CTI Billing Solutions Limited

Help desk guide

Analysis 7 1.10 – Core Back-office

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CTI Billing Solutions Limited

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Our contact address:

CTI Billing Solutions Limited

Daisyfield Business Centre
Appleby Street
Blackburn
United Kingdom
BB1 3BL

Tel: +44 0 1254 291500
Fax: +44 0 1254 291504

Email: `info@ctiGroup.com`

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Preface

Document definition

Objectives

This *Help desk guide (HDUG)* describes the core Back-office *Analysis 7* (*A7*) functionality available at product release *1.10*, identifying the key functional components together with any constraints or variations to their use.

As the basis for a common understanding of available functionality and options it will aid the design, configuration and deployment of solutions.

Audience

This manual is for Help Desk and Customer service users of *A7's* Back-office functionality (that is, those with user types *Tech Support; Administrator; Customer service; Account manager* or *Bureau*).

Things you'll need before you start

- An understanding of the Telecoms' service-provider environment and terminology.
- Awareness of analytics solutions and of the user-interfaces (UI) they typically utilise.

Related documents

This document is part of the ***A7 documentation set***, which comprises:

Document title	Audience	Reference
Analysis 7 v1.10 – Core Back-office Help Desk Guide	Operations, support & administration	MMA7HDUG
Analysis 7 v1.10 – Core Back-office Operations guide	Operations, support & administration	MMA7OPS
Analysis 7 v1.10 – Core Back-office Product specification	Management, deployment & administration	MMA7BOPS
Analysis 7 v1.10 – Core Front-office Admin User Guide	Management & administration	MMA7AUG
Analysis 7 v1.10 – Core Front-office Product specification	Management, deployment & administration	MMA7FOPS
Analysis 7 v1.10 – Core Front-office Subscriber User Guide	General usage	MMA7SUG
Analysis 7 v1.10 – Core Installation Guide	Operations, support & administration	MMA7INS
Analysis 7 v1.10 – Core Pre-Installation Guide	Management, deployment & administration	MMA7PRE
Analysis 7 v1.10 – Data description`	Management, deployment & administration	MMA7DD
Analysis 7 v1.10 – Data limits and constraints	Management, deployment & administration	MMA7LIM

Documentation conventions and devices

General

This document uses the term *service-provider* to refer to the organisation purchasing (or licensing) the A7 solution from *CTI* to providing it as a service to its own customers and subscribers.

Images of screens and reports

Screen and report images are included for illustrative purposes only. They do not necessarily reflect the exact layout and functionality of the solution provided to a specific *service-provider*. All reasonable endeavours are taken to ensure that data so displayed is either test data or anonymised data.

Typography

The following typographical conventions are used throughout this document.

Special notices

Hints and tips

Warning statements.

Supplementary information.

Contextual indicators

This text is a cross-reference.	
This text refers to an object or feature.	The *Scheduled reports* tab, the *Main Menu*
`This text indicates computer input, or computer file path names.`	▪ Navigate to /`directory/path` name ▪ **Input** `This is a description` as **Data description**
This text introduces a numbered list of instructions. 1. Numbered lists are always instructions.	
Text like this is the name of a screen object; something you type into, press or select.	▪ **Input** `This is a description` as **Data description** ▪ **Next** to continue ▪ **Select Data category**
[This text is a physical button to be pressed]	**[Enter}**

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Part One

s

Getting Started

This section describes the user interface through which A7 delivers functionality and introduces some fundamental A7 concepts.

Chapters in Part One ...

1. What A7 looks like

Each feature-set has its own display layout – normally based around an A7 report – however a standard set of icons, buttons and links provide a consistent interface throughout A7.

1.1. General layout

Not all of these components are visible in the back-office.

The user interface (UI) map – *Figure 1 (below)* – below introduces some of the basic user interface elements, naming them and identifying their purpose in the accompanying table.

A7 comprises a series of one or more *panels* 06 presented on *pages* accessed via the navigation tabs in the *Main menu*. 03

You will quickly learn how to navigate A7's features using:

- One or more of the available menus; 03 10
- Buttons or icons; 11 12 13
- My favourite links; 16
- Hyperlinks embedded within reports or displays. 02

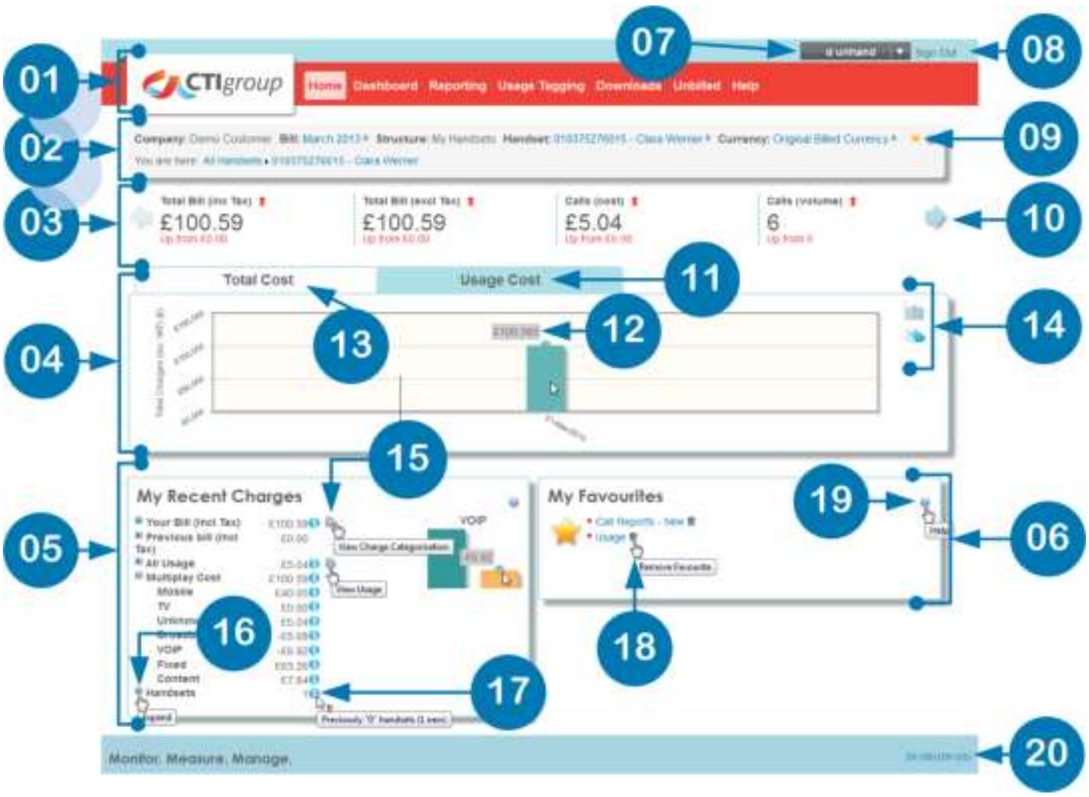
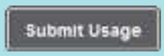


Figure 1 User interface element map

Table 1 User interface element descriptions

UI Element name		UI element description
01	User menu [3]	The *User menu* allows users to manage their *A7* account.
02	User Sign-out hyperlink	The *User Sign-out* hyperlink allows users to exit *A7*.
03	Main menu bar	The *Main menu bar* enables the *User* to quickly access *A7* features.
04	My view	This is an example of an *A7* panel; *My view* in this instance. *My view* contains the *Current analysis context controls*, which select *Billing period*, *Organisational structure*, *Group* or *Subscriber*, and *currency conversion list*.
05	User identifier	The *User identifier* is shown only when *A7* is used in *Impersonation mode*. It displays the *User* being impersonated and a hyperlink, which returns to the originating *User* and normal operating mode.
06	My favourites	Shortcuts to favourite reports.
07	Help Icon	The *Help Icon* provides easy access to further information; it opens a *Help* panel, which describes the features available on the page and may also contain links to further resources.
08	Breadcrumb trail	The *Breadcrumb trail* displays the currently selected position (*Group* or *Subscriber*) within the selected *Organisational structure*.
09	Horizontal scroll arrows	Some features such as this *Headline summary* expand beyond the page boundaries; use the pair of scroll arrows to see the previous/next item in the display.
10	Active tab	Active tabs move to the foreground of the page to display their content.
11	Inactive tab	Click to activate Inactive tabs.
12	Hover-over action:	Holding the cursor over components, such as chart bars, will reveal additional information (in this case the value represented by the bar).
13	Chart type menu	Charts and reports normally display a function menu, providing access to additional functionality (for example, Print or email).
14	Report icon	These icons are short cuts to reports; Click to open the report.
15	Download Icon	These icons are short cuts to dialog panels providing additional information and Download functionality; Click to open.
16	Delete Icon	Icons such as this provide basic housekeeping functions.
17	Expandable list	The *Expandable list* icon appears whenever a list item contains hidden detail. Use it – and the corresponding contract list icon – to view or hide the additional detail.
18	*Cost adjustment arrows*	*Cost adjustment arrows Icon*s highlight variances between current and previous *Billing period* values. They display next t *Cost* and *Original Cost* figures on reports..
19	Embedded hyperlinks	Hyperlinks are used within the page to provide shortcuts to other application pages (for example, a relevant report).
20	Language selection menu	The *Language selection* menu provides an easy means of changing the UI language.
Others - not shown on the UI Map.		
Drop-down list		A *drop-down list* enables quick and accurate selection from a predefined list of options.
Action button 		The UI contains *Action button* to enable the *User* to access additional functionality within a feature; for example, to **Edit** or **Delete** an object.

[3] Also known as the *Welcome* menu.

1.2. Selection

1.2.1. Report category menu

The *Report category menu* provides easy access to the *Report overview* and the *Report categories*, enabling users to quickly switch between reports.

Figure 2: The Report category menu bar

1.2.2. Report filters

Report filters are context-sensitive; the report type and the drill-down level determines which filters – described in *Table 2 ()* – are displayed.

The returned data includes only records that match the specified criteria, which are typically set either by:

- Selection from a drop-down list;
- Ticking a check box;
- Using a Date-picker;
- Text entry into a *Search filter text box*.

Removing data filters …

Use the associated **Clear** or **Remove** links to remove an applied filter and redisplay the unfiltered data.

Searching for text …

Search filter text boxes begin to work once at least three characters are input. The filtering effect visibly reduces the volume of displayed content.

Figure 3 Report filters pane

Table 2 Back-office report filters

Data set filter name	Data set filter description
Bill status	A drop-down list enabling filtering by *Bill status*: Options {`All`; `Inactive` or `Active`}.
Code usage	A drop-down list enabling filtering by *Code usage:* Options {`All codes`; `Expired` or `Active`}.
Consolidated customer	A Search filter text box enabling entry of a *Consolidated customer code*, *Company name* or *Email address.*
Consolidated customer group status	A drop-down list enabling filtering by *Group status*: Options {`All`; `Inactive` or `Active`}.
Corporate ID	A *Search filter text box* enabling entry of *a Corporate ID* (*customer code*).
Corporate ID or Name	A *Search filter text box* enabling entry of *a Corporate ID* (*customer code*) or *Company Name*.
Date - Show all dates	A checkbox; tick to show data for all dates loaded.

Data set filter name	Data set filter description
Date – calendar terms	A drop-down list enabling filtering by generic calendar terms. Options {`Today`; `Yesterday`; `This week`; `This month` or `Specified month and year`}. **Constraints:** ▪ This Month – the current calendar month; from the 1st to the current day – not the preceding 30 days; ▪ This Week – the current calendar week; from the Monday – not the preceding seven days. ▪ If using the specified Year/Month filter, the report includes all jobs in the specified calendar Year/Month.
Date range	A pair of date pickers (calendars) enabling selection of the Date-from and Date-to elements of a date range.
Group status	A drop-down list enabling filtering by *Group status*: Options {`All`; `Inactive` or `Active`}.
Job status	A drop-down list enabling filtering by *Job status*: Options {`All`; `Open`; `Failed` or `Complete`}.
Profile name	A Search filter text box enabling entry of a *Profile* name.
User name or email	A Search filter text box enabling entry of a user name or an Email address, The filter works on either first or last names and begins to return results when you enter three, or more, characters.
User status	ℹ By default all users (excluding deleted) are shown. A drop-down list enabling filtering by *User status*: Options {`Enabled`; `Disabled`; `Enabled/Disabled` or `Deleted`} ℹ Enabled –includes all registered users even if they have never Signed in;

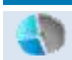
1.3. Presentation

1.3.1. Report options menu

The *Report options menu* presents a context-sensitive set of options, with each option working on the selected report; for a list of available options see *Table 3 ()*.

Access the options using the *Report options* icon:

Table 3 Available report options

Icon	Name	Description
	*Chart*	Click on this icon will open up a pop-up display of the report chart. The option to print the report and change the display to pie, line or bar chart is available. ℹ Not all reports display a graph. For individual columns within a report the chart will only be displayed if a numeric column such as duration, costs, averages, etc. are selected by sorting on one of these columns), otherwise no chart icon will be displayed.

Icon	Name	Description
	Configuration	A7enables the user to select and optionally save a custom report view comprising the: ▪ Columns to appear in the report (some columns are mandatory), ▪ Report sequence ▪ Number of rows per page. If the width of the selected columns exceeds the screen width then a horizontal scrollbar is displayed to enable viewing of off-screen column contents. By default all columns are displayed See also: *Ch. 1.3 1.3.2 Report views ().*
	Download	Save the report you are viewing to a selectable location in one of a number of formats, including: Each format includes a number of selectable options. Reports containing a large number of records display the message `Please wait while we prepare your report".` Leaving this page before the report is generated will terminates the run and you will need to rerun the export If you try to export more than 5,000 records a message will request you to refine your search, or to set the query up as a Scheduled report.
	Email	This allows you to e-mail the report you are viewing to the address you registered with *A7* in any of the exportable formats. Reports containing a large number of records display the message `Please wait while we prepare your report".` If you move away from this page before the report is generated you will need to rerun the export If you try to export more than 5,000 records a message will request you to refine your search, or to set the query up as a Scheduled report.
	Print Preview	If you select the print icon, the page will display in flat format, with a further option to print the information displayed on the page or return to the report.

1.3.2. Report views

Each report displays a *Default report view*, which you can customise using A7's *Selectable columns* feature, which enables users to choose the columns they want displayed.

Report view scope …

Report views apply only to the selected report and *Report summary level*. So, columns removed at the top-level are not automatically removed at lower *Report summary levels* or at *Report detail level*.

Legacy view …

Service-providers can opt to retain the fixed system-defined column-sets and not implement selectable columns. However, this may not display all reports in a tidy manner.

This is an unsupported option.

Using this feature you may define the:

- Name of the saved *Report view*;
- Columns to be included; although some columns are mandatory – see: *Month* in *Figure 4 ()*.

For example, any drill-down icons and report columns to their left are mandatory; they can neither be moved nor removed.

- Relative positions of the selected columns; using drag-and-drop to arrange them as required;
- Sort column and sequence direction;

- Number of rows displayed per page.

Figure 4 Report view configuration panel

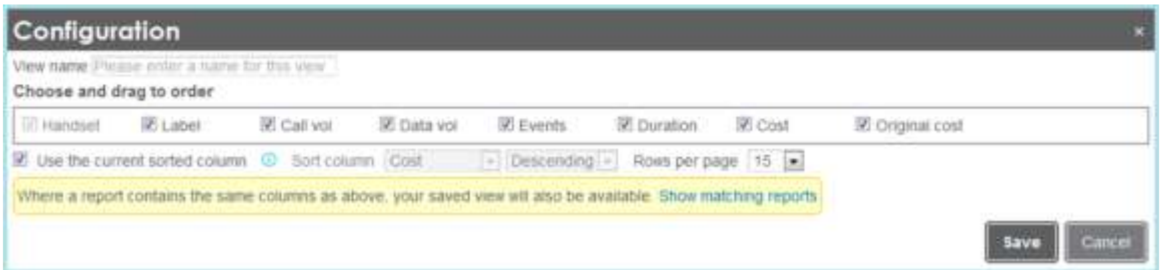
Once defined and selected a *Report view* is remembered and displayed whenever the report is used. Invalid *Report views* are ignored and the *Default report view* is displayed in its place.

The *Default report view* comprises all the service-provider defined columns for that report, but does not include *Export only* columns.

Configure a report view

1. From the *Report category menu*, select a `<report name>`
2. From the *Report options* menu, select **Configure**

   A7 displays the Configuration panel.



3. Input a name as *View name*

4. [Optionally] Use the check boxes to select each column to be displayed.
5. [Optionally] Drag-and-drop the columns into the required order.
6. [Optionally] Specify a different sequence for the report:

   i. Deselect the Use the current sorted column checkbox
      A7 activates the Sort column drop-down lists

   ii. Select a sort column from the drop-down list, Sort column.

   Sort columns do not need to be displayed.

   iii. Select a sort sequence from the drop-down list.

7. [Optionally] Select the number of lines per page from the drop-down list, *Rows per page.*

8. **Save** to continue

   A7 validates and saves the view.

   A7 displays the report using the saved view details.

   [Alternatively] **Cancel** to exit the panel without saving the view details.

Report view selection

1. From the *Report category menu*, select a `<report name>`

   If more than one *Report view* exists, A7 displays a *Report view filter*

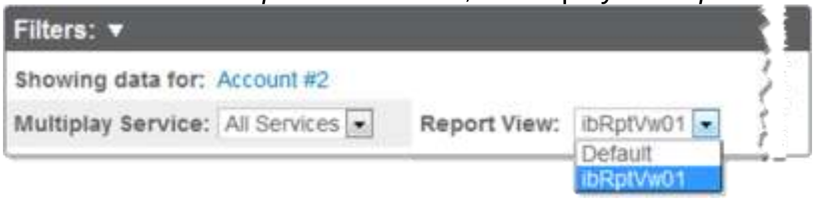


Figure 5 Report filters pane showing Report view filter

2. From the *Report view* drop-down list, select the required `<view name>`

   A7 displays the report level in the selected view format.

1.3.3. Report totals row

Some Bureau reports display a *Report totals* row, which summarises the data in the table.

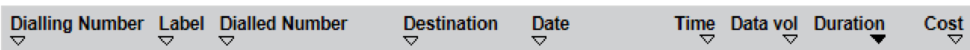
1.3.4. Column scrollbars

If the number of columns selected for display in a report exceeds the available display width then A7 displays a horizontal column scrollbar below each level of the report (that is, not the browser page).

The scrollbar scrolls only columns appearing after the drill-down icons (that is, selectable columns; mandatory columns remain fixed).

1.3.5. Sorting

Most reports allow for sorting on selected columns.



The solid arrow icons ▲▼ indicate the currently selected sort column and the direction of the sort (▲ ascending or ▼ descending).

- Clicking a selected sort icon reverses the sort sequence;
- Clicking on a different sort icon (empty arrow) sorts the report by that field.

1.4. Navigation

1.4.1. Drill-down icons

Icon	Name	Description
	Select group	The *Select group* icon drills down through the hierarchy of the *Organisational structure*. **For example:** Click on this icon whilst viewing the top-level of your structure to view the group-level below it and so on down to the usage detail level.

Icon	Name	Description
	*Select detail*	The *Select detail* icon drills down into the next level of data

1.4.2. Page browsing

Page browse controls display at the top and bottom of every page whenever the report contains more rows than the number of lines per page.

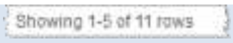
Report pages ...

Report results are organised in result-sets (that is, pages) containing a user configurable number of lines per page {Default=15}.

Figure 6 Page browse controls

The *Page browse controls* are described in the table below.

Table 4 Page browse control icons

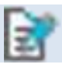
Icon	Name	Description
	Position text message	The *Report position* message showing the number of rows in the report and the row number range currently being displayed
	Previous page icon	A (Go to the) *Previous page* icon
	Page number icon	Two or more *Page number* icons: ▪ The page number for the first page and the final page are always displayed, ▪ Up to three consecutive intermediate page numbers are also displayed – for example, 2, 3 and 4 in *Figure 6 (above)*;
	Next page icon	A (Go to the) *Next page* icon;
	Page number text box	A *Page number* search filter text box and *Go* hyperlink Input a number and **[Go]** to go to that page.

1.5. Functionality

1.5.1. Report actions menu

The *Report actions menu* presents a context-sensitive list of actions to be applied to the selected row – as shown in *Table 5 ()*.

Table 5 Actions within the Report action menu

Icon	Name	Description
	**Edit**	Click to edit the selected object.
	**Delete**	Click to delete the selected object.
	**Download data export**	Click to download the selected data export object.
	**Test settings**	Click to test the sFTP settings.
	**View**	Click to view the selected object.

2. A7 User types

A7 users are either *Back-office* or *Front-office* users:

- Back-office Users include:
  - Tech Support – Administrator,
  - Customer Services User (read-write),
  - Customer Services User (read-only),
  - Account Manager,
  - Bureau User;
- Front end users include:
  - Top level users,
  - Group users,
  - Subscriber users.

See: ***A7 Administrator's User Guide*** for a description of Front-office functionality

2.1. Functionality Available to Each User Type

Table 6 Functionality available by Back-office user type

Functionality	Tech Support	Customer Service	Bureau User	Account Manager (full)	Account Manager (Read-only)
Tech Support Tab	✓	✓	×	✓	✓
Manage Users	✓	✓	×	✓ [4]	✓
Manage Customers	✓	✓	×	✓	✓
Event Usage	✓	✓	×	✓	✓
Total Volume Report	✓	✓	×	×	×
Account Manager	✓	✓	×	×	×
Registration Code Generator	✓	✓	×	×	×
Bureau Tab	✓	×	✓	×	×
Data Processing	✓	×	✓	×	×
Production Reporting	✓	×	✓	×	×
CBV Tab	✓	×	✓	×	×
Add / amend a CBV	✓	×	✓	×	×
Add / amend corporate logo	✓	×	✓	×	×

[4] A limited subset of reports are available.

Functionality	Tech Support	Customer Service	Bureau User	Account Manager (full)	Account Manager (Read-only)
Add / amend partner logo	✓	×	✓	×	×
Profile Management Tab	✓	✓	×	×	×
Profile Feature Manager	✓	✓	×	×	×
sFTP	✓	✓	×	×	×
sFTP	✓	✓	×	×	×

2.2. Hierarchy of User Types

Not all Back-office user types can see all other user types – as show in *Table 7.*

Table 7 The user types visible to other user types

User types visible	User types available				
	Tech Support	Customer Service	Bureau User	Account Manager (full)	Account Manager (read only)
Tech Support	✓	×	×	×	×
Customer Service	✓	✓	×	×	×
Bureau User	✓	✓	×	×	×
Account Manager (full)	✓	✓	×	×	×
Account Manager (read only)	✓	✓	×	×	×
Customer User	✓	✓	×	✓	✓

3. Managing user details

3.1. The user menu

Figure 7 User menu

The *User menu* – also known as the *Welcome* menu – provides access to a user's *A7 User* account including functionality to:

- Return to the *Home* page;
- Display the *Control panel*;
- Display the user's account details;
  - Change password details;
  - Change preferences (for example, stop notification emails) via the *My Account* panel.

3.1.1. My Account

You cannot change your user name.

Once signed in, the *User menu* is populated with your name (as entered when your user account was registered) and a My Account link.

From the *User menu, s*elect **My account** to display the *My Account* panel.

Use *My account* to change your details (for example, your *email address*, *first name* or *last name*) and to change your *password*.

Figure 8 My account panel

3.1.2. Changing the Password

You cannot change the password of a user you are impersonating.

You can change a user password only after you sign-in; or alternatively by requesting a password reset.

Change your password

1. From the *User menu*, select **My account**.

   A7 displays the *My account* panel (*Figure 8* .

2. Select **Password**.
   A7 displays the *Password* panel.

3. Input your new password as ***New password***.
4. Input your new password again as ***Confirm password***.
5. **Save** to complete the change.
   [Alternatively] **Cancel** to exit without saving the changes.

3.2. Changing the Language

You can change your chosen user-interface language at any time.

- Select the required language from the options provided in the footer of each page.

> Once you have selected a language A7 marks it is as a preference against your username.

Part Two

Quick start guide

A quick introduction to using back-office features.

Chapters in Part Two … …

4. Accessing A7

4.1. User Registration

Use the *User Registration* function to register your user if you have received registration credentials in the form of a *Keyword* and *Authenticode* pair.

To register

1. From the A7 welcome page, select **Register**

   The *User registration* panel is displayed.

2. Input all of the required information.

> It is particularly important to enter a valid email address as this will be used to send notifications when new data is ready to be viewed.

3. **Register** to save details.

   The user details are registered.

   The user can now use the **Sign In** panel to access A7 features.

4.2. Sign In

1. From the *A7 Welcome page Main menu*, select **Sign In**.

2. Input your username and password
3. **Sign In**

> A single set of credentials can be active on multiple computers simultaneously.

4.3. Sign Out

➲ From the Welcome Menu, select **Sign Out**.

A7's welcome page is redisplayed.

4.4. Using the predefined reports

➲ View a report

1. From the appropriate *Report overview* pane, select the **<required report name>**.
   [Alternatively] From the *Report menu bar*, select required **<required report name>**.
   A7 displays the *selected report*.
2. [Optionally] Apply any data filters, as required, to focus the results returned by the report – as described in *Topic 1.2.2 Report filters ().*
3. [Optionally] Use the drill-down icons (where available) to view additional detail down.
4. [Optionally] Use the report function menu bar to:
   - Print the report ;
   - Save the report ;
   - Email the report .
5. To return to the overview; from the report menu bar, select **Overview**.

5. Managing customers

5.1. Impersonating a customer

Use this *Manage customers* feature to investigate, diagnose and resolve issues. For example to enter the *Front-office* mode acting as a *Top-level user* for a selected customer.

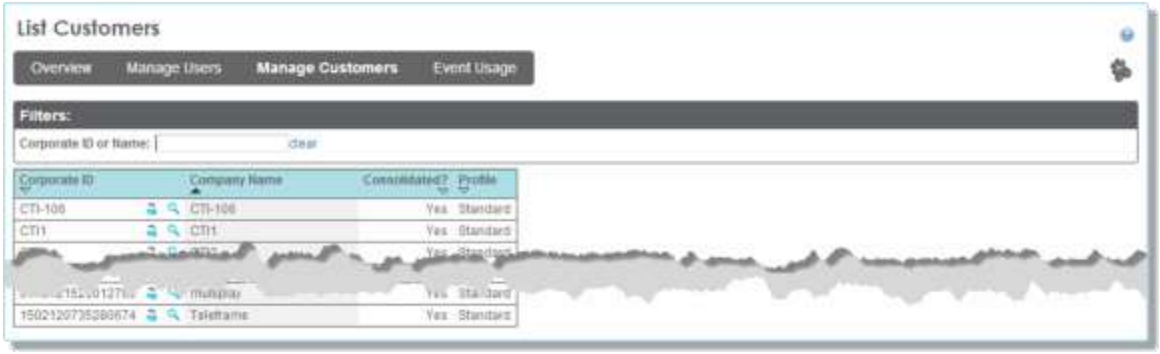


Figure 9 List customers report page

Enter impersonation mode

1. From the Main menu, select **Tech support**
2. Within the *Support Overview's Manage Customers* panel, **List Customers**

   [Alternatively] From the *Reports category menu*, **Manage customers »List customers**

   A7 displays the *List Customers report* – *Figure 9 ()*.
3. For the required customer, **Select Detail**

   A7 displays the selected customer details
4. **View analysis as customer**

   A7 displays the *Front-office Home page*, including a warning and a return link.

5. To exit impersonation mode, **Return to tech support** link

   A7 returns you to the back-office session.

5.2. Changing the assigned profile

Customer profiles determine the features visible to them. Create and edit *Profiles* using the *Profile management* feature (from *Main menu*). But you can assign profiles from within the Manage customers feature-set.

Assign a profile

1. From the *List customers* report – *Figure 9 ()* – locate the required customer row and **Select Detail**

   A7 displays the selected customer details – *Figure 17 ()*.

2. Within the customer details panel, **Action»Assign profile**

   A7 displays a list of existing profiles, showing the selected profile's features.
3. Select the required profile for this customer.
4. **Assign** to continue.

   A7 assigns the selected profile and returns you to the *List customer* view.

   [Alternatively] **Cancel** to exit the process without saving the changes.

5.3. Changing customer settings

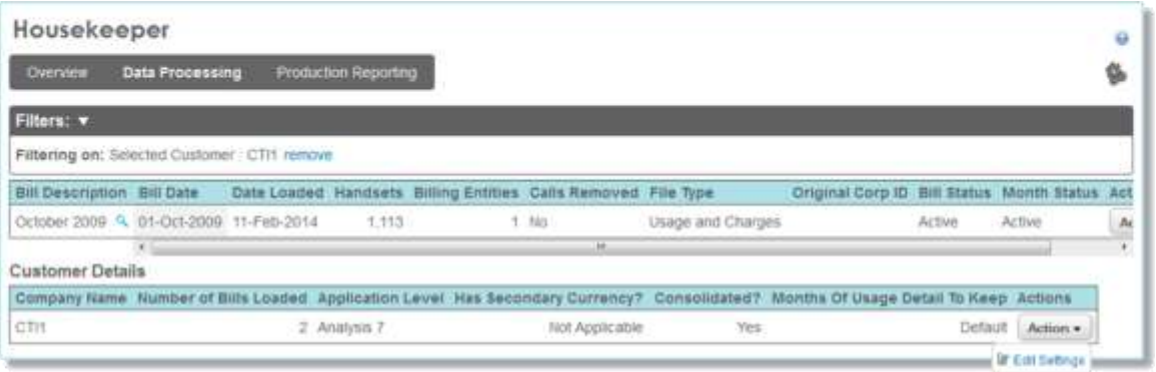


Figure 10 Housekeeper - customer page

Change customer settings

1. From the Main menu, select **Bureau**
2. Within the *Bureau Reports Overview's Data Processing* panel, **Housekeeper**

   [Alternatively] From the *Reports category menu*, **Data processing»Housekeeper**
3. For the required customer, **Select Detail**

   A7 displays the Housekeeper page for the selected customer – *Figure 10* ().
4. Within *Customer details*, **Action»Edit Settings**

   A7 displays the *Update customer settings* panel
5. Select the required value for **Number of months of usage details to keep** drop-down list.
6. **Update to continue**

   A7 save saves changes.

5.4. Deleting a CBV Account

1. From the *Main menu*, select **Bureau**
2. Within the *Bureau Reports Overview's Data Processing* panel, **Housekeeper**

   [Alternatively] From the *Reports category menu*, **Data processing»Housekeeper**
3. Within the returned list of customers, for the required customer, **Select Group**

   A7 displays the selected customer's *Corporate ID*.
4. For the selected *Corporate ID*, **Action»Delete CBV Account**

A7 requests confirmation of the action.

5. **Delete** to confirm

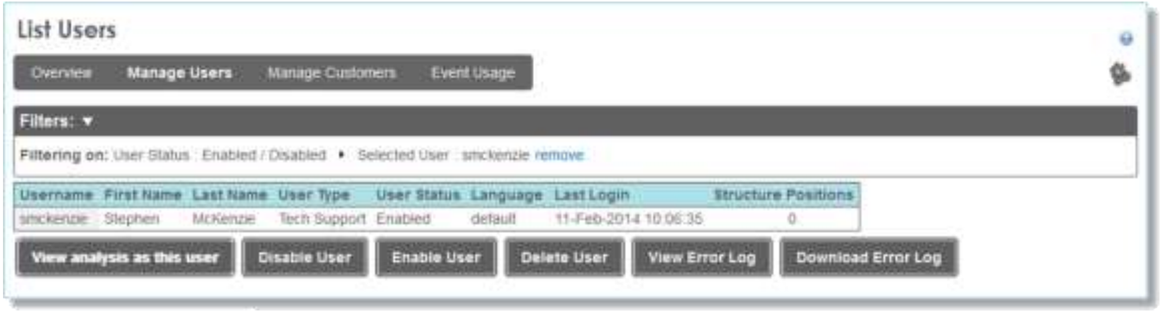
   A7 deletes the selected CBV account.

   [Alternatively] Close window **[X]** to exit the process without deleting.

6. Managing users

6.1. Impersonating a user

Use this *Manage users* feature to investigate, diagnose and resolve issues. It enables you to enter the Front-office mode acting as the selected user.



Enter impersonation mode

1. From the Main menu, select **Tech support**
2. From the Reports category menu, select **List users**
3. For the required user, **Select Detail**
4. Select **View analysis as this user**

   A7 opens a front-office session display a warning message and return link.

5. Select **Return to tech support** link

   A7 returns you to the back-office session.

6.2. Changing user status

Use the *Manage users* feature to enable, disable or delete a user.

Disable a user

1. From within *List users* for the required user, select **Disable user**

   A7 displays a confirmation message panel.

2. **Disable** to continue.

   A7 disables the user, which prevents its use in A7 *Sign In .*

Enable a user

1. From within *List users* for the required user, select **Enable user**

   A7 displays a confirmation message panel.

2. **Enable** to continue.

   A7 enable the user, which is now able to use A7 *Sign In.*

Delete a user

1. From within *List users* for the required user, select **Delete user**
   A7 displays a confirmation message panel.
2. **Delete** to continue.
   A7 deletes the user.

Part Three

Tech Support Tab

Chapters in Part Three …

Introduces A7's Tech support feature-set, which provides easy access to features that enable Customer and User support, Account and Registration Management.

7. Support Overview

The *Support Overview* contains three sections with the following options:

Manage Users	Manage Customers	Event Usage
▪ List Users ▪ Users with activity ▪ Users with no activity	▪ List Customers ▪ Customers with user activity ▪ Customers with no user activity ▪ List Profiles ▪ Registered Users	▪ Event Usage Summary ▪ Event Usage By User ▪ Event Usage By Customer

7.1. Manage users

7.1.1. List Users

Only users accessible to the signed-in Back-office user are visible in the list – as described in *Section. 2.2 Hierarchy of User Types ().*

The *List users* report functionality includes options to:

- Drill-down to user details;
- Impersonate a selected user;
- View and/or download error logs;
- Disable and Enable a selected user;
- Delete a user;
- View a user's structure positions.

Filtering by customer …

You cannot filter by customer here; use *List customers* feature.

Locate the required customer, then **Select group** to drill-down to their users.

View the List user top-level report

Within the *Support overview's Manage users* pane, select **List users**

[Alternatively] From the Tech *support menu*, select **Manage users»List users**

A7 displays the *List user* report.

Report variations or constraints

- Select group action drill-down is unavailable;
- Totals line is unavailable;
- Sort icons are unavailable.

Figure 11 Manage users – list users sample

View the List user top-level report

1. From *Manage users' List users*, **Select detail** 🔍 for the required user.

   A7 displays the *User details* report showing the available functionality.

Report variations or constraints:

- Select group action drill-down is unavailable;
- Totals line is unavailable;
- Sort icons are unavailable.

2. Select the appropriate functional action – as described in *Table 8 ()*.
3. Select **Remove** to return to the top-level report.

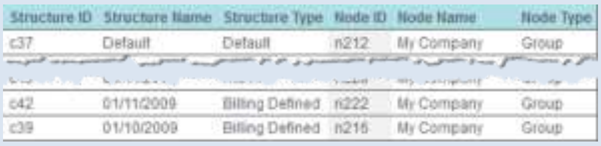
Filters available:

- *User Name(s) or Email* text search box;
- *User Status* drop-down list {**Enabled/Disabled**; Enabled ; Disabled; Deleted)

Table 8 List users functionality

Object	Description
View analysis as this user	Select **View A7 as this user** to open a Front-office A7 session and impersonate the selected user.
Disable User	Select **Disable User** to disable the selected user, revoking their access to A7.
Enable User	Select **Enable User** to re-enable a previously disabled user, reinstating access to A7.
Delete User	This action cannot be undone. Select **Delete User** to permanently delete the user.
View Error Log	Error logging is done for Front-office users only. Select **View Error Log** to see the user's error log records. Related information: Error logs are a created whenever A7 display a red error message – see also: *Appendix A Examples of user error logs (page II)*.
Download Error Log	Select **Download Error Log** to download the user's error log records.

Object	Description
🔍	**Select detail** to see the *Structure positions* assigned to the selected user.



Structure ID	Structure Name	Structure Type	Node ID	Node Name	Node Type
c37	Default	Default	n212	My Company	Group
c42	01/11/2009	Billing Defined	n222	My Company	Group
c39	01/10/2009	Billing Defined	n216	My Company	Group

7.1.2. Users with activity

This report lists all users that have signed-in, showing basic user details and providing a drill-down, which displays a list of the selected user's sign-on details.

View users with activity

1. From *Support overview's Manage users* pane, select **Users with activity**

   [Alternatively] From the Tech *support menu*, select **Manage users» Users with activity**

   A7 displays the Users with activity report.

Report variations or constraints

- Select group action drill-down is unavailable;
- Totals line is unavailable.

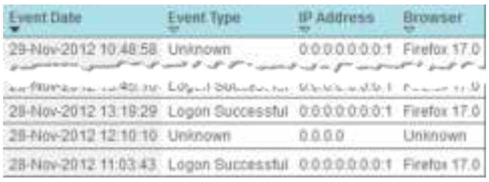
Filters available:

- *User Name(s) or Email* text search box;
- *User Status* drop-down list

Figure 12 Manage users – List users with activity sample

2. **Select detail** 🔍

   A7 displays a log of the selected user's sign-in attempts.



Event Date	Event Type	IP Address	Browser
29-Nov-2012 10:48:58	Unknown	0:0:0:0:0:0:0:1	Firefox 17.0
28-Nov-2012 13:19:29	Logon Successful	0:0:0:0:0:0:0:1	Firefox 17.0
28-Nov-2012 12:10:10	Unknown	0.0.0.0	Unknown
28-Nov-2012 11:03:43	Logon Successful	0:0:0:0:0:0:0:1	Firefox 17.0

Refining the report …

- *Show all* dates check box
- *Data range– used to set the timeframe covered.* This is visible only when Show all dates is unchecked.

7.1.3. Users with no activity

This report lists all users that have not attempted to sign-in, showing basic user details.

.

Figure 13 Manage users – Users with no activity sample

View Users with no activity report

From *Support overview's Manage users* pane, select **Users with no activity**

[Alternatively] From the Tech *support menu*, select **Manage users»**
Users with no activity

The *Users with no activity* report is displayed.

Report variations or constraints

- Select group action drill-down is unavailable;
- Totals line is unavailable.

Refining the report ...

- *User Name(s) or Email* text search box;
- *User Status* drop-down list

Username	First Name	Last Name	Email	Corporate ID	Company Name	User Type	User Status
dhand1	d	hand	dsingleton@ctigroup.com	0310121520012785	multiplay	Customer	Enabled
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
itopuser	1B	TopUser	ibridge@ctigroup.com	CTI-106	CTI-106	Customer	Enabled
uusera	user	usera	zhalim@ctigroup.com	CTI-106	CTI-106	Customer	Enabled

Only standard report functionality is available here.

7.2. Manage Customers

7.2.1. List Customers

Figure 14 List customers report

View a list of the customer's users

1. From the *Manage customers* menu, select **List Customers**

   The *List customers* report is displayed.

2. From *List customers* top-level, **Select group**

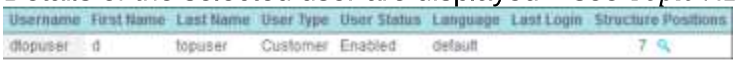
   A list of the customer's users is displayed.

Username	First Name	Last Name	Email	Corporate ID	Company Name	User Type	User Status
aaa	administrator	aa	zhalim@ctigroup.com	CTI-106	CTI-106	Customer	Enabled
uusera	user	usera	zhalim@ctigroup.com	CTI-106	CTI-106	Customer	Enabled

Figure 15 List customers; a list of the customers users.

3. From the *List customers user list*, **Select detail**

   Details of the selected user are displayed – see *Topic 7.1.1 ()*.



Username	First Name	Last Name	User Type	User Status	Language	Last Login	Structure Positions
dtopuser	d	topuser	Customer	Enabled	default		7

Figure 16 List customers; a selected users details

Refining the report …

- Use the *User Name(s) or Email* to find the user required;
- Use the *User Status* filters to view a specific user status.

View the customer details

1. From *List customers* top-level, locate the required customer.
2. For the required customer, **Select detail**

   The customer details page is displayed.

Refining the report …

Use the *Corporate ID filter* to find the customer required.

Error logs …

Error logs are a created whenever A7 displays a red error message *Appendix A Examples of user error logs ()*.

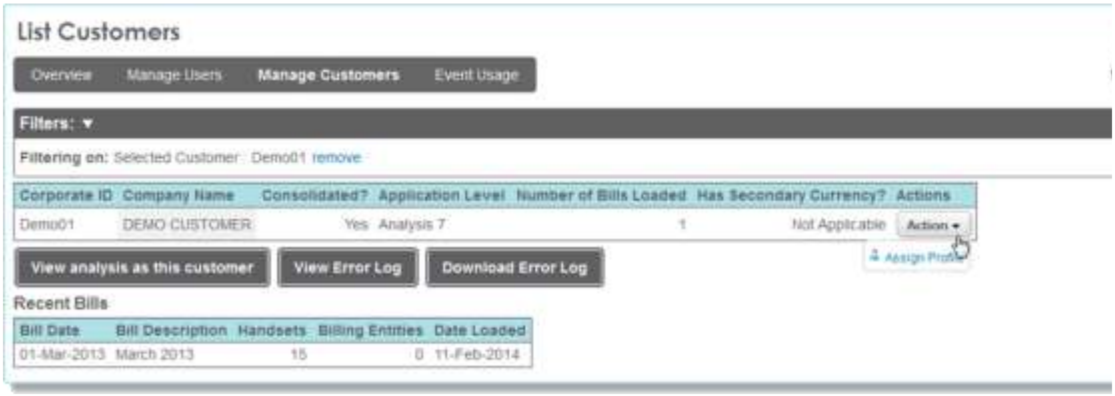


Figure 17 List customers - detail panel

3. [Optionally] Select one of the available functions:

Select **View A7 as this customer** to open a Front-office A7 session and impersonate the selected customer.

Select **View Error Log** to see the customer's users' error log records.

Select **Download Error Log** to download the user's error log records.

Select group

Select group to launch the *Assign* profile panel – as described in *Ch. 17 Assigning Customers to a Profile (page 59)*.

7.2.2. Customers with user activity

The *Customers with user activity* report lists all customers with user activity and is very similar to the *Users with activity* report.

Refining the report …

Use the *Corporate ID filter* to find the customer required.

From *Manage customers*, select **Customers with user activity**

Filters:

Corporate ID or Name: clear

Corporate ID	Company Name	Consolidated?
CTI-106	CTI-106	Yes
CTI1	CTI1	Yes
1353600926384452	Customer 135360	No
0812090926364452	Customer 81209	No
0310121520012785	multiplay	No

Figure 18 Customers with user activity report sample

View sign-on events for the customer

1. Locate the required customer in the *Customers with user activity report's* list.
2. For the customer, **Select detail**

   The list of *Sign-on events*, for all the *users* assigned to that *customer* is displayed:

Username	Event Date	Event Type	IP Address	Browser	Email
adurant	08-Oct-2013 15:57:43	Logon Failed: Could not authenticate user	0.0.0.0	Unknown	edunleavy@ctigroup.com
adurant	08-Oct-2013 15:58:03	Logon Failed: Could not authenticate user	0.0.0.0	Unknown	edunleavy@ctigroup.com
adurant	08-Oct-2013 15:58:22	Logon Failed: Could not authenticate user	0.0.0.0	Unknown	edunleavy@ctigroup.com
adurant	09-Oct-2013 14:44:14	Logon Failed: Could not authenticate user	0.0.0.0	Unknown	edunleavy@ctigroup.com
adurant	09-Oct-2013 14:44:48	Logon Failed: Could not authenticate user	0.0.0.0	Unknown	edunleavy@ctigroup.com
adurant	09-Oct-2013 14:56:04	Logon Failed: Could not authenticate user	0.0.0.0	Unknown	edunleavy@ctigroup.com
adurant	09-Oct-2013 14:59:01	Logon Failed: Could not authenticate user	0.0.0.0	Unknown	edunleavy@ctigroup.com
adurant	09-Oct-2013 14:59:35	Logon Failed: Could not authenticate user	0.0.0.0	Unknown	edunleavy@ctigroup.com

Figure 19 Sign-on events list all users

Functionality is as described for the *Users with activity* report.

View users assigned to selected customer

1. Locate the required customer in the *Customers with user activity report's* list.
2. For the required customer, **Select group**

3. The *Users assigned to selected customer* list is displayed.

Username	First Name	Last Name	Email	Corporate ID	Company Name	User Type	User Status
auser	administrator	user	zhaim@ctigroup.com	85621	Universal Exports 1	Customer	Enabled
guser3	group	user	zhaim@ctigroup.com	85621	Universal Exports 1	Customer	Enabled
uuser	user	user	zhaim@ctigroup.com	85621	Universal Exports 1	Customer	Enabled

Figure 20 Users assigned to a customer list

View user sign-on activity

1. In the *Users assigned to selected customer* list, locate the required user.

The *User Name(s) or Email* and *User Status* filters are available.

2. For the required user, **Select detail**:

A list of all the *Sign-in events* for the selected *user*: is displayed

Event Date	Event Type	IP Address	Browser
17-Jul-2013 12:21:35	Unknown	192.168.1.146	Firefox 10.0.1
17-Jul-2013 12:18:24	Logon Successful	192.168.1.146	Firefox 10.0.1
17-Jul-2013 12:18:01	Unknown	192.168.1.146	Firefox 10.0.1
17-Jul-2013 11:54:59	Logon Successful	192.168.1.146	Firefox 10.0.1

Figure 21 Sign-on events list for a selected user

The *Show all* dates and *Date range* filters are available

Functionality at this point matches the *Users with activity* report.

7.2.3. Customers with no user activity

The *Customers with no user activity* report lists all customers with at least one user that has *never attempted* to Sign-in to *A7*.

From the Manage customers menu, select **Customers with no user activity** report

Corporate ID	Company Name	Consolidated?
CTI-106	CTI-106	Yes
1353600926364452	Customer 135360	No
0812090926364452	Customer 81209	No
0310121520012785	multiplay	No

View the inactive users

1. In the Customers with no user activity panel, locate the required customer.
2. For the required customer, **Select group**

A list of the users for the selected customer is displayed.

Username	First Name	Last Name	Email	Corporate ID	Company Name	User Type	User Status
glevel	group	level	zhaim@ctigroup.com	99999	Demo Customer	Customer	Enabled

Use the *User Name(s) or Email* and *User Status* filters to filter long lists.

7.2.4. List Profiles

You can only create profiles using the *Profile Management* tab.

The *List Profiles* feature displays a read-only view of *customer profiles*

Figure 22 Manage customers – List profiles

This reports shows how many accounts (*customers*) are assigned to each profile (a profile name filter is provided).

Select detail

A7 displays a (read-only) list of features in the selected profile

Select group

A7 displays a (read-only) list of customers assigned to the profile

7.2.5. Registered Users

The *Registered Users* feature lists all *Authenticode* and *Keyword* pairs that *A7* has generated; this includes the initial pair generated when data was first loaded and any subsequent pairs generated using the *Registration Code Generator*.

Figure 23 Registered users panel

The report shows:

- The customer the pair belongs too

> No Customer ID/Name is shown for Back-office pairs;

- The date the pair was created;
- When they were used to create a user

No timestamp is shown if the pair has not been used.

7.3. Events

The *Event Usage* reports show the usage of selected items of functionality, include a count of the number of times each was used.

Three reports are available:

- Event usage summary
  An overall summary;
- Event usage by user
  Usage by individual users;
- Event usage by customer
  Usage by individual customers.

Types of Events Captured

To make the reports meaningful, not every activity or button click is captured.

For example:

- Selecting a report from the *Report Overview Menu* will increment the total for the *Internal Calls Report*.
- However, any further activity in that report, such as drilling down, is not logged as it would result in a large volume of event logs.

Event tracking does not include Administration functionality.

7.3.1. Event Usage Summary

The *Event Usage Summary* shows usage throughout the whole of A7.

Figure 24 Event usage summary example

7.3.2. Event Usage By User

Tech Support, Customer Service, and Account Manager user activity is not recorded; these user types are always impersonating a customer or a customer user.

The *Event Usage by User* report presents the same information, initially summarised by individual *user*.

Username	First Name	Last Name	Email	Corporate ID	Company Name	User Type	User Status
auser	administrator	user	zhalim@ctigroup.com	1353600926364452	Customer 135360	Customer	Enabled
gmulti	group	multi	zhalim@ctigroup.com	0310121520012785	multiplay	Customer	Enabled
smckenzie	Stephen	McKenzie	smckenzie@ctigroup.com			Tech Support	Enabled

Select detail to view the usage for a particular user

7.3.3. Event Usage by Customer

Tech Support, Customer Service, and Account Manager user activity is not recorded; these user types are always impersonating a customer or a customer user.

The *Event Usage by Customer* report presents the same information initially summarised by individual *Customer*.

Corporate ID	Company Name	Consolidated?
CTI-106	CTI-106	Yes
CTI1	CTI1	Yes
0310121520012785	multiplay	Yes

- **Select detail** to expand the list.

  A7 displays the usage for all the users of that customer.

8. Account Manager

Users assigned as account managers are able to access a pre-determined group of customers.

Figure 25 Account manager panel

The *Account manager* panel – *Figure 25 ()* – allows you to:

- Create groups of customers;

  Customers can exist in many groups

- Create account managers;

  Account Managers can exist in many groups;

- Assign account managers to groups of customers.

8.1. Creating a customer group

Customer groupings are set-up by first creating an empty group and then adding the group members.

Figure 26 Account manager new group panel

Create a new customer group

1. From the *Main menu*, **Tech support**
2. In the *Account manager* panel, **Add new**
   The *Account manager's New group* panel is displayed.
3. Input a description as **Group description**
4. **Save Group Details**
   [Alternatively] *Return to full page* – to exit without saving the group.
   A7 creates an empty group and displays *Details saved successfully* message.
   A7 displays the *Account manager's Maintain customer group* panel.

8.2. Maintaining customer groups

Creating a new group, or selecting an existing group, displays the *Account Manager's Maintain customer group* panel, which allows:

- Adding and removing accounts/customers;
- Adding and removing account managers;
- Deleting of the group.

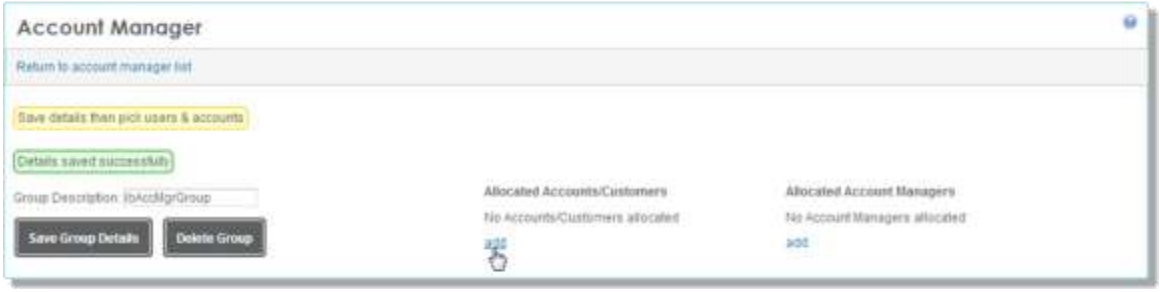


Figure 27 Account manager Maintain customer group panel

Add or remove customers

1. From the *Allocated Accounts/Customer* pane, **Add**

   A7 displays the *Account manager's Allocate customers* panel.

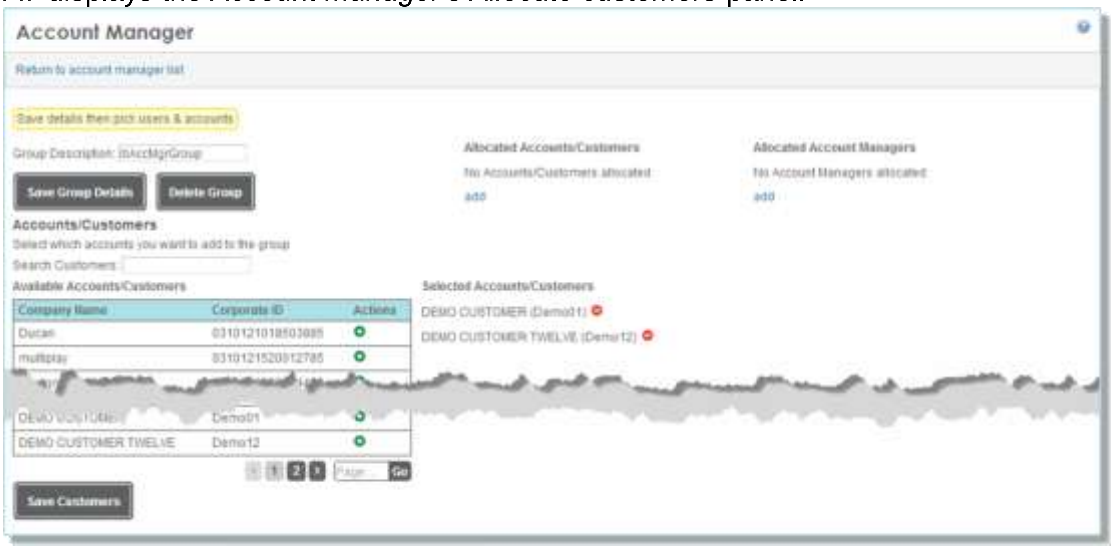


Figure 28 Account manager's Allocate customers panel

2. For each customer to be included in the group:
   i. Locate the customer in the Available Accounts/Customers list

   Use the Search customers feature for long lists.

   ii. Select the plus icon in the Actions column of the required customer.
3. For each customer to be removed from the group:
   i. Locate the customer in the *Selected Accounts/Customers list*.
   ii. Select the minus icon in the *Actions* column of the required customer.

4. **Save Customer** to save the changes.
   A7 displays the *Account Manager's Maintain customer group* panel as confirmation.

> The links beneath *Allocated Accounts/Customers* and *Allocated Account Managers* change from *Add* to *Edit* when the respective lists are populated; the same maintenance panel is launched for add and edit.

Add or remove account managers

> You must first create one or more account manager users – as described in *Section 8.3 Creating account manager users (page 37)*.

1. From the *Allocated Account Managers* pane, **Add**
   The *Account manager's Maintain account managers* panel is displayed.

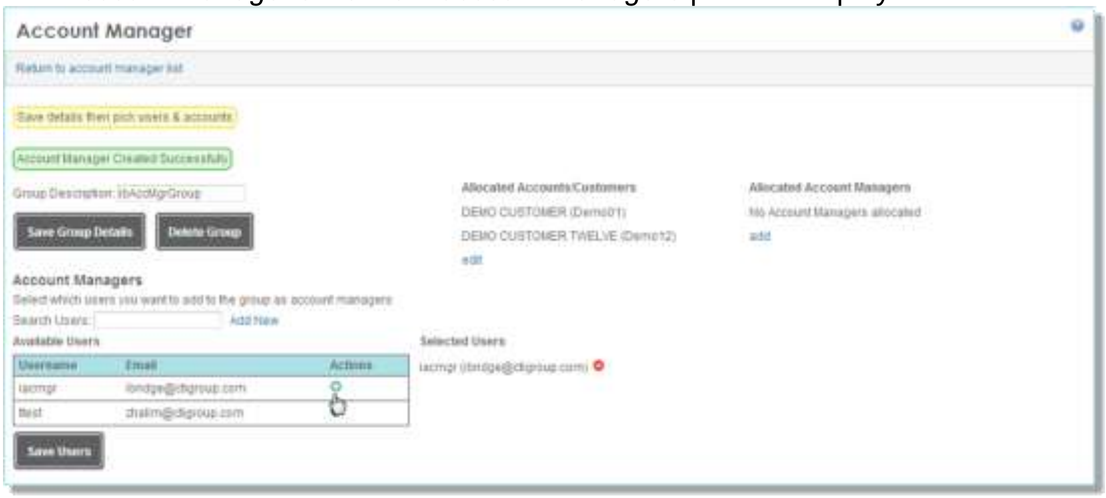


Figure 29 Account manager's Maintain account managers panel

2. For each change required to the customer group:
   i In the Available Users list, select the Plus icon to add the account manager;
   ii In the Selected Users list, select the Minus icon to remove the account manager
3. **Save Users**
   The customer group is updated to reflect the changes.
   A7 displays the *Account Manager's Maintain customer group* panel as confirmation.

Figure 30 Account manager Maintain customer group panel

8.3. Creating account manager users

If the *Account Manager* you want to add is not in the *Available Users* list, then you will need to create them.

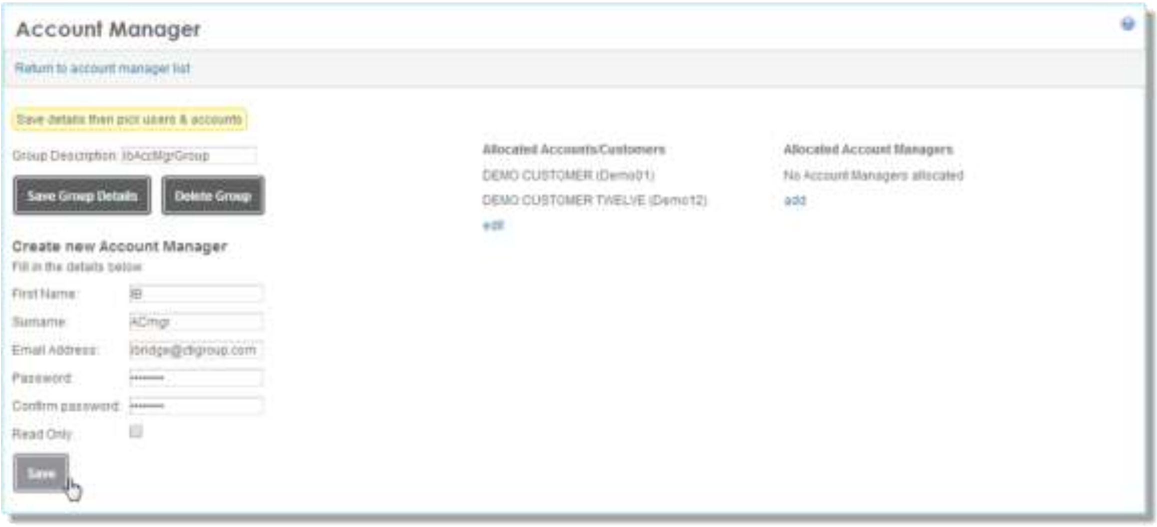


Figure 31 Account manager – using the add new feature

Create account manager user

1. From the Account manager's pane, **Add New**
   The *Create new account* manager panel is displayed.
2. Enter the details of the new *Account Manager*.
3. [Optionally]To create a read-only account managers select the *Read Only* tick box.
4. **Save**
   The user is added to the *Account Manager's Available users* list.

9. Registration Code Generator

This panel is available only to Tech Support and Customer Service users.

The *Registration Code Generator* creates *Authenticode and Keyword pairs,* credentials used to create the following types of users:

- Tech support users (general administrator);
- Customer services user;
- Bureau user;
- Customer top-level (CBV level) user.

User type restrictions

Authenticode/Keyword pairs can be generated only for user types at, or below, the level of the user generating them.

▶ So, for example, only Tech Support users can create credentials for other Tech Support users.

Once generated the credentials are used to create a new A7 user.

Create registration credentials

1. *S*elect a user type from the ***Registration type*** drop-down list.
2. [Optionally]Input a valid ***Corporate ID.***

Use this only when creating Top-level *users*

3. **Request Code**.

A7 displays the generated credentials.

Figure 32 Registration code generator - showing generated codes

[Alternatively] Use **List Active**

A7 displays all generated credentials not used to register a user.

[Alternatively] Use **List Used**

A7 displays a list of generated credentials used to register a user.

Part Four

Bureau Tab

Chapters in Part Four…

Introduces A7's Bureau features, which provide Data processing and Production reporting.

10. Bureau reports overview

The *Bureau reports overview* page provides a gateway to reports and functionality aimed at the management – and monitoring – of data processing and performance.

Figure 33 Bureau reports overview

Data Processing	Production Reporting
▪ View Jobs ▪ Job Status Summary ▪ Job Charges Summary ▪ Payment Summary ▪ Housekeeper ▪ Load Report	▪ Performance Statistics ▪ Login Attempts ▪ Sessions By Day of Week ▪ Sessions By Hour of Day ▪ Sessions By Customer ▪ Sessions By User ▪ Sessions By Partition

From the *Main menu*, select **Bureau**

A7 displays the *Bureau reports overview* (*Figure 33*).

11. Data processing reports

11.1. View jobs

The *View Jobs* report displays all requested jobs, including requests to load data and to remove data (automatically via housekeeper or manually).

To view the jobs report, from the *Main menu,* **Bureau»Data processing»View jobs**

Figure 34 View jobs page

The report shows the current job status, which is also available as a filter and takes the values:

If a job is complete or failed ...

An XML audit of the job is available for download – as described in *18.Appendix A Examples of user error logs (page II).*

Select **Download Job Data Processing Audit** link.

- Open – the job has been requested but has not yet finished;
- Completed;
- Failed.

To view a *Job details report,* locate the required job and **Select detail**

Figure 35 View job's Job details report

11.2. Job status summary

This report shows the total number of jobs requested summarised by *Job status (that is,* `Open, Failed` or `Completed`); a *Date* filter is also available.

➲ To view the job status report, from the *Main menu,* **Bureau»Data processing»Job status summary**

Figure 36 Job status summary report

11.3. Job charges summary

This report shows the number of items processed in the selected timeframe; the items summarised include:

- Number of charges (`n-chg`);
- Number of subscribers (`n-hset`);
- Number of usage events (`n-cdr`).

Refining the report …

➲ Use the *Date* drop-down filter to vary the timeframe; default is the current month.

➲ To view the jobs charges summary, from the *Main menu,* **Bureau»Data processing»Job charges summary**

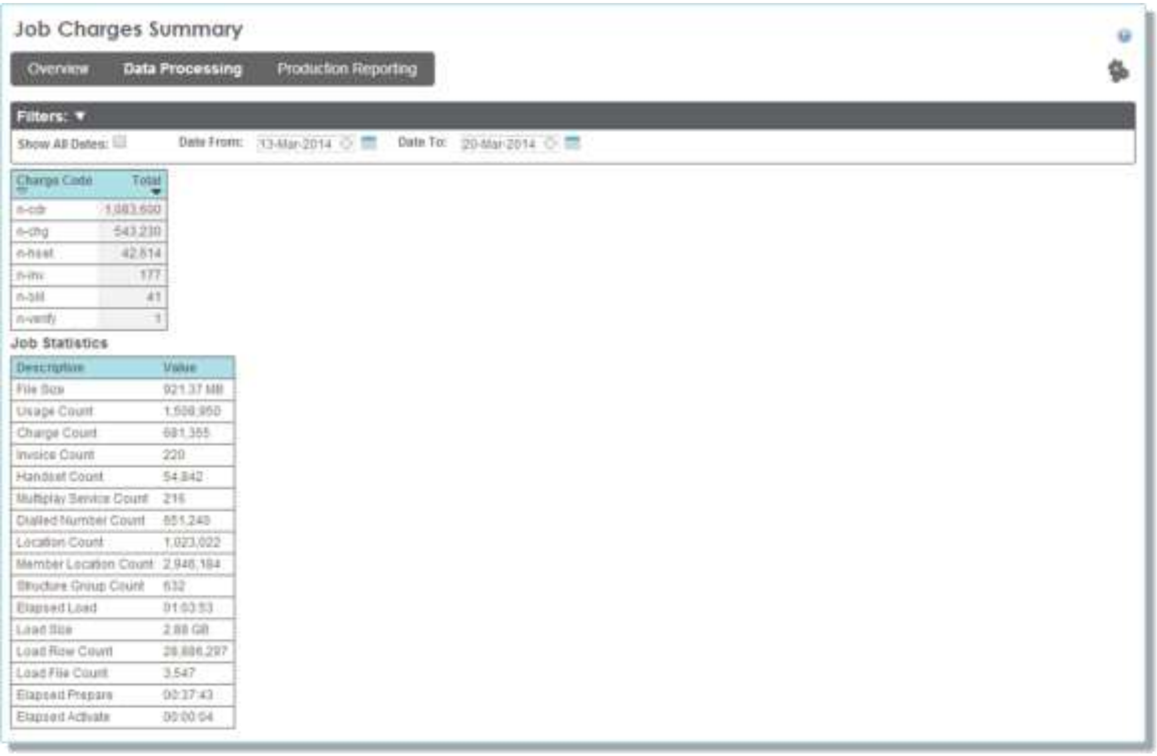


Figure 37 Job charges summary report

11.4. Payment summary

The *Payment Summary* displays a running total of data load and access statistics summarised by customer, which includes the number of loaded:

- Billing Entities;
- Subscribers;
- Usage records (CDR);
- Bills;
- Unique logins;
- All logins.

Refining the report …

Initially this report shows the last calendar month's totals.

Use the *date pickers* to set the ***Date from*** and ***Date to***.
[Alternatively]: **Show All Dates**.

Within Bureau reports overview's *Data processing* pane, select **Payment summary**
[Alternatively] From the *Report category menu*, **Data processing»Payment summary**

Figure 38 Payment summary

11.5. Housekeeper

Housekeeper functionality allows the removal of loaded data such as:

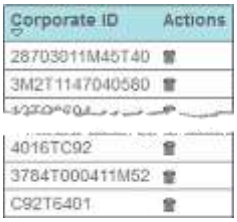
- A whole customer;
- A specific month;
- A specific data file;
- A specific account (all months/data files).

Figure 39 Housekeeper report

List the accounts loaded for a customer

1. From *Housekeeper's* returned list, **Select detail** for the required customer.

   The list of customer accounts loaded is returned.



Corporate ID	Actions
28703011M45T40	
3M2T1147040580	
4016TC92	
3784T000411M52	
C92T6401	

Figure 40 Housekeeper; accounts for selected customer

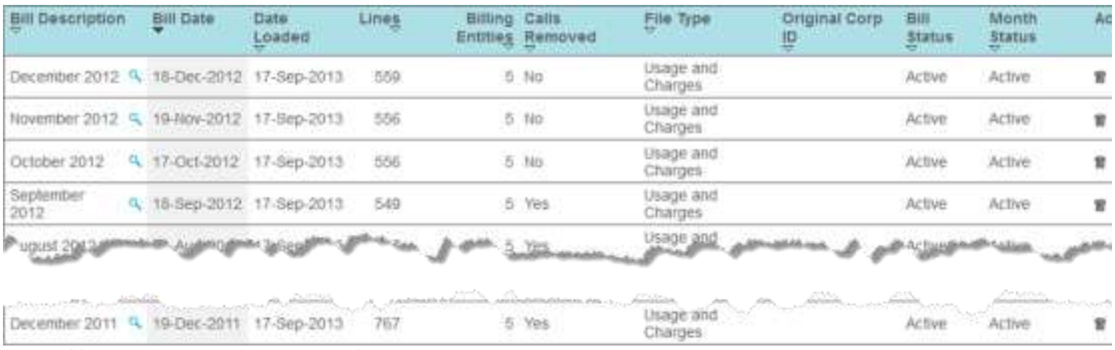
2. [Optionally]**Delete** to delete the selected account.

This deletes the data (files) for all months for the selected account.

List the months loaded for a customer

1. From *Housekeeper's* returned list, **Select group** for the required customer.

   The list of months loaded is returned.



Bill Description	Bill Date	Date Loaded	Lines	Billing Entities	Calls Removed	File Type	Original Corp ID	Bill Status	Month Status	Ac
December 2012	18-Dec-2012	17-Sep-2013	569	5	No	Usage and Charges		Active	Active	
November 2012	19-Nov-2012	17-Sep-2013	556	5	No	Usage and Charges		Active	Active	
October 2012	17-Oct-2012	17-Sep-2013	556	5	No	Usage and Charges		Active	Active	
September 2012	18-Sep-2012	17-Sep-2013	549	5	Yes	Usage and Charges		Active	Active	
December 2011	19-Dec-2011	17-Sep-2013	767	5	Yes	Usage and Charges		Active	Active	

Figure 41 Housekeeper; months loaded for customer

2. [Optionally]**Delete** to remove the selected month.

This deletes the data (files) for all months for the selected account.

3. [Optionally] **Select detail** for the required month.

   A list of data files loaded for the selected month is displayed.

Bill Description	Bill Date	Date Loaded	Lines	Billing Entities	Calls Removed	File Type	Original Corp ID	Bill Status	Month Status	Ac
December 2012 925000054	18-Dec-2012	17-Sep-2013	306	0	No	Usage and Charges	925000054	Active	Active	
2012-12 (084M104203T571-0) 084M104203T571	03-Dec-2012	17-Sep-2013	13	0	No	Usage and Charges	084M104203T571	Active	Active	
2012-12 (C129064T-0) C129064T	01-Dec-2012	17-Sep-2013	240	0	No	Usage and Charges	C129064T	Active	Active	

Figure 42 Housekeeper; Data files for selected month

[Optionally]**Delete** to remove the selected data file.

11.6. Load report

The *Load Report* lists all the data files loaded into the system.

The columns shown include the date/time that the file was loaded and counts of the data the file contained (for example, a count of subscribers, CDRs, total charges & total value of invoices).

Refining the report …

Initially this report shows the last calendar month's totals.

- Use the *Date pickers* to set the ***Date from*** and ***Date to***. [Alternatively]: **Show All Dates**.
- Select the required status from the ***Bill status*** filter {`All`; `Active`; `Inactive`}.

Within Bureau reports overview's *Data processing* pane, select **Load report**

[Alternatively] From the *Report category menu*, **Data processing» Load report**

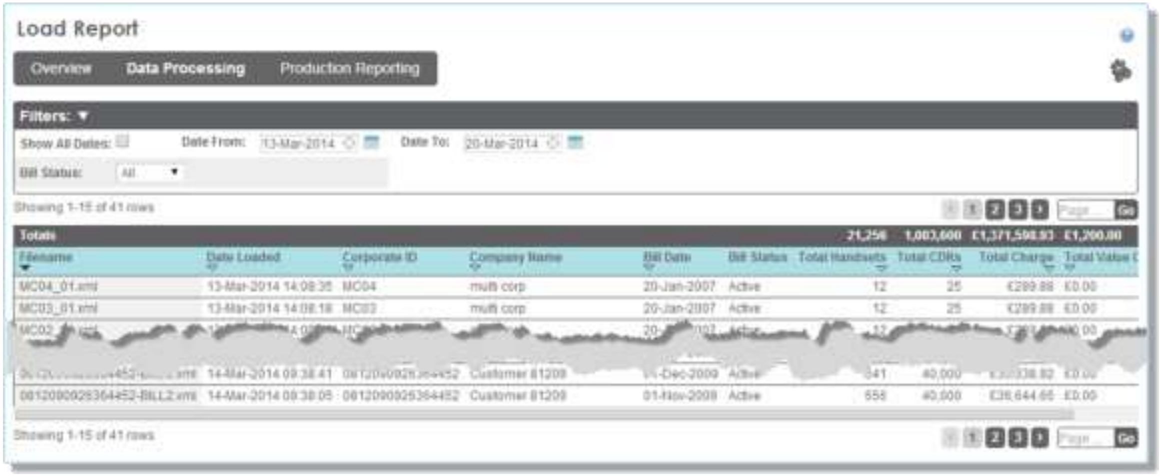


Figure 43 Load report

12. Production reporting

12.1. Performance statistics

This report requires system configuration to run successfully.

Refining the report …

Initially this report shows the last week's statistics.

- Use the *Date pickers* to set the ***Date from*** and ***Date to***. [Alternatively]: **Show All Dates**.

The statistics displayed by the *Performance Statistics* report enable analysis of the impact workload is having upon performance; they are based on:

- The time taken to action seven key performance indicators (kpi);
- The number of user sessions open at the time of the measurement.

Figure 44 Performance statistics report

12.2. Login attempts

The *Login attempts* report summarises the number of *successful, failed* and *total* sign-in attempts per day in the selected period.

Refining the report …

Initially this report shows the last week's statistics.

- Use the *Date pickers* to set the ***Date from*** and ***Date to***. [Alternatively]: **Show All Dates**.

Figure 45 Login attempts report

12.3. Session reporting

The five *Sessions by…* reports summarise the number of A7 sessions in a timeframe by:

- Day of the week;
- Hour of the day;
- Customer;
- User;
- Partition.

An *A7* session – *a* single instance of a single user *signing-in*, using (or not) A7, and *signing-out*.

Refining the reports …

Initially these reports show statistics from the previous week. However all five reports have at least the *Date* filter available.

Use the *Date pickers* to set the ***Date from*** and ***Date to***. [Alternatively]: **Show All Dates**.

Impact of extended timeframes …

A7 aggregates the *Number of sessions* across the whole timeframe, before summarising them..

So view a report such as *Sessions by Day of Week* over a timeframe of two-weeks and it will show Monday with 11 sessions if the counts are:

- Monday (week 1) – 6 sessions;
- Monday (week 2) – 5 sessions.

12.3.1. Sessions by day of week

Figure 46 Sessions by day of week report

12.3.2. Sessions by hour of day

Hour	Number of Sessions	Percent
Totals	1,558	
00:00 - 00:59	65	4.2 %
01:00 - 01:59	77	4.9 %
02:00 - 02:59	67	4.3 %
03:00 - 03:59	65	4.2 %
04:00 - 04:59	67	4.3 %
05:00 - 05:59	66	4.2 %
06:00 - 06:59	67	4.3 %
07:00 - 07:59	66	4.2 %
08:00 - 08:59	67	4.3 %
09:00 - 09:59	68	4.4 %
10:00 - 10:59	71	4.6 %
11:00 - 11:59	70	4.5 %
12:00 - 12:59	64	4.1 %
13:00 - 13:59	71	4.6 %
14:00 - 14:59	70	4.5 %

Figure 47 Sessions by Hour of day list

12.3.3. Sessions by customer

The *Date* and *Corporate ID/Name* filter are available for this report

Totals		1,542	
Corporate ID	Company Name	Number of Sessions	Percent
95621	Universal Exports 2	1,537	99.7 %
85621	Universal Exports 1	5	0.3 %

Figure 48 Sessions by customer list

12.3.4. Sessions by user

The *Date* and *User name/email* filters are available for this report

Totals				1,559	
Username	Corporate ID	Company Name	User Status	Number of Sessions	Percent
apearson	95621	Universal Exports 2	Active	1,537	98.6 %
tsupport			Active	17	1.1 %
hmistry	85621	Universal Exports 1	Active	3	0.2 %
demo1	85621	Universal Exports 1	Active	1	0.1 %
edunleavy1	85621	Universal Exports 1	Active	1	0.1 %

Figure 49 Sessions by user list

Part Five

CBV Tab

Introduces A7's CBV feature-set, which is used for creating new consolidated customers and managing account level branding.

Chapters in Part Five...

13. Maintaining consolidated customers

The *Customer's* details must exist in A7 before any data can be loaded for it.

CBV is a system term used to describe a consolidated customer.

The *CBV feature-set* enables *Back-office users* to create consolidated customers and to adjust their applied branding.

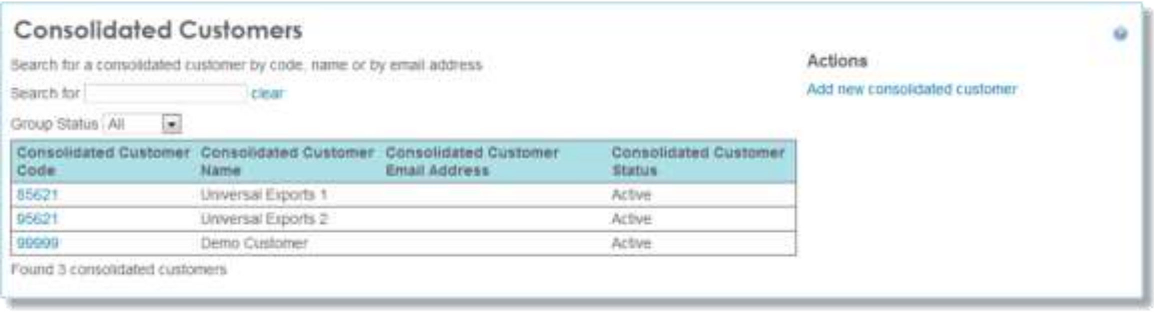


Figure 50 Consolidated customers page

From this panel you can:

- Maintain customer details
  Add or amend a customer;
- Maintain logos
  - Add, amend or remove a Corporate Logo;
  - Add, amend or remove a Partner Logo.

Add a new consolidated customer

1. From the *Main menu*, **CBV**
   A7 displays the *Consolidated customers* page – *Figure 50 ()*.

Related information

Ch. 14 Maintaining account level branding 52

2. Within the *Consolidated customers* page, select the **Add new consolidated customer** hyperlink.
   A7 displays the *New consolidated customer* panel.

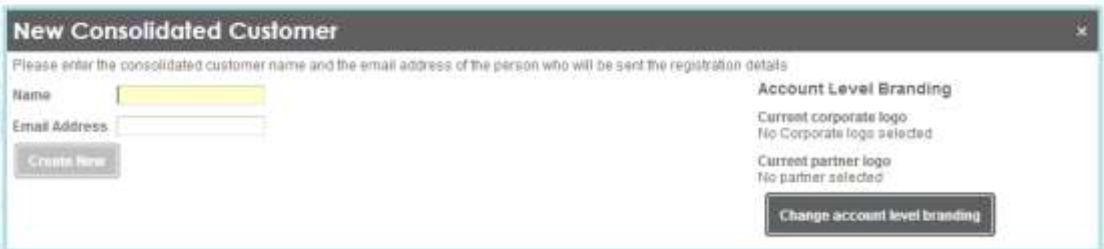


Figure 51 New consolidated customer panel

3. Input the following data items:
   - An identifying name as ***Name***;
   - The main contact's (valid) email address as ***Email address***.
4. [Optionally] **Change account level branding** – as described in *Ch. 14 ()*.
5. **Create New**

   A7 saves the customer details.

> **Email address**
>
> This is the recipient address for the *Authenticode* and *Keyword* credentials, which are emailed when data is loaded and activated for the first time.
>
> ▶ Enter the credentials into the *User Registration* panel to create the required registered user.

Amend customer details

> The amended customer name is used only in **future** *Billing-defined* structures; they are not retrospectively applied to *Historical*, old *Billing-defined* or the *Default* [5] structures.

1. Within the *Consolidated customers* page, select the ***Consolidated customer code*** of the customer to edit.

   A7 displays the *Update consolidated customer* panel.

Figure 52 Update consolidated customer panel

2. Amend the details as required.

   A7 activates the previously inactive *Update Customer Details* button.
3. [Optionally] **Change account level branding** – as described in *Ch. 14 ()*.
4. **Update Customer Details** to save the changes

   [Alternatively] **Cancel** – to exit without saving the changes.

5 It is possible to rename the Default structure within the product.

14. Maintaining account level branding

Each *customer* can have its own logo displayed in A7, or can be associated with a partner and have the partner logo displayed.

Logo constraints

The logo must be a maximum of 100 pixels wide and 40 pixels high to be displayed correctly.

Add or amend branding

1. From the *Consolidated customer* page select either a **Consolidated Customer code** to update or **Add new consolidated customer**

   A7 displays either the *Update Consolidated Customer* panel – *Figure 52 ()* – or the *New Consolidated Customer* panel – *Figure 51 ()*.

2. Within the *New/Update Consolidated Customer* panel, **Change account level branding**.

   A7 displays the *Update Account Level Branding* panel.

Figure 53 Update account level branding panel

3. [Optionally] To remove a (previously applied) corporate logo:

   Select **Use none** as the *Upload Corporate logo* option

4. [Optionally] To add a corporate logo:

   i. Select Upload new corporate logo as the Upload Corporate logo option
   A7 displays a *Choose file* button.

   ii. Choose file to continue
   A7 opens a Windows Explorer panel.

   iii. Within the Explorer panel, browse to and select the required logo image file

   iv. Open to continue.
   [Alternatively] **Cancel** to close the panel without selecting a logo file.

5. [Optionally] To add a corporate partner association,

   Select a partner from the ***Select corporate partner*** drop-down list.

6. [Optionally] To remove a corporate partner association,

   Select `No corporate partner` from the ***Select corporate partner*** drop-down list.

7. **Updated account branding** to continue

   A7 saves the account level branding details and returns to the previous panel.

Part Six

Profile Management Tab

Introduces A7's Profile management feature-set.

Chapters in Part Six...

15. About profiles

Only *Tech Support* and *(full) Customer Service* users can manage *Profiles*.

Profiles are groups of A7 features.

Each customer is assigned a profile appropriate for their role; use *Profile manager* to group some (or all) of A7's features into assignable units.

For example:

You may create a profile called SME which designed for smaller customers, whom you want to restrict to viewing only the *Home page*, *Trends*, *Reports* and *Downloads*; excluding them from access to *Usage Tagging* and *Administration* features.

In addition to removing whole tabs *Profile management* also allows the removal of specific features, for instance the removal of an individual report.

Read-only Customer Service users do not see the *Profile Management* tab, although they do see the read-only *List Profiles* report (on the *Tech Support* tab).

15.1. Feature dependencies

Some features are dependent on others, which must be included in all profiles *Profile manager* displays these essential features in the *Default Features* section; they cannot be removed.

For example:

- To add any *Usage Tagging* feature you must also add *Full Tagging Usage* because it controls the appearance of the *Usage Tagging* tab.
- To add the *Manage Subscribers Move* or *Manage Subscribers Rename* feature (or many of the *Administration* features) you must also add *Manage Company Structure*.

For example, *CTI* would recommend multicurrency customers do not remove the *Currency Conversion* feature-set.

15.2. Standard Profile

The *Standard* profile can be neither edited nor deleted.

A7 creates a single profile named *Standard* at installation time; it contains every *feature* available in your deployment of *A7*.

15.3. Default Profile

The *Default profile* cannot be deleted.

You can designate any profile as the *Default profile*; at installation time the *Standard profile* is the de-facto *Default profile*.

A7 automatically assigns new customers to the current *Default profile* when their data is loaded for the very first time.

To delete a profile that is currently the *Default profile*, first choose another profile to be the *Default profile*.

15.4. Profiles and page layout

Removing a feature from a profile also removes the associated panel from A7.

A7's *fluid page design* feature handles this by allowing panels to relocate within the page boundaries to fill space left by the missing panel.

Fluid design constraints

The fluid design feature is applicable only for users who **sign-in** to A7's Front-office.

When a Back-office user impersonates a user (or customer) all panels are visible. However, panels not available to the impersonated-user display only a message asserting that fact.

However, removing some combinations of panels may cause styling issues to occur and this must be a consideration when creating and edit profiles.

16. Managing profiles

From the *Main menu*, select **Profile Management**

A7 displays the *Profile Feature Manager*.

Figure 54 Profile feature manager panel

From this panel you can:

- Search for a profile;
- Set a default profile

> Customers assigned to the previous default remain on their assigned profile until specifically moved

  Select the radio button next to the profile name, from that point forward all new customers loaded are assigned to that profile;

- Add a new profile;
- Add features to a profile;
- Remove features from a profile;
- Assign customers to a profile;
- Delete a profile.

16.1. Adding Profiles

Add a new profile

1. From the *Profile feature manager*, select the **Add New** hyperlink

   A7 displays the *Add new profile* panel.

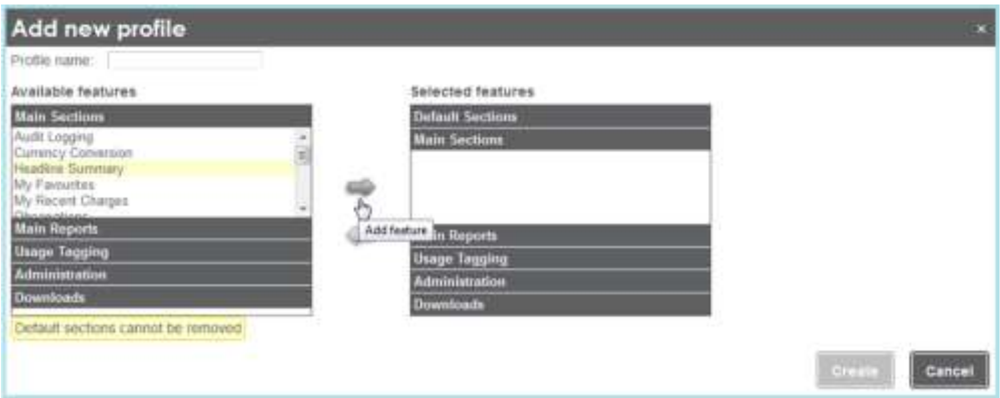


Figure 55 Add new profile panel

2. To add a feature to the profile
   i. Select the feature
   ii. Select the appropriate arrow to move it from the Available features list to the Selected features list.
3. To remove a feature from the profile
   i Select the feature
   ii Select the appropriate arrow to move it from the Selected features list to the Available features list.
4. Once you have completed building the profile feature list, **Create**

   A7 saves the profile details.

   [Alternatively] **Cancel** to exit without saving details.

16.2. Editing Profiles

Edit a profile

1. From the main list of profiles, **Edit** icon

   A7 displays the *Edit profile* panel.

   This is the same panel as *Add new profile* panel – *Figure 55 ()* – except that the *Create* button becomes an *Update* button.

2. Edit the details as described for *Add a new profile*.

   Once you have completed changing the profile, select **Update** A7 saves the amended profile details.

   [Alternatively] **Cancel** – to exit without saving the amendments.

16.3. Deleting Profiles

Delete a profile

1. From the main list of profiles, **Delete** icon

A7 displays the *Delete profile* confirmation dialog:

Figure 56 Delete profile panel

2. **Yes** to continue

A7 queues the profile for deletion by the next run of the *Profile deletion service*.

A7 re-assigns all customers currently assigned to the deleted profile to the *Default* profile.

[Alternatively] **No** to exit without deleting the profile.

17. Assigning Customers to a Profile

Users logged into a customer at the time of a re-assignment from one profile to another may not see the change until they next sign-in to A7.

Assign a customer to a profile,

1. From the main list of profiles, click on the *people icon* –
   A7 displays the *Assign customers to profile* panel.

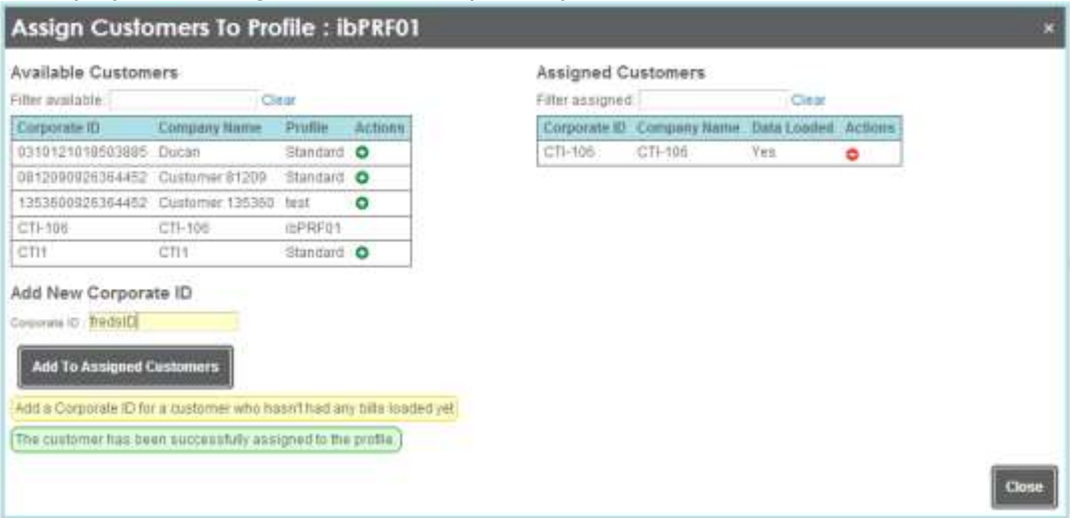


Figure 57 Assign customers to profile panel

2. Add customers as required:

   i. Within *Available Customers*, locate the customer to be added

   Use *Filter available* on larger lists.

   ii. **Add** icon
   A7 assigns the selected customer to the profile.

To add a customer before loading their data …

- Input a name as **Corporate ID**
- **Add to assigned customers** – to add to the profile
- The customer is added to the profile.

3. Remove customers as required:

   i. Within *Assigned Customers*, locate the customer to be removed

   ii. **Remove** icon – to remove a customer from the profile
   A7 removes the customer from the profile.

Part Seven

sFTP Tab

Introduces A7's Profile management feature-set.

Chapters in Part Seven...

18. Configuring sFTP profiles

The *sFTP* feature-set enables *Service-providers* to configure *sFTP* servers to handle file downloads.

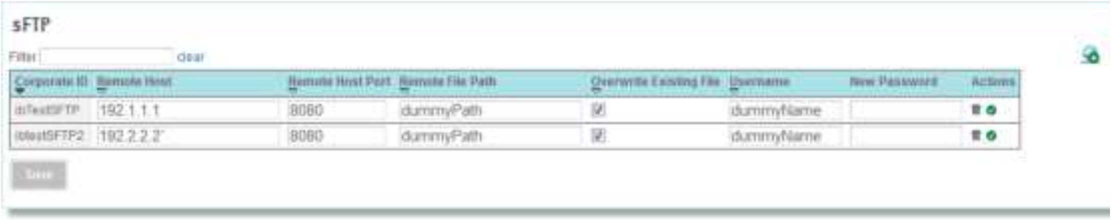


Figure 58 sFTP profile list

Add new sFTP profile(s)

1. From the *sFTP profile list*, select **Add new profile**

   A7 displays the *Add new sFTP profile* panel.

> **Remove unused profiles**
>
> Select the **Trashcan** icon for the profile to remove.

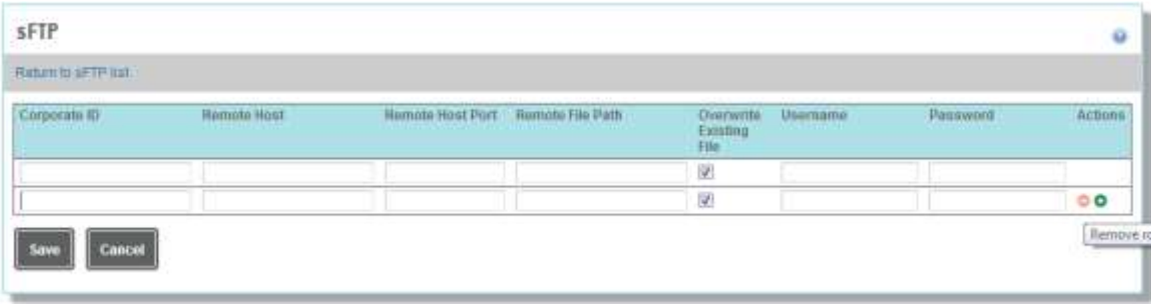


Figure 59 Add new sFTP profile panel

2. For each profile to be added:
   - i. Select Add

     A7 displays a new blank details row.
   - ii. Input the required sFTP details.
3. For each profile to remove, select **Remove**

   A7 deletes the selected profile (and row).
4. **Save**

   A7 saves the profile(s).

   [Alternatively] **Cancel** to exit without saving the changes
5. **Return to sFTP list** to exit the panel

Any details not saved are lost.

Test an sFTP connection

From the *sFTP Profile List*, select **Test connection**

A7 displays the connection panel, showing progress.

Figure 60 Example test of sFTP connection

Appendices

Appendix A Examples of user error logs

Red error messages may appear for any user for many different reasons. It is impossible to document every possible error message that may occur as they are generated only when the error occurs.

Error logs for users can be viewed or downloaded from the Tech Support tab when viewing a user's details.

A.1 Error message components

There are the following parts of an error message:

Code	Description
When	Details when the error occurred (uses server date and time)
ClassRef	Details which component of the application reported the error
Cause	Usually the command that tried to execute when the error occurred
Type	For example an API or a Java exception
Message	A more detailed description of what has happened
Stack Trace	A list of open routines at the time the error occurred

A.2 Example error log file as downloaded:

In this example, the API has returned a 'Customer not found exception' the reason for which needs to be investigated further.

```
When:         28-Apr-2010 13:32:11
ClassRef:     class com.cti.panther.web.servlets.Back-
office.ConsolidationServlet
Cause:
     http://192.168.1.113:80/mncapi73/customer/C00065?lang=en_GB
Type:         class com.cti.panther.api.ApiException
Message:  API call error: 404 - URL:
http://192.168.1.113:80/mncapi73/customer/C00065?lang=en_GB
Exception Type: com.cti.panther.types.CustomerNotFoundException
Exception Message: CustomerPartitionLookup failed for CorpID C00065
Exception Detail: com.cti.panther.types.CustomerNotFoundException:
CustomerPartitionLookup failed for CorpID C00065
at com.cti.panther.data.DalLookups.CustomerPartitionLookup(String
corporateID)
at com.cti.panther.data.DalBase.CustomerPartitionLookup_WithCache(String
corpID)
at com.cti.panther.data.Database.GetCustomerDetailsByCorporateID(String
corporateID)
at
com.cti.panther.business.CustomerLogic.GetCustomerDetailsByCorporateID(S
tringcorporateID)
at com.cti.panther.api.providers.CustomerParameter..ctor(BusinessLogic
biz, String value)
at
com.cti.panther.api.providers.PantherApiRequest.GetParameterValue(Type
paramType, String name, String value)
at
com.cti.panther.api.manager.ProviderManager.InvokeMethod(ProviderMethod
method, String[] wildcardValues, ApiRequest request, Object
optionalPostData)
```

```
at com.cti.panther.api.manager.ProviderManager.Execute(ApiRequest
request)

Stack Trace:

at com.cti.panther.api.PantherAPI.doHttpOperation(PantherAPI.java:364)
at com.cti.panther.api.PantherAPI.doApiRequest(PantherAPI.java:133)
at com.cti.panther.api.PantherAPI.doGet(PantherAPI.java:67)
at com.cti.panther.providers.ProviderBase.doApiGet(ProviderBase.java:47)
at
com.cti.panther.providers.CustomerProvider.getCustomerByCorpID(CustomerP
rovider.java:39)
at com.cti.panther.web.servlets.Back-
office.ConsolidationServlet.processAction(ConsolidationServlet.java:150)
at com.cti.panther.web.servlets.Back-
office.ConsolidationServlet.doAction(ConsolidationServlet.java:90)
at com.cti.panther.web.servlets.Back-
office.ConsolidationServlet.doPost(ConsolidationServlet.java:69)
at com.cti.panther.web.servlets.Back-
office.ConsolidationServlet.doGet(ConsolidationServlet.java:60)
at javax.servlet.http.HttpServlet.service(HttpServlet.java:627)
at
com.cti.panther.web.servlets.PantherServletBase.service(PantherServletBa
se.java:143)
at javax.servlet.http.HttpServlet.service(HttpServlet.java:729)
at
org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(Applica
tionFilterChain.java:269)
at
org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilt
erChain.java:188)
at
org.apache.catalina.core.StandardWrapperValve.invoke(StandardWrapperValv
e.java:213)
at
org.apache.catalina.core.StandardContextValve.invoke(StandardContextValv
e.java:172)
at
org.apache.catalina.core.StandardHostValve.invoke(StandardHostValve.java
:127)
at
org.apache.catalina.valves.ErrorReportValve.invoke(ErrorReportValve.java
:117)
at
org.apache.catalina.core.StandardEngineValve.invoke(StandardEngineValve.
java:108)
at
org.apache.catalina.connector.CoyoteAdapter.service(CoyoteAdapter.java:1
74)
at
org.apache.coyote.http11.Http11Processor.process(Http11Processor.java:87
5)
at
org.apache.coyote.http11.Http11BaseProtocol$Http11ConnectionHandler.proc
essConnection(Http11BaseProtocol.java:665)
at
org.apache.tomcat.util.net.PoolTcpEndpoint.processSocket(PoolTcpEndpoint
.java:528)
at
```

```
org.apache.tomcat.util.net.LeaderFollowerWorkerThread.runIt(LeaderFollow
erWorkerThread.java:81)
at
org.apache.tomcat.util.threads.ThreadPool$ControlRunnable.run(ThreadPool
.java:689)
at java.lang.Thread.run(Thread.java:595)
```

A.3 Example error log file as seen on screen:

In this case the error was that a report failed to render correctly.

When	02-Jul-2012 12:45:43
ClassRef	class com.cti.panther.web.portlets.report.helpers.ReportToolsHelper
Cause	Unknown
Type	SuperReport Render Exception
Message	
Stack Trace	at com.cti.panther.web.portlets.report.customreport.CustomReports.removeStructuresWithNoSummaryPermissions(CustomReports.java:450) at com.cti.panther.web.portlets.report.customreport.CustomReports.initCompanyStructureData(CustomReports.java:537) at com.cti.panther.web.portlets.report.SuperReport.refreshCompanyStructureForCustomReportsIfRequired(SuperReport.java:1874) at com.cti.panther.web.portlets.report.SuperReport.prepareReportView(SuperReport.java:1836) at com.cti.panther.web.portlets.report.SuperReport.doReportView (SuperReport.java:1894) at com.cti.panther.web.portlets.report.SuperReport.doViewPortlet(SuperReport.java:1486) at com.cti.panther.web.portlets.PantherPortletBase.doView (PantherPortletBase.java:456) at javax.portlet.GenericPortlet.doDispatch(GenericPortlet.java:328) at com.cti.panther.web.portlets.PantherPortletBase.doDispatch (PantherPortletBase.java:386) at javax.portlet.GenericPortlet.render(GenericPortlet.java:233) at com.sun.portal.portletcontainer.appengine.filter.FilterChainImpl.doFilter (FilterChainImpl.java:126) at com.liferay.portal.kernel.portlet.PortletFilterUtil.doFilter(PortletFilterUtil.java:69) at com.liferay.portal.kernel.servlet.PortletServlet.service (PortletServlet.java:100) at javax.servlet.http.HttpServlet.service(HttpServlet.java:729) at org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(ApplicationFilterChain.java:269) at org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterChain.java:188) at org.apache.catalina.core.ApplicationDispatcher.invoke(ApplicationDispatcher.java:679) at org.apache.catalina.core.ApplicationDispatcher.doInclude(ApplicationDispatcher.java:584) at org.apache.catalina.core.ApplicationDispatcher.include(ApplicationDispatcher.java:497) at com.liferay.portlet.InvokerPortletImpl.invoke(InvokerPortletImpl.java:618) at com.liferay.portlet.InvokerPortletImpl.invokeRender(InvokerPortletImpl.java:700) at com.liferay.portlet.InvokerPortletImpl.render(InvokerPortletImpl.java:419) at org.apache.jsp.html.portal.render_005fportlet_jsp._jspService(render_005fportlet_jsp.java:1462) at org.apache.jasper.runtime.HttpJspBase.service(HttpJspBase.java:98) at javax.servlet.http.HttpServlet.service(HttpServlet.java:729) at org.apache.jasper.servlet.JspServletWrapper.service(JspServletWrapper.java:331) at org.apache.jasper.servlet.JspServlet.serviceJspFile(JspServlet.java:329) at org.apache.jasper.servlet.JspServlet.service(JspServlet.java:265) at javax.servlet.http.HttpServlet.service(HttpServlet.java:729) at org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(ApplicationFilterChain.java:269) at org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterChain.java:188) at org.apache.catalina.core.ApplicationDispatcher.invoke(ApplicationDispatcher.java:679) at org.apache.catalina.core.ApplicationDispatcher.doInclude(ApplicationDispatcher.java:584) at org.apache.catalina.core.ApplicationDispatcher.include(ApplicationDispatcher.java:497) at com.liferay.portal.util.PortalImpl.renderPortlet(PortalImpl.java:2884) at com.liferay.portal.util.PortalUtil.renderPortlet(PortalUtil.java:397) at com.liferay.portlet.layoutconfiguration.util.RuntimePortletUtil.processPortlet(RuntimePortletUtil.java:170) at com.liferay.portlet.layoutconfiguration.util.RuntimePortletUtil.processPortlet(RuntimePortletUtil.java:103) at com.liferay.portlet.layoutconfiguration.util.RuntimePortletUtil.processTemplate (RuntimePortletUtil.java:281) at com.liferay.portlet.layoutconfiguration.util.RuntimePortletUtil.processTemplate(RuntimePortletUtil.java:190) at org.apache.jsp.html.portal.layout.view.portlet_jsp._jspService(portlet_jsp.java:624) at org.apache.jasper.runtime.HttpJspBase.service(HttpJspBase.java:98) at javax.servlet.http.HttpServlet.service(HttpServlet.java:729) at org.apache.jasper.servlet.JspServletWrapper.service(JspServletWrapper.java:331) at org.apache.jasper.servlet.JspServlet.serviceJspFile(JspServlet.java:329) at org.apache.jasper.servlet.JspServlet.service(JspServlet.java:265) at javax.servlet.http.HttpServlet.service (HttpServlet.java:729) at org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(ApplicationFilterChain.java:269) at org.apache.catalina.core.ApplicationFilterChain.doFilter (ApplicationFilterChain.java:188) at org.apache.catalina.core.ApplicationDispatcher.invoke(ApplicationDispatcher.java:679) at org.apache.catalina.core.ApplicationDispatcher.doInclude (ApplicationDispatcher.java:584) at org.apache.catalina.core.ApplicationDispatcher.include(ApplicationDispatcher.java:497) at com.liferay.portal.action.LayoutAction.includeLayoutContent(LayoutAction.java:294) at com.liferay.portal.action.LayoutAction.processLayout(LayoutAction.java:471) at com.liferay.portal.action.LayoutAction.execute(LayoutAction.java:195) at org.apache.struts.action.RequestProcessor.processActionPerform(RequestProcessor.java:431) at org.apache.struts.action.RequestProcessor.process(RequestProcessor.java:236) at com.liferay.portal.struts.PortalRequestProcessor.process(PortalRequestProcessor.java:157) at org.apache.struts.action.ActionServlet.process(ActionServlet.java:1196) at org.apache.struts.action.ActionServlet.doGet(ActionServlet.java:414) at javax.servlet.http.HttpServlet.service(HttpServlet.java:627) at com.liferay.portal.servlet.MainServlet.callParentService(MainServlet.java:608) at com.liferay.portal.servlet.MainServlet.service(MainServlet.java:646) at javax.servlet.http.HttpServlet.service(HttpServlet.java:729) at org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(ApplicationFilterChain.java:269) at org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterChain.java:188) at org.apache.catalina.core.ApplicationDispatcher.invoke(ApplicationDispatcher.java:679) at org.apache.catalina.core.ApplicationDispatcher.processRequest (ApplicationDispatcher.java:461) at org.apache.catalina.core.ApplicationDispatcher.doForward(ApplicationDispatcher.java:398) at org.apache.catalina.core.ApplicationDispatcher.forward(ApplicationDispatcher.java:301) at com.liferay.portal.servlet.FriendlyURLServlet.service(FriendlyURLServlet.java:143) at javax.servlet.http.HttpServlet.service(HttpServlet.java:729) at org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(ApplicationFilterChain.java:269) at org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterChain.java:188) at com.liferay.portal.kernel.servlet.BaseFilter.processFilter(BaseFilter.java:154) at com.liferay.portal.servlet.filters.etag.ETagFilter.processFilter(ETagFilter.java:54) at com.liferay.portal.kernel.servlet.BaseFilter.doFilter(BaseFilter.java:91) at org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(ApplicationFilterChain.java:215) at org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterChain.java:188) at com.liferay.portal.kernel.servlet.BaseFilter.processFilter(BaseFilter.java:154) at com.liferay.portal.servlet.filters.strip.StripFilter.processFilter(StripFilter.java:143) at com.liferay.portal.kernel.servlet.BaseFilter.doFilter(BaseFilter.java:91) at org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(ApplicationFilterChain.java:215) at org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterChain.java:188) at com.liferay.portal.kernel.servlet.BaseFilter.processFilter(BaseFilter.java:154) at com.liferay.portal.kernel.servlet.BaseFilter.doFilter(BaseFilter.java:94) at org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(ApplicationFilterChain.java:215) at org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterChain.java:188) at com.liferay.portal.kernel.servlet.BaseFilter.processFilter(BaseFilter.java:154) at com.liferay.portal.servlet.filters.gzip.GZipFilter.processFilter(GZipFilter.java:140) at com.liferay.portal.kernel.servlet.BaseFilter.doFilter(BaseFilter.java:91) at org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(ApplicationFilterChain.java:215) at org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterChain.java:188) at com.liferay.portal.kernel.servlet.BaseFilter.processFilter(BaseFilter.java:154) at com.liferay.portal.servlet.filters.secure.SecureFilter.processFilter(SecureFilter.java:282) at com.liferay.portal.kernel.servlet.BaseFilter.doFilter(BaseFilter.java:91) at org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(ApplicationFilterChain.java:215) at org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterChain.java:188) at com.liferay.portal.kernel.servlet.BaseFilter.processFilter(BaseFilter.java:154) at com.liferay.portal.kernel.servlet.BaseFilter.doFilter(BaseFilter.java:94) at org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(ApplicationFilterChain.java:215) at org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterChain.java:188) at com.liferay.portal.kernel.servlet.BaseFilter.processFilter(BaseFilter.java:154) at

Appendix B Example Errors from Bureau Tab

Whenever data fails to load, an error message is logged that can be used to determine the cause of the failure. These are accessed via the *Bureau* tab, *View Jobs* section, by clicking on the *magnifying glass* next to failed jobs.

These errors are in XML format and an example of one is shown here:

The area in red has been expanded here:

```
The following elements are not closed: Handset, Invoice, Bill, Customer. Line 173441, position 70016302.
```

In this example, the indicators to show the end of the Subscriber, Invoice, Bill and Customer elements have been missed from the file.

Here is another example of a failed file:

As you can see in the red boxes, in the DateTime attribute has an invalid value in it - *1 -29-11T : :*

Appendix C Logged event types

Table 9 List of Logged Events

Event	Event
Access to the following reports:	Most Expensive Report
Call Wizard Access (for Call Reports – New)	Peak Off-Peak Report
Charge Categorisation Report	Roamed Report
Charge Wizard Access (for Charge Report – New)	Scheduled Report Management
Cost Allocation Report	Scheduled Report Run Automatic
Cost Range Report	Scheduled Report Run Once
Currency List Updated	Tagging State Report
Destination Analysis Report (for the Call Category report)	Tagging Usage Report
Duration Range Report	Transmission Type Report (for the Usage Type report)
Frequently Dialled Report	Unlocked Completed Users Report
Internal Calls Report	Usage Summary Report
Invoice Summary View Bill	Usage tagging
Lock Status Non Completed Users Report	Usage Tagging Report For Admin
Longest Duration Report	Usage Tagging Report For Subscriber
Monthly Trend Report	Watchpoints Updated

[Inside back cover page]

Our contact address:

CTI Billing Solutions Ltd

Daisyfield Business Centre
Appleby Street
Blackburn
United Kingdom
BB1 3BL

Tel: +44 0 1254 291500
Fax: +44 0 1254 291504

Email: info@ctigroup.com

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