, with its six subsections, appears on the right.
Click any of the view links in the sub areas, for example Credentials or Notifications, to see information for that specific aspect of the subscriber.

**Details Screens**

The Details item in the menu lets you view five other screens that contain even more specific information about a subscriber or a subaccount:

- General information
- Credentials or passwords
- Services the subscriber pays for
- Notification preferences
- Subaccount users under the subscriber
General Screen

1. Click **Subscribers tab > Subscribers node > Find Subscriber** item in the menu tree.
2. Find the subscriber as described in **Find a Subscriber**, on page 1.
3. Click **Details > General > view link**.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>This single field is shows both the first and last name of the subscriber.</td>
</tr>
<tr>
<td>Domain</td>
<td>This drop-down list displays the domain to which the subscriber is assigned. Domains themselves are created in the Policy Builder interface.</td>
</tr>
</tbody>
</table>
| Status         | The Status field shows these three states for a subscriber:  
> • Active and able to use services  
> • Deleted and no longer part of your system  
> • Suspended and in the system, but not able to use services  
> By default, the status for a new subscriber is always ACTIVE. |
<p>| Start Date     | Both these fields show the start and stop date and time of service to the subscriber.                                                        |
| End Date       |                                                                                                                                               |</p>
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
</table>
| Role          | When the subscriber logs in to your subscriber portal, this field shows the read-write privilege granted to them. As a default, the primary subscriber is always granted the Write All role, permitting editing of all subaccounts underneath. For example, the primary subscriber might be: An adult, and responsible for other family members A team leader, responsible for team member accounts See Subaccount Screen. If a user is not a primary subscriber, they are created as a subaccount user under a primary subscriber. A subaccount user can have these levels of privileges:  
  - Write all—can read and write all information for themselves and any subaccounts  
  - Read all—can view all portal information  
  - Write self—can read and write only their own information  
  - Read self—can view only their own information                                                                 |
| External ID   | Occasionally, a subscriber may need to connect with or relate to an external third-party system. This field identifies the subscriber to that external service. |
| Rate Plan     | Shows predefined rate plan codes, such as prepaid or postpaid.                                                                                       |
| Charging ID   | A subscriber might have a unique charging ID. Usage by members of a subaccount, or 'children' of the subscriber can be billed to their 'parent' if this is set. |
| Custom Data Area | This area lets you view a look up list, or key-value pairs that track other variables that concern your subscriber |
| Code          | The key portion of a key-value pair.                                                                                                               |
| Value         | The definition or value of the key-value pair.                                                                                                         |
Credentials Screen

The Credentials screen lets you view more than one credential or password for a subscriber. More than one credential may be necessary for the subscriber to log in from different devices or locations.

The rows in this screen are populated by the Credential Detail screen shown below.

Click the open link to display the Credential Detail screen.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credential ID</td>
<td>A credential is a unique identifier that subscribers and subaccount customers use to log in. A credential is defined when the subscriber is created. from usum 1.0 if guide</td>
</tr>
<tr>
<td>Type</td>
<td>Useful for sorting and reporting, this field indicates if the credential is for a subscriber or a subaccount, or for a permanent or guest use.</td>
</tr>
<tr>
<td>Description</td>
<td>Shows more information about this particular credential.</td>
</tr>
<tr>
<td>Expiration Date</td>
<td>Shows the end date of the credential.</td>
</tr>
<tr>
<td>Password</td>
<td>In addition to a credential ID, a subscriber can log in with a password. A password is optional because MAC addresses, for example, do not have a password.</td>
</tr>
<tr>
<td>New Password</td>
<td>Not available to view only administrators.</td>
</tr>
</tbody>
</table>
Services Screen

The Services link lets you administer what services or service plans a subscriber may access.

Click Subscribers tab find a subscriber > Details in the menu tree > Services to the left.

This screen is a point of intersection between Policy Builder and Control Center. That is, services and service plans are developed in Policy Builder and are reflected here for you to choose from.

A read only administrator may not add services to a subscriber.

Notifications Screen

The Notifications screen lets you view how to contact your subscriber for system messages or for special promotions, for example. You can notify with these methods.

- XML
- Email
- SMS
- Apple iPhone push

Note

Notifications must be set up in Policy Builder prior to using this screen.

To view a notification, click the open link on the right to display the Notification Detail screen.

The Notification Detail screen shows you the specific details about subscriber emails, SMS, or iPhone push, but you may not make changes.
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Contact your subscriber with one of these methods in the drop-down menu:</td>
</tr>
<tr>
<td></td>
<td>• Real time / XML</td>
</tr>
<tr>
<td></td>
<td>• SMS</td>
</tr>
<tr>
<td></td>
<td>• Email</td>
</tr>
<tr>
<td></td>
<td>• Apple iPhone push</td>
</tr>
<tr>
<td>Destination</td>
<td>Specify the address for the notification. For an XML message, provide URLs. For an SMS message, provide the destination number, perhaps 555544444.</td>
</tr>
<tr>
<td></td>
<td>For an email notification, provide an email address. For an Apple iPhone push, provide the server gateway, server port, and certificate and certificate password.</td>
</tr>
<tr>
<td>Enabled</td>
<td>Click this check box to allow notifications to go through, or uncheck it if you are still developing the message.</td>
</tr>
<tr>
<td>Custom Data Area</td>
<td>This area lets you use a look up list, or key-value pairs and so keep track of other variables that concern your subscriber.</td>
</tr>
<tr>
<td>Code</td>
<td>This is the key portion of a key-value pair.</td>
</tr>
<tr>
<td>Value</td>
<td>This is the definition or value of the key.</td>
</tr>
</tbody>
</table>

**Subaccount Screen**

A subaccount user can occur under a primary subscriber so that the primary subscriber has authority over others, perhaps team members or family members. This construct makes subaccount activity logins, debit, credit, and bill to the primary subscriber.

For example, if the primary subscriber has a Charging ID of 123456, assign the subaccount users the same charging ID.

1. Click **Subscribers tab** > **Subscribers node** > **Find Subscriber**.

2. Find the subscriber who is the primary subscriber and is responsible for the subaccount.

3. Click **Details** > **Subaccounts** and click the view link in the corner.
Sessions Screen

The Sessions item in the menu tree under a subscriber lets you see the sessions the subscriber has running. That is, find the subscriber first, and then check their sessions. A subscriber may have several sessions up, perhaps from different devices.

You can display a Sessions screen two ways:

- Find the subscriber and then view all their sessions:
  Subscribers tab > Subscriber node > Subscriber item > Overview screen > Sessions area > manage
  See Viewing a Subscriber Session.
- Find all sessions on the network and then look for a subscriber:
  Subscribers tab > Subscriber node > Subscriber Sessions item > Current Sessions table > open
  See Finding Network Sessions.

Note
If you would like a utility to start artificial sessions, contact your Cisco technical representative.

Session Details Table

The Session Detail table contains information about the session, including a Remove Session link.
An example of a Session Detail is shown below.
At the top, a tab exists for each session the subscriber has running. The example has one tab, the subscriber has one session up.

This check box lets you filter the session information below to one or more devices.

This drop-down list lets you show details for only the devices you can provide IP addresses and secrets for, and so limits the data returned by the detail table.

The Policy Server folder has several subfolders to organize the session data.

### Balance Screen

The Balance item in the tree under a subscriber name provides a way to set balance amounts and quota amounts for the subscriber.

A subscriber can have several balance codes in place, and under each one, the subscriber can have several quota codes.

Balance codes and quota codes are developed and maintained in the Policy Builder interface. Control Center reflects that configuration.
Balances

Balances are of these types:

- **Recurring**—recurring balances automatically replenish on a configured cycle, for example daily, weekly, monthly, or per billing cycle. Any remaining balance is not carried over when the balance is reset.
  - Roll Over—a type of recurring balance. Roll over balances, which are additive, are similar to recurring balances, but any remaining balance is kept when the balance replenishes.

- **One-time**—one-time balances do not automatically replenish. One-time balances may be configured with an expiration date.
  - Top Up—a type of One-time balance. Top ups add to a subscriber’s balance and may be applied to any of the above balance types. Top ups are differentiated from the balance to which they are applied, enabling the service provider to define the order in which top ups, and the underlying balance, is consumed. Top ups may be assigned an expiration date.

Balances can be configured to be automatically allocated in the Quantum Unified MsBM for a subscriber during a balance reserve if a balance does not already exist. The fair use balances for new subscribers is an example. Auto-provisioned balances are created based on rules configured by the service provider, which may refer to parameters such as subscriber class, rate plan, and so on, when provisioning the balance.

Quotas

Quota may be either of two types, one-time or recurring.

One-time quotas are amounts of time use or data use that occur only one time and are not renewed. For example:

- If an ISP provider gives free introductory minutes
- If data bandwidth is provided on a tiered system, with the first 100 KB free, and then payment begins
- For a prepaid card use case

Recurring quota are those services the account subscriber signs up for and gets refreshed at some recurring period.

View Quotas and Balances

Note: In the data hierarchy, Balances contain Quota.

**Step 1**

Click Subscribers tab > Subscribers node > Find Subscriber item in the menu tree.

Find the subscriber as described on Finding a Subscriber.
Step 2: Select the Balance item in the menu tree under the subscriber.
Step 3: Open the full view to the balances. Click the Plus sign by Data.
The Balance Codee in our example is DATA.

Note: Balance codes and quota codes are developed and maintained in the Policy Builder interface for these drop-down lists.

---

Check the History of Balances

On the Balance screen, you can review the credit transactions against a quota type, but not the debit history.

Step 1: Click the history link associated with the quota.
The History screen shows you the Start and Expiration dates, original amount, transacted amount and any reserved quota.
Step 2: Click on a column heading to sort that column.
Step 3: Click on the down arrow in a column to change the sort columns from the display.
Check the History of Balances
Session Tracing

- View a Subscriber Session, page 13
- Find Network Sessions, page 14

View a Subscriber Session

This procedure looks at available sessions and lets you find sessions for the subscriber you specify. Contrast this to finding a subscriber and then checking their sessions as described at Sessions Screen.

**Step 1**
Click the **Subscribers tab > Sessions node > Find Subscriber Session.**

**Step 2**
For **Query Key**, select to use either the subscriber's credential ID or the framed IP address of the session, if you know it.
You must enter the full ID or IP address. Partial information here proves unsuccessful.

**Step 3**
In **Key Data**, enter a valid user ID or a valid framed IP that is your target.
Step 4
Click Search to display the general information about the found session on the right.

Step 5
In the list to the right, hover over a session and double click, or click the open link to display the details about the session.

Find Network Sessions

Use the Find Network Session link to look at selected session running on the network.

Step 1
Click Subscribers tab > Sessions node > Find Network Session item in the menu tree.

Step 2
Fill in the Find Network Session screen.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Query Key</td>
<td>The type of data on the session you want to search for, either framed IP or User ID.</td>
</tr>
<tr>
<td>Key Data</td>
<td>The value of the query key, for example, part of a framed IP address.</td>
</tr>
<tr>
<td>Query Device</td>
<td>The type of device you want to query. Currently, only ISG is supported.</td>
</tr>
<tr>
<td>Results Area</td>
<td>List of all the matches for your query key and key data.</td>
</tr>
</tbody>
</table>
CHAPTER 3

Custom Reference Data Tables

- Concepts for Custom Reference Data Tables, page 15
- Typical Tasks for Everyday, page 15

Concepts for Custom Reference Data Tables

- The Policy Builder interface creates and edits the custom reference data table structure, defines its columns, and defines the data type, ranges and size of the fields.
- Control Center reflects the custom reference data tables constructed in Policy Builder.
- You can view data content present in the custom reference data tables in Control Center.
- A key symbol and arrows are provided to each column in the Customer Reference Data table to enable the user to distinguish among keys, input columns, and output columns.
  - A key symbol indicates a key column.
  - A downward arrow indicates an input column. The input columns are key columns for which Runtime Binding option is selected.
  - An upward arrow indicates an output column. The output columns are non key columns.

When constructing the custom reference data table in the Policy Builder, look at the spreadsheet you want to import later and use the same column names, data types and other attributes.

Typical Tasks for Everyday

These navigation tasks and activities are specific to the custom reference data tables in Control Center.

Refresh the Screen

- The refresh link in the upper right corner.
- Click the refresh link to force a refresh.
A successful refresh message appears on the right.

The usual refresh time is every 5 minutes, and is refreshed from the server.

In the middle of updating, refresh is deferred.

Upon close and reopen a table, the refreshed table is displayed.

The refresh interval for these tables cannot be changed.

### Navigate the Table Screens

- Multiple tables can be open at one time.
- Icons in the tree to show the open and active focus.
  - Circle with hyphen—open table
  - Circle with arrows—active table focus
  - Square—table not open
  - Blue square—table open and in the tray at bottom

- Icons in the upper right corner of a table minimize, maximize, or close the table. When minimized, the table heading displays at the bottom of the screen in the tray.

- To restore a table to view,
  - Click the restore button of the table in the tray,
  - Or
  - Double click the table tab in the tray.

- Resize a table for viewing by dragging the edges.
- Narrow or widen a column by dragging the margin of the column head.

### Navigate in a Row

- If you have many columns, they cannot all display in the browser.
- Notice that in the bottom right corner, there is an indicator of how many rows you are viewing at the moment, and how many rows there are total in the table.