User Guide:
VC-Report
Confidentiality Statement and Copyright Notice
This document is published as “Commercial in Confidence” for the sole use of the intended Recipient as detailed.

Copyright subsists in all UCi2i (UK) Limited publications.

No extract may be reproduced, stored in a retrieval system or transmitted in any form or by any means – electronic, photocopying, recording or otherwise – to any third parties, without prior permission in writing from UCi2i (UK) Limited.

Version Control

<table>
<thead>
<tr>
<th>Date</th>
<th>Version</th>
<th>Changes</th>
<th>Authorised</th>
</tr>
</thead>
<tbody>
<tr>
<td>07.09.2012</td>
<td>1.0</td>
<td>Release</td>
<td>MG/JR</td>
</tr>
<tr>
<td>04.10.2013</td>
<td>2.0</td>
<td>Updated screen shots</td>
<td>JA</td>
</tr>
<tr>
<td>06.03.2014</td>
<td>2.1</td>
<td>Added mutilingual page selection and updated interface</td>
<td>JA</td>
</tr>
<tr>
<td>14.07.2016</td>
<td>3.0</td>
<td>Rebranding from RAR to VC-Report</td>
<td>TK</td>
</tr>
<tr>
<td>20.06.2017</td>
<td>3.1</td>
<td>Updates to Support details</td>
<td>TK</td>
</tr>
</tbody>
</table>
1. What is VC-Report?

VC-Report is a cloud based call logger developed by UCi2i to provide real time reporting of all video calls that traverse a network, without the necessity of end point integration.

The database behind VC-Report is a multitenant solution enabling:

✓ UCi2i to use VC-Report
  - Internal network monitoring of all partners and their end users video calls.
  - Generation of usage and adoption reports for partners.

✓ VC-Report to be used by partners
  - Monitoring of their own video calls and that of their end users.
  - Generation of usage and adoption reports.

✓ Certain enterprise level end users with large video estates to use VC-Report (under license) for their own in house use.

VC-Report is able to monitor and report on every individual end point within a network to which it is associated. It can also report all external (off-net) network calls in/out of the same network.

2. Using VC-Report and understanding its benefits

VC-Report is simple to use and provides critical information necessary for a VNOC operative to monitor and manage all video end points within a network.

The use of VC-Report by partners enables them to strengthen their service offering to their customers through the generation of usage and adoption reports covering all end points and software clients within a customers’ network. Each report can be tailored to provide specific statistical data. VC-Report’s flexible filtering system enables users to generate reports down to individual end points or software client accounts, against time periods from as short as a single day. There are many active search categories within VC-Report, every word that has a hyperlink is able to act as a search subject. In addition there is a filter box where custom searches can be performed using keywords.

All of the data available in VC-Report is exportable to a CSV file for external review and/or importing into POS systems or billing platforms. This level of flexibility enables partners to accurately charge their customers on a per minute / hour, per site basis if preferred potentially giving rise to even higher revenues than is possible through the unlimited usage fixed rate monthly service plan model that is favoured by UCi2i.
3. **VC-Report overview**

3.1 **Logging into VC-Report**

The URL for VC-Report is:

https://vcreport.uci2i.com

After navigating to this page you will find yourself at the VC-Report login screen (see Figure 1 below). This is where you enter your login email address and password (both of which are provided by UCI2i).

![VC-Report login screen](image)

Figure 1: VC-Report login screen.

1. **Hide Message**: You may hide the message on the top “VC-Report use cookies to enhance the performance of this web site” by clicking Hide Message.

2. **Multi-language**: You may select your preferred language to use in VC-Report.

   (English(UK), English(US), French, Spanish, Simplified Chinese and Traditional Chinese)

3. **Remember me**: You can also save the login email address and password by ticking the option box.
3.2 Homepage - The dashboard

After successfully logging into VC-Report you will find yourself on the VC-Report homepage, which is a dashboard overview (see Figure 2).

The VC-Report dashboard provides a complete overview of the entire video estate usage to which it is connected. Following is a description of each area of the dashboard.

**Figure 2: VC-Report homepage, the ‘Dashboard’.**

4 **Settings**: This area enables the user to select their local time zone and change the password.

5 **Active Monitoring**: There are 2 categories here, Registrations, where detail of all monitored registrations within the network can be found (see Figure 3 for detail) and Live Calls, where all calls in progress across the network can be found (see Figure 5 for detail).

6 **Reporting**: There are 3 categories here, Accounts, Calls and Company. Usage and adoption reports can be generated within these sections (see Figure 6 - 23 for detail of each sub-menu).

7 **Registrations Monitoring**: This section provides the user with an overview of the Registered, Unregistered and any Unknown systems on the network (See Figure 3 for detail).
8 **Service Plans**: A high level overview of all service plan types and their status can be found here. Each heading is active and will navigate to a summary of all associated plans when clicked.

9 **Live Calls**: This is a real-time total number of the live calls across the network.

10 **Call Counts**: A summary view of the total quantity of calls within the selected time period (i.e. Today, Yesterday, This week, Last Week, This Month, Last Month, This Year etc) can be found here.

11 **Live Calls Summary**: This is a real-time summary of the live calls across the network.

12 **VCS Summary**: This window provides a high level overview of all the VCS being managed.

13 **Support Centre**: This link takes you to the support page where you can log and submit any issues, faults or ideas you may have to help improve VC-Report.

### 3.3 Registrations

The registrations menu is where all service account registrations are monitored.

![VC-Report registrations screen.](image)

Users may select a view between one or a mixture of four check boxes for the different type of service plan registration categories as follows:

- **Unregistered**: Addresses that are known (i.e. have been used on the network before) but are currently not visible on the network.
- **Unknown**: These are addresses that exist but have never been used on the network before. Typically an unknown address applies to soft client H.323 addresses since all soft clients use the SIP protocol for calling and not H.323.
- **Registered**: Addresses that are currently visible on the network.
- **Soft client addresses**: If this option is selected, all soft client addresses (i.e. addresses which belong to an individual and are delivered as a Jabber or VC-Connect account for PC, Mac or mobile device) will be included in the output. NOTE: inevitably at any one time there will be many soft client addresses that are unregistered since these accounts are associated with mobile
devices and by nature are switched on and off (i.e. register and unregister) frequently.

Click on the **Refresh** button\(^{15}\) which will refresh the data on screen with the check box option(s) you have selected.

Upon a fixed end point system becoming unregistered, it is tracked and monitored by the UCi2i V-Desk team. Should the end point not re-register to the network the owner is contacted to further investigate the reason. This enables the UCi2i V-Desk team to proactively support partners and their customers ensuring that end points are always available when required and network issues are not discovered only when an end point is required for use.

The registrations screen has 5 headings

16 **Service Plan**: This is the name of the service plan.
17 **Address**: This is the address of the service plan.
18 **Protocol**: This is the registration protocol. NOTE: within UCi2i the default registration protocol is SIP and then H.323.
19 **Last Update**: This is the date and time of when the system last updated on the network.
20 **Status**: This is referring to the status of the account, green means online and red means offline.

Each hardware end point or software client name (in the Service Plan column\(^{16}\)) is active. Clicking on a hardware end point or software client name will take you to a separate screen (see Figure 4 below) showing the details associated with that particular registration.
3.3.1 Service plan details

Full details of each service plan can be seen here including the registration status of the system, this is for SIP, H.323 and WebRTC only within the UCi2i network. Additional information specific to each individual service plan can also be found in the Service Plan Details, such as the call history logs related to that one specific service plan.

Figure 4: Service plan details screen.

3.4 Live calls

An overview of all calls currently in progress can be found here, whether the calling systems are on-net or off-net. All calls across the VC-Report monitored network appear in VC-Report.

Figure 5: VC-Report live calls screen.
**Packet Loss %**: This is the threshold level for packet loss severity. If the real-time packet loss is lesser than 0.5 %, then the packet loss severity will be considered low and therefore, the packet loss would not have affected the video & audio quality. If it is in between 0.5 % to lesser than 2 %, the packet loss is considered medium. The video & audio quality will start to degrade. When it is greater than 2%, the packet loss will be considered as high. This will then highly affect your video experience and could cause video and audio issues and you could experience video call drop due to high packet loss %.

**Jitter (ms)**: This is the threshold level for jitter severity. If the real-time jitter is lesser than 20 ms, then the jitter severity will be considered as low. Therefore, there should not be any significant latency/delay of the video and audio quality. If it is in between 20 ms to lesser than 50 ms, the jitter of the call is considered medium. The video and audio quality will start to have latency issues which might affect you video experience. When it is greater than 50 ms, you could experience video call drop.
3.5 Accounts

Under the service plan menu exists a sub-menu which will reveal itself when a mouse pointer is moved over the top.

Figure 6: Accounts sub-menu.

3.5.1 Accounts – Service plans

Under service plans sub-menu a list of all Service plans can be found;

Figure 7: Service Plans sub-menu screen.
Service plans can be sorted by their status;

Figure 8: Service Plans sub-menu screen, Status dropdown menu.

Or by the type of plan;

Figure 9: Service Plans sub-menu screen, Type dropdown menu.
3.5.2 Accounts - Addresses

Under the addresses sub-menu there are 6 headings.

![Figure 10: VC-Report addresses screen.](image)

#### 25 Service Plan: This is the name of the account.

#### 26 Address: This is the address of the account.

#### 27 Protocol: This is the registration protocol. NOTE: within UCi2i the default registration protocol is SIP and then H.323.

#### 28 Type: This is referring to the account type and is either (i) Fixed End Point, (ii) Soft Client, (iii) Unknown, (iv) Video Address, (v) VMR.

#### 29 Status: This is referring to the status of the account and is either (i) Registered, (ii) Unregistered, or (iii) Unknown.

#### 30 Last Update: This is the date and time of when the system last updated on the network.

Each of the headings are active, which means that it can be used as a sort filter.

There is also an Export button on the top right hand of the screen which can be pressed to export the data to a CSV file. Many screens within VC-Report have the same Export button feature.

The button below to the Export button is the manual Refresh button which when pressed will refresh the data on screen. Again, many screens within VC-Report have the same Refresh button feature.
3.5.3 Accounts – Disabled / Expired activities

In the event that a disabled/expired address (i.e. an address with an expired service plan) registers to the network, it will be shown under the disabled activities sub-menu.

Disabled/Expired address are accounts where the service plan associated with the address has expired and is out of contract, however the address is still registered. In the event of an end user renewing the service plan the address can be re-enabled, however if an end user really doesn’t intend to renew then the registration can be permanently deleted. Deleted registrations will of course no longer appear under the disabled/expired activities sub-menu, however historical data will still be available when running usage and adoption reports.

Figure 11: VC-Report disabled/expired activities screen.
3.5.4 Accounts – Redundant service plans

If a service plan has no activity within 10 days it will appear here under the redundant service plans sub-menu. Redundant service plans are not disabled (i.e. are still within contract).

![VC-Report redundant service plans screen.](image)

Figure 12: VC-Report redundant service plans screen.

3.5.5 Accounts – Busy registrations

All frequently used registrations on the network will appear under the busy registrations sub-menu. A registration is deemed to be busy when it registers or deregisters 10 times within a period of 7 days. Usage of a registration is determined by the time that it is on the network. In the event of a persistent de-registration (i.e. turned off or disconnected from the network) and re-registration (i.e. turned on or reconnected to the network) the UCi2i V-Desk will investigate together with the partner and or end user to establish the reason.

![VC-Report busy registrations screen.](image)

Figure 13: VC-Report busy registrations screen.
3.5.6 Accounts – Registrations history

Within the registration history sub-menu a list of all registered accounts can be seen, both fixed end point registrations and also soft client registrations. NOTE: Visibility of these accounts is controlled by UCi2i so that partners can only see the detailed registration information of their own addresses and that of their customers.

Figure 14: VC-Report registrations history screen.

3.6 Calls

Under the calls sub-menu there are 4 headings

Figure 15: Calls sub-menu.
3.6.1 Calls – Call history

By default the call history page displays the present days calling activity in descending order (i.e. the most recent call at the top). Filters can be applied for specific search criteria (such as a specific user, end point, H.323 or SIP alias etc). Additionally all searches can be narrowed to within selectable time periods (in ‘day’ increments).

All calling activity is logged including live calls, completed calls and failed calls and unlike some other data logging systems, all call history is held in the VC-Report database. This means that partners and customers can have access to their calling records as far back as they desire.

![Figure 16: Calls – Calls history sub-menu.]

To access the Call Details page, click on the ‘note and hand icon’ to the right of the ‘Hops’ column as shown in Figure 16.
Figure 17 below shows an example of a Call Details page. The call status and all the call control devices that the call used are displayed. Event Data can also be exported as an XML file if required for further detailed analysis. The In-Call Analysis button also provides the graphical views of the call detail statistics.

Figure 17: Call details screen.
In the event that a call leaves the UCi2i network and traverses the Internet additional call data information is also available. Data of each hop, the call used, packet loss and also jitter statistics for the call are available. Figure 18 below shows details of an Internet call.

![Figure 18: Call details screen of an internet call.](image)

### 3.6.1.1 Calls – In-call analysis

In the Call details screen, the In-call Analysis button provides a graphical view of the video endpoint ‘A’ connecting to video endpoint ‘B’. This shows us the in-call statistics, ranging from packet loss inbound, packet loss outbound, packets in thousands inbound, packets in thousands outbound, jitters in milliseconds inbound, jitters in milliseconds outbound, rate of call in kilobits inbound, and rate of call in kilobits outbound. The graphical view provide us a clear picture of where the network issues is being seen and could be a useful tool to help network team to pin point and resolve network related issues.

![Figure 19: In-call analysis button.](image)
Figure 20: Call Details - In-Call Analysis screen.
3.6.2 Calls – Call usage

The call usage sub-menu is a particularly significant tool for partners and end users as this is where vital usage and adoption reports can be generated. Each service plan is sorted by its total duration and again although the default reporting period is the present day, call usage statistics can be expanded to review specific time periods (again in ‘day’ increments).

Access to such information is invaluable to partners and end users as it can enable useful end point and software client report generation. The findings of VC-Report adoption reports can assist with strategic decision making for video estate expansion or redeployment assisting businesses to ensure their total investment in video is maximized.

Figure 21: Calls – Call usage sub-menu.

32 Export: You can export the raw data from here and use Microsoft excel to open it.

33 VMR Only: When selected along with connecting, connected, completed, unanswered and failed, you will be able to view VMR service plan video conference call usage.

34 Connecting: When selected, you will be able to view current connecting video conference call usage.

35 Connected: When selected, you will be able to view current connected video conference call usage.

36 Completed: When selected, you will be able to view completed video conference call usage.

37 Unanswered: When selected, you will be able to view unanswered video conference call usage.

38 Failed: When selected, you will be able to view failed video conference call usage.
3.6.3 Calls – Daily breakdown

With the daily breakdown, you are capable of viewing all the video devices being used throughout the daily span. This is a good way in keeping track of how video is being used and could provide the network team a video network usage report during a certain period. You will therefore, be able to see if there are peak usage of video and provide statistics for network team to be cautious of network usage during those peak hours or peak seasons. This will then ensure your quality of video experience to be maximized and used to the fullest.

Figure 22: Calls – Daily Breakdown
3.6.4 Calls – Disabled / Expired activity

The disabled/expired activity sub-menu displays all calls that have been attempted to a disabled/expired service plan regardless of whether the call connected or not.

![Figure 23: Calls – Disabled / Expired activity sub-menu](image1)

3.7 Settings

Within this section a user may change their time zone to that of the local time zone, his/her login password and select the preferred language.

![Figure 24: Time zone selection and change password options.](image2)
3.8 Support Centre

The Support Centre link can be used to log any issues, faults you incur, or submit ideas you may have to help improve VC-Report.

![VC-Report Support Page]

**Figure 25:** VC-Report Support Page
4. CSV file export sample

As mentioned in section 3.5.2 on page 13, it is possible to export VC-Report data on any page containing an Export button.

To export, simply click ‘Export’ on the page of VC-Report containing the information desired. A CSV file will be downloaded via your web browser which you can either save or open directly.

The below image is an example of the CSV file export from VC-Report. This data can then be imported in billing platforms, Property Management Systems (PMS) and Point of Sales (PoS) systems too.

The table below illustrates an example of a CSV file export from VC-Report:

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>Start Time</td>
<td>Status</td>
<td>From</td>
<td>To</td>
<td>Duration</td>
<td>Protocol</td>
</tr>
<tr>
<td>2</td>
<td>3/5/2014 11:42</td>
<td>Completed</td>
<td>Justin Au</td>
<td>Zhejiang</td>
<td>4:00:34</td>
<td>SIP</td>
</tr>
<tr>
<td>3</td>
<td>3/5/2014 11:54</td>
<td>Completed</td>
<td>Hong Kong MCU - VMR</td>
<td>Zhejiang</td>
<td>0:00:35</td>
<td>SIP</td>
</tr>
</tbody>
</table>

*Figure 26: Example of a CSV file export from VC-Report.*
5. Notes

Contact UCi2i

APAC

t: +852 3746 6001
V-Desk: +852 3746 6000
e/v: support@uci2i.com

21/F, Wyler Centre Phase II
192-200 Tai Lin Pai Road
Kwai Chung
N.T.
Hong Kong

EMEA

t: +44 (0) 203 841 8555
e/v: support@uci2i.com

120-22 Wenlock Road
London, N1 7GU
United Kingdom