



# temetra

## Temetra Web Application Manual

Version 2.0 July 2014

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# Introduction

Temetra is a web-based application that allows you to asset manage your water meter network, collect and store readings for meters and generate bills or integrate with external billing applications.

# Terminology

To avoid confusion, the terminology used in this document and throughout the web application is explained below:

## Network

The network describes your entire collection of meters for a complete geographic or management area, for example the city of Waterford or Kerry County Council. The network includes all meters irrespective of type (district, domestic or industrial commercial), reading method (manual, wireless, logger) or purpose (monitoring or billing). Every meter in Temetra belongs to a single network.

## Scheme/DMA

It is often useful to aggregate meters according to their water source, so Temetra allows each meter to belong to a single Scheme or District Metering Area (DMA). Schemes can contain sub-schemes and can span networks. For example, a scheme could include meters from the city of Waterford and County Waterford, even though they are organized into two different networks for the purposes of operations and billing.

## Route

Each meter in Temetra belongs to a route, a grouping of meters primarily used to gather the meters together for reading by meter readers or reading systems. So if there are 2000 meters in the city of Waterford, it might be appropriate to divide these into 4 routes of approximately 500 meters each to break down the task of reading into manageable size.

## Meter

Meters in Temetra hold all information associated with the physical installation of the meter. This includes meter type, serial number, reference numbers, GPS location, installation date, expected collection method etc.

## Account

Accounts indicate the owner or operator of a meter. For a billing customer this will identify the property to which the connection and meter applies, external reference Ids, billing address if different, any special instructions etc. More than one meter can belong to an individual account, for example in the case of a property with more than one connection/meter, or in the case of a billing entity with more than one property.

## Meter Index

The digits from a meter indicating the current volumetric flow. Depending on the meter type and size this will normally consist of up to 8 digits. For a metric meter this value will be in cubic metres (m<sup>3</sup> or 1000 litres) and may or may not include digits after the decimal point. For manually read meters, the index normally consists of just the digits up to the decimal point (by convention the white on black digits on a meter index) with those after the decimal point discarded (by convention the white on red digits on a meter index).

## Reading

A meter reading is a combination of a meter index, a date and time, a collection method and any meter reader comments.

## Tour / Reads

A collection of readings, typically as a result of a meter reader collecting a route, reading the meters and returning those reads to Temetra. These reads are stored as a group so that a complete record is maintained of all meter reading activity. The tour does not have to be complete, so for example a meter reader could collect a full route, only read half the meters and return the reads to Temetra. In this case the tour would only show the meters that were read.

## Receive / Download

When a meter reader wants to begin a tour with a handheld computer, they download a particular route from Temetra into the handheld and this contains a complete list of meters, their locations, serial numbers, previous index, previous reference consumption data etc.

## Send / Upload

When a meter reader has done some meter readings on a previously downloaded route, they can send these readings back to Temetra by performing an upload. This sends the readings back to Temetra where it is displayed as a Tour and each meter's reading is displayed with the appropriate meter.

## MIU

Meter Interface Unit, a transponder that is fitted to meters to allow automatic meter reading (AMR). The meter reader uses some form of wireless reading system to read the meter rather than physically view (eyeball) the meter to read it.

## AMI

Advanced Metering Infrastructures are systems that measure, collect and analyse metered data either on request or on a schedule. The network between the measurement devices allows the information to be distributed to customers, suppliers, service providers etc.



## Username and Password

A pink rectangular button with a white padlock icon on the left and the text "Customer Login" in white.

You will be supplied with a username and password for use with Temetra. To log in to Temetra, go to the web page <http://www.temetra.com/> and follow the link for customers as shown in the image to the left.

Enter your username and password in the boxes supplied and you will be taken to your network within Temetra.

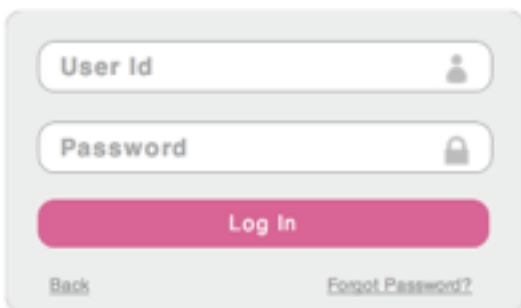
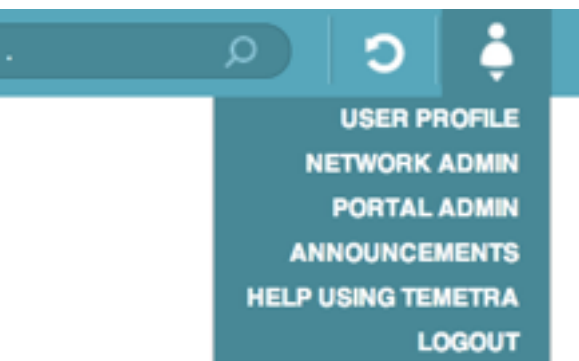
Once you have successfully logged into Temetra, a LOGOUT button becomes available at the right hand side of the all screens, when you hover over the little image of a person.

By clicking this button, you are logged out and to use Temetra again you will need to re-enter your username and password.

If you do not access any pages in Temetra for a period of 15 minutes, you will be automatically logged out and will need to enter your username and password to continue.

This is a security precaution to avoid unauthorised access to Temetra.

When logged into Temetra, all communications between your browser and the Temetra servers are encrypted using SSL, making it extremely difficult for anyone to eavesdrop on your data, but also giving you an assurance that you are correctly connected to the Temetra servers.

A login form with a light gray background. It contains two input fields: "User Id" with a person icon on the right, and "Password" with a padlock icon on the right. Below the fields is a pink "Log In" button. At the bottom left is a "Back" link and at the bottom right is a "Forgot Password?" link.

# Access Privileges

Every user of Temetra has an access level that defines the tasks that they are permitted to complete within Temetra. Some users are only allowed to view the data for their network and cannot modify the data in any way, other users can read meters but cannot adjust meter or account details, and others are given full access that allows the creation of new accounts, modifying readings etc.

Users may also have access to more than one network, for example a regional manager could be given access to all the networks in the entire region, allowing them to do analysis on more than one network.

Depending on your access level, buttons, information and links will be visible or inaccessible. Some of the screens and navigation shown in examples below assume full administrative access, so when you log into Temetra, the screens will not be identical.

# Navigating in Temetra

Located at the top left of each screen in Temetra is the main menu.



If you move the mouse over any of these items you will see a drop-down menu appear.

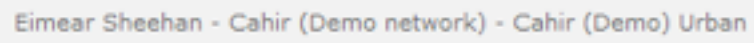


By clicking on these items, you may move around within the application and access all the features.

The Search facility allows you to search the entire Temetra network for any keywords you specify, and can be accessed on every page. If you need to search quickly at any time, hold [ALT] + [S] on your keyboard and the cursor will jump straight into the search area.



At the left bottom of every screen in Temetra is an indicator of the currently logged in user, the network and the current route.



Eimear Sheehan - Cahir (Demo network) - Cahir (Demo) Urban

# Forms in Temetra

Add the meter details below, or [Refresh This Meter](#).  
Use the Save button to save your changes and return to the account view, or Cancel button to return without saving changes.

**Edit Meter Details 11F629504 (Test1)**

Save Cancel

Meter Type / Brand:

Meter Model:  Model not in this list

Nominal Size:

Meter Units:

Meter Format:  Units on format

Meter Details

Meter State of Repair:

Meter Serial:

Meter Commission:

Meter Install Date:

Collection Method:

MU Serial:

MU Install Date:

MU Commission:

Meter Ref:

exclude from handheld download

Comment:

Code:

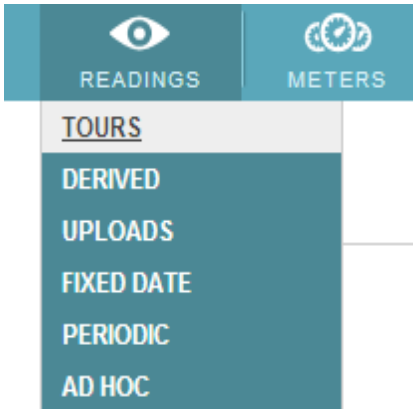
Expected Flow Rate:

exclude from consumption

To change the value of items in Temetra, you will normally be taken to a page that allows you edit items following the normal convention of web applications.

It is recommend that you always complete these forms by either clicking the Save button to save your changes, or the Cancel button to discard your modifications. If you need to make further changes to the same item, you should begin editing again using the same procedure as before, rather than using the Back button in your browser.

# Readings – Tours

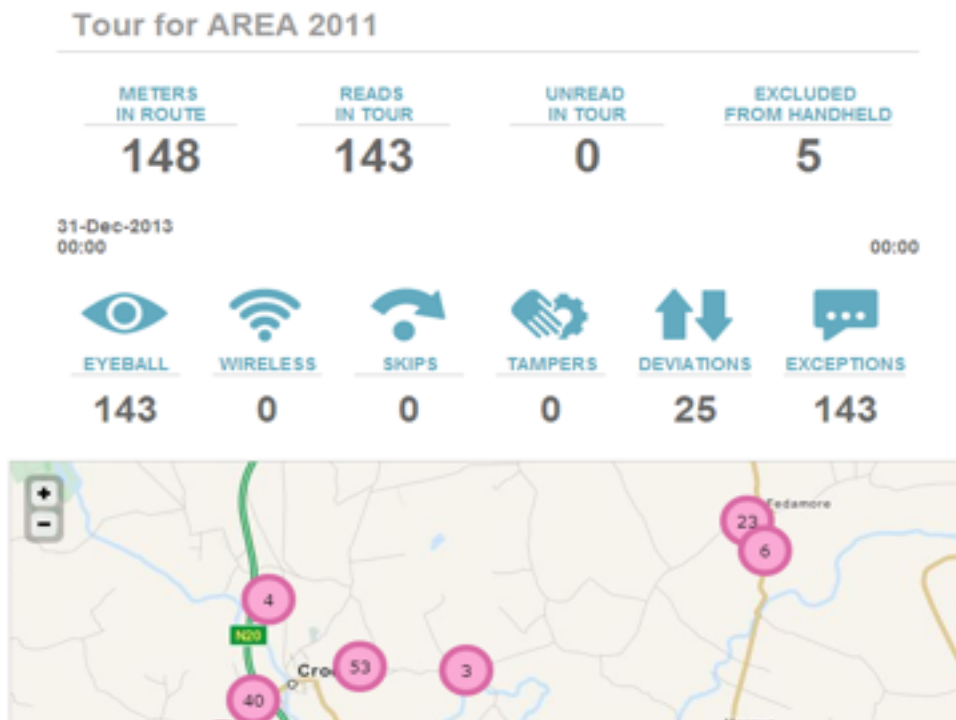


When you log into Temetra you will normally be taken directly to the READINGS page, that shows a summary of the latest set of readings taken on your network.

Alternatively, this page can be accessed at any time by clicking READINGS -> TOURS.

This summary describes an individual tour taken on a specific route within your network.

To view details of the latest set of readings, then you need to select one of the individual reports on this tour, listed on the left hand side of the screen.



# Tours

## Tour

### Summary

#### All Reads

#### Wireless Reads

#### Manually Read Wireless

#### Manual Reads

#### Wireless Audits

#### Unread Meters

#### Exceptions

#### Leaks

#### Tampers

#### Skips

#### Gps

**WIRELESS READS** report displays a summary of each individual reading done on this tour, and the other reports select a subset of the readings to display based on certain criteria.

**WIRELESS READS -** report displays only the Automatic Meter Reading (AMR) readings that were part of this tour.

**MANUALLY READ WIRELESS** report displays only the readings from wireless meters that were read manually this tour (eyeball reads).

**MANUAL READS** report displays only the eyeball reads.

**WIRELESS AUDIT** report displays audit data gathered by visually confirming (eyeball reads) the transmitted wireless read.

**UNREAD METERS** report displays meters that are on this route but were not read as part of this tour.

**EXCEPTIONS** report displays only the readings where the meter reader had comments about the meter. Examples of this would include visible leaks, damaged chambers, frozen pipes, but can be any comment the meter reader has entered through the reading system.

**LEAKS** report displays the meters that indicate a leak based on 24 hour flow thresholds. In particular Actaris Cyble AMR can report leaks based on configurations of the MIU.

**TAMPER** report displays the meters that reported tampering via MIU.

**SKIPS** report displays the meters that were visited by the meter reader, but could not be read. For example in the case of manually read meters, this could be because access was impossible and will normally have an exception attached to the meter.

**GPS** report shows readings where there is a discrepancy between the reading GPS and the meter GPS. The readings are ordered according to the severity of the discrepancy. Hovering over the icon following the reading will give an approximate distance for the difference in the read location to the meter location.

When viewing these reports, a summary of the available information is displayed.

Sort by [name](#), [read time](#).

Readings for Cahir (Demo) Urban , 01-Apr-2002 , sorted by route sequence

Account Ref	Name	Seq	Connection	Meter Ref	Date	Index	Comment
DEM200	CW installations	1000	<a href="#">269230</a>		01/04/02 14:17	2400 m <sup>3</sup>	
DEM201	Cahir Vet.	1020	<a href="#">266581</a>		01/04/02 14:19	5966 m <sup>3</sup>	Leak before meter
DEM202	BF Tyres	1040	<a href="#">266582</a>		01/04/02 14:20	5320 m <sup>3</sup>	 Uneven cover
DEM202	BF Tyres	1060	<a href="#">266583</a>		01/04/02 14:21	4674 m <sup>3</sup>	Cover missing
DEM203	Lee Saw Co.	1080	<a href="#">266584</a>		01/04/02 14:22	4028 m <sup>3</sup>	

These reports provide details such as the account holder's reference number, the account holder's name, the connection reference number of the account holder, the meter reference number (if any), the date and time of the last reading, the meter index of the last reading and any comments that were recorded.

You can choose to sort the listed results in order of name, read time or route sequence by clicking the blue links at the top of the report. By default, sort by route sequence is selected.

The connection number is displayed as a link in blue and by clicking on this link you will be taken directly to the ACCOUNTS- VIEW screen for that particular connection reference number. More details about the ACCOUNT – VIEW screen can be found in later pages of this manual.



# Analysis

The analysis reports are based not just on a single tour, but more than one tour.

## *Analysis:*

### **Route Consumption**

***ROUTE CONSUMPTION*** will display the consumption between the current tour and the previous tour.

### **Zero Consumption**

***ZERO CONSUMPTION*** will display only those meters that showed no consumption between tours.

### **Deviations**

***DEVIATIONS*** will display meters that showed consumption deviation.

### **Unexpected Flow**

***UNEXPECTED FLOW*** will display meters that showed unexpected flow rates.

### **Lower Index**

***LOWER INDEX*** will display any meters with a lower current index than the previous read's index.

## Actions

**DOWNLOADS** allows you to take a copy of an individual tour in a variety of formats, suitable for importing into external systems.



These downloads are only for this particular tour and the route, so are probably not suitable for billing purposes. See a later section for downloading reads from your entire network, a set of reads probably more suitable for billing purposes.

**MERGE TOURS** allows you to take the last two tours and combine them to make a single tour.

For example, let's say your meter reader did a tour, but left 5 unread meters because they were inaccessible. You later obtain these reads directly from customers and add these reads via Temetra, where they become another tour. With the MERGE TOURS action, you can merge these tours into a single tour, containing the original reads via the meter reader and the 5 reads entered via Temetra.

## Changing route, changing tour

*(Non Schedule / GeoRoute networks only)*

While logged into a network in Temetra, you always have a 'current' route selected. As described earlier, routes are a grouping of meters within your network and it's often easier to deal with individual routes rather than the entire network. The current route is always displayed at the bottom of every screen, after the network name.

Eimear Sheehan - Cahir (Demo network) - Cahir (Demo) Urban

When you log in to Temetra, the most recent tour is automatically selected, and the route for this tour becomes the current tour.

While on the READINGS screen, you will notice an indicator at the top left that always shows the current route and the current tour, indicated by the last reading date in the tour.

ROUTE: Tem1



READS: 07-Jan-2014



The small pink button along-side each of these indicators allows you to select a different tour or a different route.

ROUTE: Tem1

READS: 07-Jan-2014

Tour

Summary

All Reads

Routes

001

002

Route 66

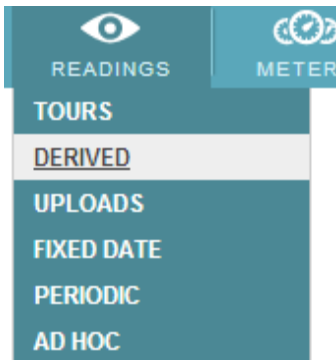
Route Antenna Check

Tem1

When you select a different route, the latest tour for that route becomes the current tour.

When you select a different tour, the reports display data from that newly selected tour. In this way, you have a full history of all meter reading tours, how long they took, exception reports etc.

# Readings – Derived



Derived meters allow you to work out certain consumption levels, based on the readings from other meters. This is typically used to prepare billing data for users that don't have a meter.

A “virtual” meter is set up on the desired line and temetra will calculate the readings using existing meters around the confluence point.

The power of derived meters is in the ability to describe relationships between water meters, giving you the ability to work billing reads for almost any scenario.

Derived meters in your network

Show all using connection ref  , max displayed

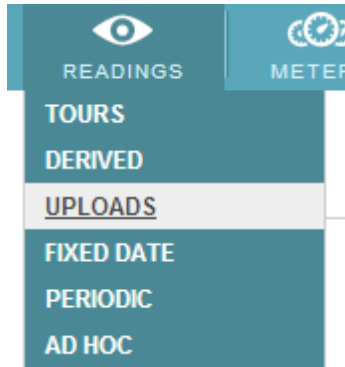
**Meters**

1027dm=1188-1027			
	<a href="#">1027dm</a>	<a href="#">1188</a>	<a href="#">1027</a>
Date	JOE O CALLAGHAN	OLIVE RIORDAN	JOE O CALLAGHAN
31/12/13	▶	587	101
20/11/13	-	-	100
18/11/13	-	572	-
24/06/13	332	520	97
14/12/12	287	465	87
19/06/12	247	418	80
21/12/11	-	-	68
15/12/11	-	372	-
30/06/11	-	-	62
21/06/11	-	323	-

The calculation can be seen on the top of the table. The first column shows the derived meter and the columns to the right delineate the read meters. All meter

reports (including the derived meters) can be accessed by clicking on the meter number highlighted in blue.

# Readings – Uploads



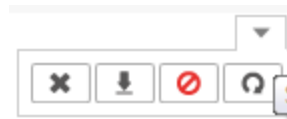
The upload section allows the user to upload GPMRI files, meter load sheets and updates for your network.

To upload a file, click on the choose file button to select the desired file on your computer. Once the file has been selected it can be saved to temetra by clicking the upload button. The comments field is optional, but can help identify an upload later, for example "First readings on route 7"

## Upload File

A form titled 'Upload File'. It has a 'File' section with a 'Choose File' button and the text 'No file chosen'. Below that is a 'Comment' text input field with a small '...' icon. At the bottom right is a pink 'Upload' button.

The most recent files previously uploaded are shown on the upload screen.



The arrow to the right can be used to edit the uploaded file. Hovering over each icon will give a description of its function.

## Previous Uploads

	Ref		File Name	Comment	
2	offic3194786, Temetra Updates by meter or connection lookup		NEW CREF.csv		▼
	10/01/14 13:06:56	Jimmy O' Mahony	queued for processing NEW CREF.csv		
	10/01/14 13:06:56	Jimmy O' Mahony	1 records. Meters: 0 ignored, 1 updated, 0 unchanged		
3	offic3194785, Temetra Updates by meter or connection lookup		NEW CREF.csv		▼
	10/01/14 13:06:26	Jimmy O' Mahony	queued for processing NEW CREF.csv		
	10/01/14 13:06:27	Jimmy O' Mahony	1 records. Meters: 0 ignored, 0 updated, 1 unchanged		

▼ Show All Events ▼

## Search

The search filter panel is a light gray box containing several input fields and a checkbox. At the top is the 'Ref' field, followed by 'Comment', 'File Name', 'Type', 'User', 'From', 'To', 'Content', and 'Max displayed'. The 'Max displayed' field contains the number '10'. Below these fields is a checkbox labeled 'Hide reading files' which is currently unchecked. At the bottom left is a link 'Less...' and at the bottom right is a blue 'Filter' button.

All uploads can be searched using the search bar on the right hand side of the page.

**Ref** will filter by the upload reference field

**Comment** will filter by user entered comments on upload files

**Type** will allow you to search for just read

bundles, or just uploaded files through the webapp

**User** will show you all uploads by a particular user

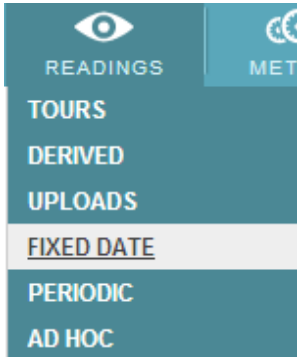
**From** and **To** are date fields, filtering by uploads submitted between the designated dates.

**Content** will allow you to filter by the upload content

**Max displayed** allows you to see more search results on the page.

The final checkbox allows you to Hide reading files. these are the files uploaded from Temetra Reader.

## READINGS – Fixed Date



Fixed date readings allow you to reconstruct readings on a particular date for meters on the selected route. The readings can be calculated as estimates when enough information is available, taken from manual reads or AMR, or both.

AMR Fixed Date readings are taken on a date designated by meter / AMR the manufacturers. The frequency varies from every 15 minutes to monthly reads taken on the 1st of each month. Temetra will store whatever FDRs the meter records, regardless of the intervals.

A light blue horizontal bar containing a form. It has four main sections: 'Route:' with a dropdown menu showing 'All Routes'; 'Mode:' with a dropdown menu showing 'Closest two reads'; 'Date:' with a text input field containing '01/01/14'; and a checkbox labeled 'Billing Meters only' followed by a 'Check' button and a help icon (question mark in a circle).

*Hitting the Check button will give you a summary of the actions to be carried out. You will be given an opportunity to confirm or decline before the readings are actually constructed.*

Fill in the desired date and click the check button. This will provide a summary of the actions to be carried out as new fixed date readings.



Fixed date readings for 01-Jan-2014

Current Route Details

Meters in route	35
Active meters in route on this date	31
Meters with AMR in route	2
Meters with GSM logger in route	0
Meters already with readings on this date	0

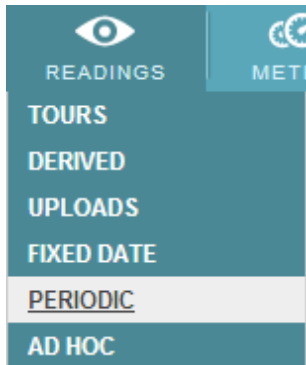
Proposed new fixed date readings

New readings available from AMR fixed dates	0
New readings available from GSM logger	0
New readings available from estimates	10
Meters with insufficient information for estimation	21

*Clicking on the Confirm button will insert the new readings*

Clicking on the 'confirm' button will upload the the new readings to Temetra. This will create an estimate only for the selected area. If the details are not correct, hitting the back button on your browser will revert back to the summery page.

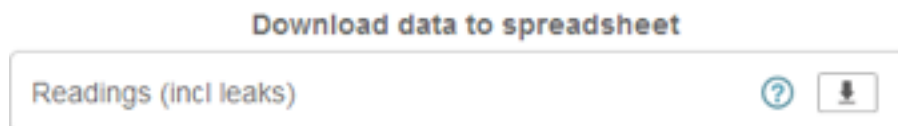
## Readings – Periodic



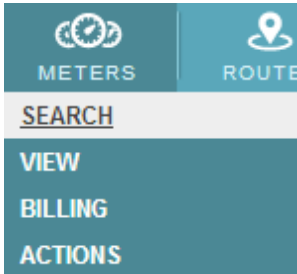
The periodic option will open a summary section of all reads from a user defined period in time. The user can specify between the last reads or all reads, from different routes and from included and excluded meters.

Select  from  including meters excluded from handheld  
in the period from  to

The results will show a summary of the selected area and the first 20 unread meters in the area. It also gives the option to download the specified data to a spreadsheet. Clicking on the arrow on the right hand side of the table will download the data.



# Meters – Search



Search allows you to quickly access meter or account data, based on information you supply. The supplied data does not need to be a complete word, reference or serial number. So for example, if you know the serial number of the meter you are looking for, then it is normally sufficient to enter the last 5 or 6 digits. If there is only one meter serial that contains these 5 digits then you will be taken directly to that meter. If there are several matches then you will see a list and can select the correct entry.

You can add filters to your search. You can filter your search by meter, connection, billing or location details. If you select to filter by DMA you will get added filter fields:

You can filter by more than one field:

Once you click on the search button, you are then presented with your list of meters:

47 matches    Prev 1 **2** ... **5** Next

[14MU026414](#) ItronTest Itron Test *Reader Stability ...*  
DN15 Coax 4 reads, latest 03-Jul-2014 *Anyquest Full*  
Installed: 29-Apr-2014 Billing group 1

[H13AU092175](#) DIEHL Diehl Test *Diehl Test*  
DN15 Coax 2 reads, latest 27-Jun-2014 *Diehl-1*  
Installed: 20-Jun-2014 Billing group 1











[H13AU092174](#) DIEHL Diehl Test *Diehl Test*  
DN15 Coax 2 reads, latest 27-Jun-2014 *Diehl-1*  
Installed: 20-Jun-2014 Billing group 1

[07067687](#) DIEHL Diehl Test *Diehl Test*  
DN15 Coax 2 reads, latest 27-Jun-2014 *Diehl-1*  
Installed: 20-Jun-2014 Billing group 1

[H13AU092173](#) TESTDIEHL Diehl Manual Test *Temetra Sensus Test*  
DN15 Coax 1 read, latest 18-Jun-2014 *Diehl-1*  
Installed: 13-Jun-2014 Billing group 1

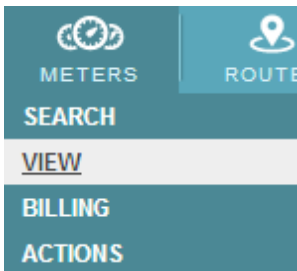
Clicking on the blue link will take you directly to the meter. Once you have the list of meters from your compiled search, there is then the opportunity of downloading various files of data relating to these meters.

**Download search results**

Customer Details		
Meter Details		
Summary with flow rate		
GPS Connections (Customer/Route)		
KML Connections		

Alternatively you can also use the search facility which is located on the top right of each page.

# Meters – View



The **Meters View** is one of the central screens in Temetra. On this screen you get a complete list of all information held in Temetra about a particular meter, its associated account, and all the readings taken for this meter.

1 of 54 in route Cahir (Demo) Urban

**Customer** Note Edit

Account Ref: DP1000  
 FAO: testfao  
 Name: CW Installations  
 Address: Unit 8 BDA Blvd PK  
 Billing Pin: 7096

**Meter Details** Note Edit

Meter Serial: 01AU103014  
 Type: Actaris Aquadis  
 Size & Format: DN15 Coax B-3  
 Read Method: Cyble Wireless  
 HSI Serial: 66-0081705-209  
 SMA: Cahir Demo DMA

Connection Ref: 266090  
 Tour Sequence: 1000  
 GPS: N02 22.43 W07 55.35  
 Location Code: Rear  
 Route: Cahir (Demo) Urban  
 Billing: YES, group 1  
 Allowance:

Summary Edit Readings Bills Balance Photos (1) Issues (0)

Monthly consumption from extended data in latest AMI reading

Flow (m³/month)

Min: 6.7 Max: 13.3 Average: 8.6

Date	Index no	Information	Flow
01/04/02 14:17	2400	Wireless	0.26 m³/day
01/01/02 13:17	2377	Wireless	0.34 m³/day
01/10/01 13:17	2346	Wireless	0.29 m³/day
01/07/01 13:17	2319	Wireless	0.25 m³/day
01/04/01 13:17	2296	Wireless	0.29 m³/day
01/01/01 13:17	2270	Wireless	0.26 m³/day
01/10/00 13:17	2246	Wireless	0.33 m³/day
01/07/00 13:17	2216	Wireless	

Depending on the data that has been filled in for the meter, you will not see all the possible fields displayed. For example, if there is no GPS co-ordinate stored for the meter installation, then this field is not displayed on the view screen. If you edit the meter details and fill in GPS co-ordinates, then that data will be displayed on the view screen.



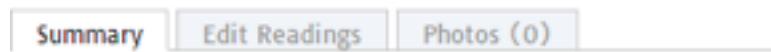
You can page through all the meters in a route using the step buttons at the top.

Use this button to move to the previous meter on the route. This button will not be visible if you are at the start of the route.

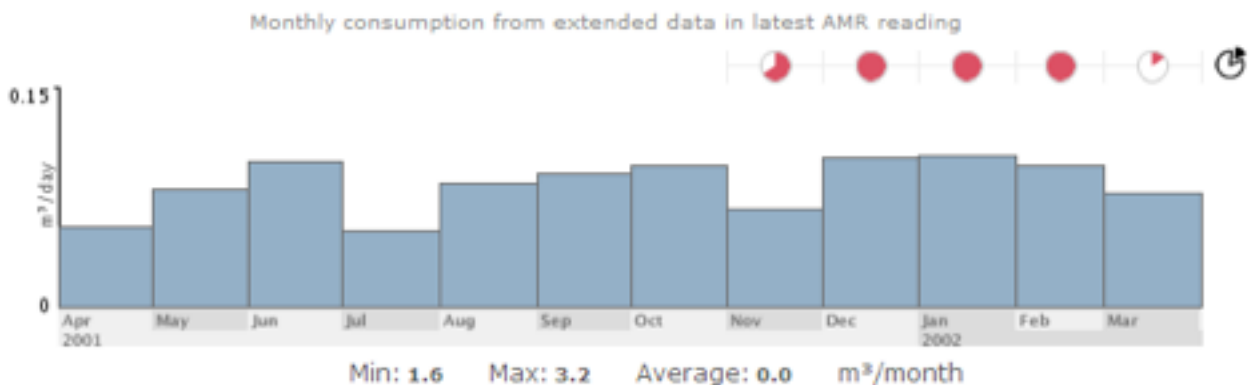


Use this button to move to the next meter. If not visible, then you are at the end of the current route.

Below the account and meter blocks is a tabbed menu that allows you to look at all the extended information for the meter.



The summary tab is shown above, and when this is selected, you will see a summary of all previous reads and a Cyble histogram summary if this meter is has a Cyble MIU fitted and the most recent read is an AMR read.



This graph shows the monthly consumption data generated from the Cyble historical index values. The graph automatically scales to fit the data, so in this case the top of the scale is 0.15m<sup>3</sup>/day.

Below the graph shows the maximum consumption value of 3.2m<sup>3</sup>/month and minimum consumption of 1.6 m<sup>3</sup>/month.

The red pies above each month show a summary of the leakage days recorded by the Cyble.



A solid red pie indicates every day in that month recorded a leak.



An incomplete pie shows a quick summary of the number of days in the month that were record as a leak.

So in this case only one or two days recorded a leak.

The readings themselves are displayed below the graph on the Summary tab and show the exact date and time of reading, the index, the method of reading and any comments or reading codes entered by the meter reader on the handheld.

Readings

Date	Index m <sup>3</sup>	Information	Flow	
01/04/02 14:32	<b>4528</b>	Wireless	0.09 m <sup>3</sup> /day	
01/01/02 13:32	<b>4520</b>	Wireless	0.10 m <sup>3</sup> /day	
01/10/01 13:32	<b>4511</b>	Wireless	0.08 m <sup>3</sup> /day	
01/07/01 13:32	<b>4504</b>	Wireless	0.08 m <sup>3</sup> /day	
01/04/01 13:32	<b>4497</b>	Wireless	0.09 m <sup>3</sup> /day	
01/01/01 13:32	<b>4489</b>	Wireless	0.09 m <sup>3</sup> /day	
.....	.....	.....	.....	-



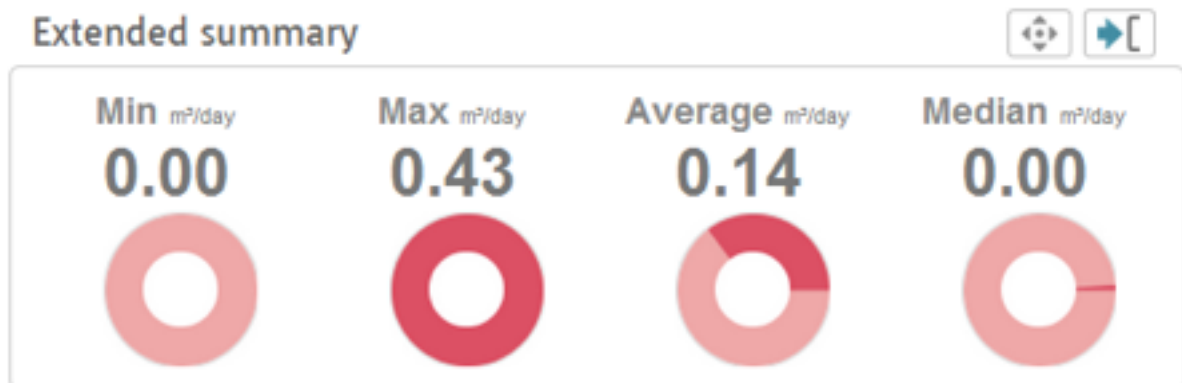
## Extended Data



Extended data is graphed in movable modules on the meter view page.

You can choose what extended data you wish to view on each meter using the module icons shown on the right hand side of the meter view page. An example of some extended data modules can be seen here on the right.

Once you select a module, it will automatically display for each meter until you minimise it again. This allows you to see only the data that you are interested in seeing at a glance, but keeps further information a single click away.



Above is an example of an undocked module with summary extended data.



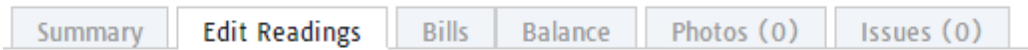
Use this button on the top right to minimise (or dock) a module.



To move it around the page click and hold this icon, then drag the module to the area you prefer.

## Edit Readings

If you have sufficient access privileges to edit readings, then you will see an EDIT READINGS tab.



By selecting this tab you can add a new reading, modify or delete an existing reading.

**Readings** New Reading

Date	Index ( m <sup>3</sup> )	Information		
01/04/02 14:32	4528	Wireless	Edit	Delete
01/01/02 13:32	4520	Wireless	Edit	Delete
01/10/01 13:32	4511	Wireless	Edit	Delete
01/07/01 13:32	4504	Wireless	Edit	Delete
01/04/01 13:32	4497	Wireless	Edit	Delete
01/01/01 13:32	4489	Wireless	Edit	Delete
01/10/00 13:32	4481	Wireless	Edit	Delete
01/07/00 13:32	4473	Wireless	Edit	Delete

It may be impossible to modify some readings because they are in use elsewhere, for example as a billing read.

To modify an existing reading, click the EDIT button alongside the reading and the screen will change to the edit reading form.

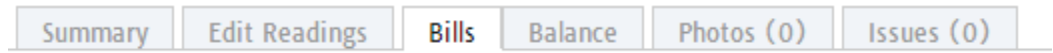
## Readings



Date	Index ( m <sup>2</sup> )	Information
<input type="text" value="01/04/02 14:32"/>	<input type="text" value="4528.386"/>	<input type="text" value="Cyble"/> <input type="button" value="Save"/> <input type="button" value="Cancel"/>
01/01/02 13:32	4520	Wireless
01/10/01 13:32	4511	Wireless
01/07/01 13:32	4504	Wireless
01/04/01 13:32	4497	Wireless
01/01/01 13:32	4489	Wireless
01/10/00 13:32	4481	Wireless
01/07/00 13:32	4473	Wireless

You can now edit the date/time, the index or the reader comment.

# Bills

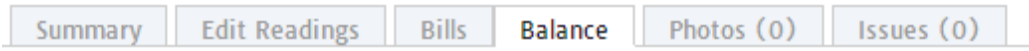


This tab shows a list of all bills generated by Temetra for this account. By clicking on the download link, you obtain a copy of the bill in either XML or PDF format. If you are using Temetra only to collect readings for an external billing system then this tab will not be visible.

## Bills for this account

Date	Ref	Bill	Charges	Balance	Download
02/10/00	<a href="#">Q3 2000</a>	15796 - 766727	€ 21.48	€ 21.48	

# Balance



The balance tab shows all payments received on this account from an external cash receivables system. These payments are used to generate bills in Temetra for the account.

# Photos



If you have stored digital photos with the meters then a PHOTOS tab will be visible and clicking it will show a list of all photos.



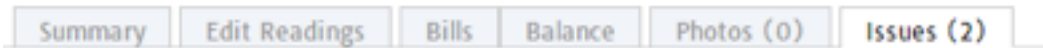
**ADD PHOTO**

The images shown in the list are reduced in size to make them visible in this tab. By clicking on the image, a new window will open on your screen with the full size version of the photograph.

These photographs can be useful to record location, installation details and re-instatement quality for meter connections.

<b>Comment:</b>	File 0147
<b>Photo Date:</b>	13/05/03 00:00
<b>Uploaded:</b>	25/11/03 19:21
<b>Uploaded:</b>	Paul Barry
<b>Tags:</b>	bad-exif

# Issues



The ISSUES tab will only be available to customers who have opted to use **Temetra Issue Tracker**.



Temetra Issue Tracker allows you record work and customer service issues in a database, integrated with Temetra meter management. See <http://www.temetra.com/issuetracker/> for more details on this service.

The ISSUES tab shows a list of all recorded issues with the selected meter. It records the status of the issue (i.e. resolved/ unresolved) and a summary of the problem that was noted.

## Issues in Tracking system

Issue Id	Status	Date Updated	Summary
<a href="#">000004</a>	assigned	10/01/13 14:21	Stylite meter cover broken
<a href="#">000005</a>	assigned	18/12/12 15:17	Finance require reading verification

[Report New Issue](#)

Clicking on the “[Report New Issue](#)” link” at the bottom of the issues table will allow the user to identify a new issue and assign it to the relevant person. Click create issue to submit the issue to Temetra issue tracker.

✕

### Create new issue

Summary

Category

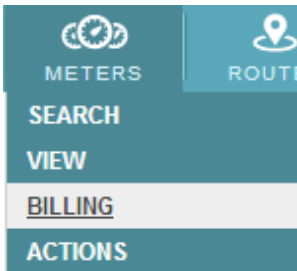
Assign to  Priority

Status

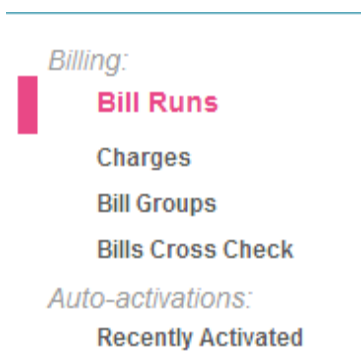
Description



## METERS – Billing



If you have sufficient access privileges then there will be a BILLING tab under METERS, and selecting this will allow you to administer billing, payments and charges within Temetra.



**BILL RUNS:** By clicking on the GENERATE NEW BILL RUN button, Temetra will identify if there are sufficient readings to complete a new bill run, present a form to fill in details and a new bill run will be generated.

**CHARGES:** This creates a table with relevant water charges and allowances for both the current and previous years.

**BILL GROUPS:** This puts the billing meters into billing groups

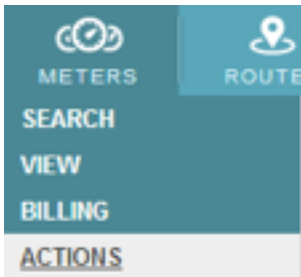
**BILLS CROSS CHECK:** Enter text into the text box that filters the bill runs to leave only those you're interested in. For example, "2006" will show all bill runs that contain 2006 in the reference, or "2006 Q1" will show a subset of these. Click 'Filter' to sort into the desired information.

This will issue a bill run total, and an option to download a CSV spreadsheet file containing details of every bill, in every bill run matching your current filter.

**RECENTLY ACTIVATED** shows information on recently activated meters.

Please contact [billing@temetra.com](mailto:billing@temetra.com) for more details billing function in Temetra.

# Meters – Actions



If you have sufficient access privileges then you will see an ACTIONS tab under METERS. This screen has a list of common procedures that you may need to carry out on accounts or meters, like creating new accounts and meters. Some are simply instructions on how to carry out the task using other screens, or others allow you to initiate the procedure directly from this screen.

## Replace a meter

The replace meter procedure should be used if you replace a meter on a connection. Using this procedure, all the details of the old meter and the reading that were made for this replaced meter are retained within Temetra for future access.

### Replace a Meter

*This procedure is used if are replacing an existing meter on a connection, with a new meter. The new meter details will be used in all subsequent reads on this connection and you will be asked for the final reading on the meter you are replacing. The existing meter will remain in the history so you can see all previous reads of this meter, but will no longer be used when meter reading.*

To replace a meter, [find the meter](#), click the edit button beside the meter and then click on the Replace Meter link.

Edit a meter in the way previously described and then click the “Replace this Meter With Another” link at the top of the page.

*Edit the meter details below, or [Replace This Meter](#).*

*Use the Save button to save your changes and return to the account view, or Cancel button to return without saving changes.*

This will present you with a new meter edit form that you should fill in with the details of the new meter.

## Add new meter to existing account

If you have an account already set up a new connection and meter has been added, then follow this procedure. In the case where a meter is being replaced on an existing connection, use the procedure “Replace a Meter”.

### Add New Meter to existing Account

*Use this procedure if you are adding a new connection with a new meter to an existing account.*

To add a new meter, find the account ( [click here](#) ), click the edit button beside the account and then click on the Add Meter link.

## Add new account and new meter

Use this procedure for adding a completely new meter and account.

### Add New Account and New Meter

*Use this procedure to add a new account to the system and with a new meter and connection. This new meter will be added to the route for meter reading.*

[Click here to add new account and meter](#) . You will be asked brought through the procedure, first adding the account, then adding the meter for that account and finally confirmation of the addition. Once this is done, your new meter will be included in the route for reading.

## Move a meter to a different account

### Move a Meter to a Different Account

*This procedure is normally used to move a meter has been incorrectly assigned to an account.*

To move the meter, find the account you will move the meter to ( [click here to search](#) ). Use the 'Move Meter to This Account' field at the bottom of the page.

This procedure is normally used when a meter has been assigned to the incorrect account and you would like to move the meter and all its associated readings to the correct account.

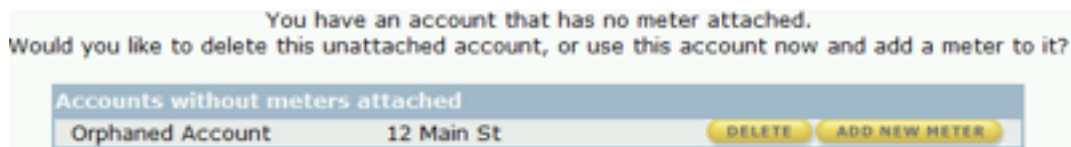
## Accounts Without Meters

For various reasons, it's possible to end up with one or more accounts that have no meters attached, for example by deleting a meter, but not deleting the account. When this happens, the ACCOUNT – VIEW will not display the accounts because they have no meters or routes.



**Manage Accounts Without Meters**  
 You have accounts on your network without any meters attached. This happens if you move meters or fail to complete a new Account and Meter procedure.  
To delete these accounts, or add meters to them now [click here](#)

If there are accounts without meters on your network then METERS – ACTIONS will display the above procedure and allow you to manage these accounts, by either deleting these accounts or adding new meters to them.



You have an account that has no meter attached.  
Would you like to delete this unattached account, or use this account now and add a meter to it?

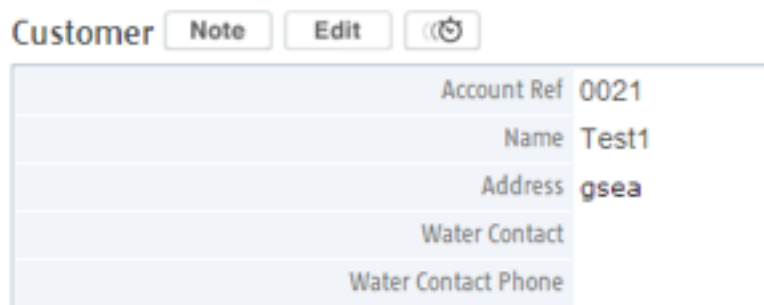
Accounts without meters attached	
Orphaned Account	12 Main St

DELETE    ADD NEW METER

# METERS – Editing Meters and Accounts

## Account Edit

If you have sufficient privileges, when looking at the METERS → VIEW screen, there will be an EDIT button alongside the heading.



Customer

Account Ref	0021
Name	Test1
Address	gsea
Water Contact	
Water Contact Phone	

By clicking the EDIT button you can edit the details of the account.



**Edit Customer Details**

Enabled

Account:

Name:

FAX:

Phone Number:

Alternate Phone:

Address:

Bill Address:

Billing PIN:

Water Contact Forename:

Water Contact Surname:

Water Contact Phone:

Main email:

[AddAnotherEmail](#)

The **Account** field allows you to enter any external reference for this account. Typically this will be an account id that has been assigned by an external billing system like Agresso.

**Name** is the name of the premises of the installation and address is the address of the installation.

**Notes** can be used for any comments you have on this account.

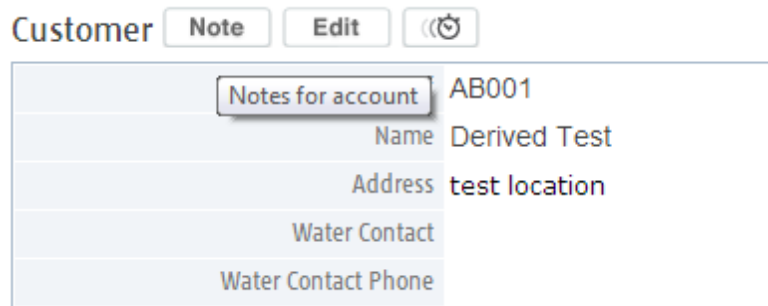
**FAO** and **Bill Address** are used when the billing address for this account is not the same as the installation address. If these have no values and Temetra is used to generate bills then the name and address fields are used instead.

If Temetra is generating bills, then allowance refers to any credits to be applied when determining volumetric consumption charges for this customer.

If Temetra is used to provide customer access to bills, then Billing PIN is the PIN number that the customer should use to access their details.

## Notes

Accounts and meters may also have notes attached to them. These notes can be accessed by clicking on the relevant icon as shown below.



This will open a separate window in which you can read the notes attached to the account. You can also edit or delete existing notes or create new notes for the account.

## Meter Edit

As with accounts, meter details can also be edited.

**Edit Meter Details 13LA054321 (TEST ACC)**

Save Cancel

Meter Type / Brand: Unknown ▼

Meter Model: Unknown ▼  
Model not in this list?

Nominal Size: DN15 Coax ▼

Meter Units: m<sup>3</sup> ▼

Meter Format: 8.3 ▼  
Help on formats

---

Meter Details

Meter State of Repair: Unknown ▼

Meter Serial: 13LA054321

Meter Commissioner: Unknown ▼

Meter Install Date: 10/01/14

Collection Method: Manual Read ▼

MIU Serial:

MIU Install Date:

MIU Commissioner: Unknown ▼

Meter Ref:

exclude from handheld download

Comment:

Code:

Expected Flow Rate: Unknown ▼

exclude from consumption

---

Relationships

*Route Sequence* is the sequence number for this meter in the route. When meters are downloaded to the handheld for reading, they will be stored in numeric order according to this number.

*Meter Type* – select the meter type from the pop-up menu.

*Meter Serial* – the manufacturer's serial number from the meter body

*MIU Serial* – The Cyble MIU number, printed on the MIU

*Meter Reference* – Any external reference number for this meter (e.g. Agresso Meter Id)

*Collection Method* – Manual, wireless, GSM etc. from the pop up list

*Exclude from handheld download* – If checked, this meter will not be downloaded to the handheld for reading. For example, if this meter is read on a fixed network or by GSM, there is normally no need to read by handheld also.

*Exclude from billing* – If checked this meter and its reading will not be included in export files for billing.

*Location* – Left, front etc. from the pop-up list

*GPS Location* – Lon/Lat as Northing and Easting from GPS equipment

*Route* – the route that this meter belongs to. By changing this you can move meters around between routes.

*DMA* – The DMA./Scheme that feeds this meter.

*Meter Group* – used to group meters for AMR purposes.

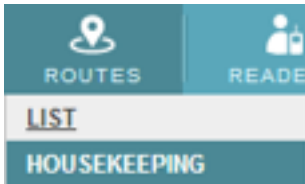
*Installation Date* – the date this meter was installed.

*Comment* – Any other information that you wish to store about this meter.

There are a huge number of other fields available on Temetra. If these are filled in, the information will display with all other meter details. The fields will be hidden if they are not filled in.



## Routes – List



To view all of the routes in your network, click on ROUTES -> LIST. This will also display the total number of active meters, wireless read meters and the amount of billing meters.

### Routes in your network

Name	Handheld pickup code
<a href="#">001 ()</a>	001
2 meters, 2 read by handheld, 2 wireless, 1 billing	
<a href="#">002 ()</a>	000002
19 meters, 19 read by handheld, 1 wireless, 19 billing	
<a href="#">Route 66</a>	000001
10 meters, 10 read by handheld, 2 wireless, 9 billing	
<a href="#">Route Antenna Check ()</a>	000008
0 meters, 0 read by handheld, 0 wireless, 0 billing	
<a href="#">Tem1 ()</a>	000021
4 meters, 3 read by handheld, 2 wireless, 1 billing	

Total of 35 meters, 30 billing  
34 read by handheld, 7 wireless


[Add New Route](#)

[Add New Combination Route](#)

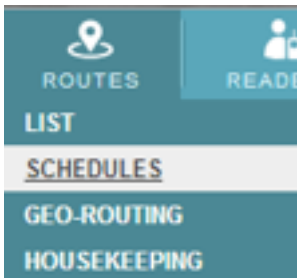
[Download GPX file for all matching routes](#)

By clicking on the name of any of the displayed routes, you can view all of the meters on that route.

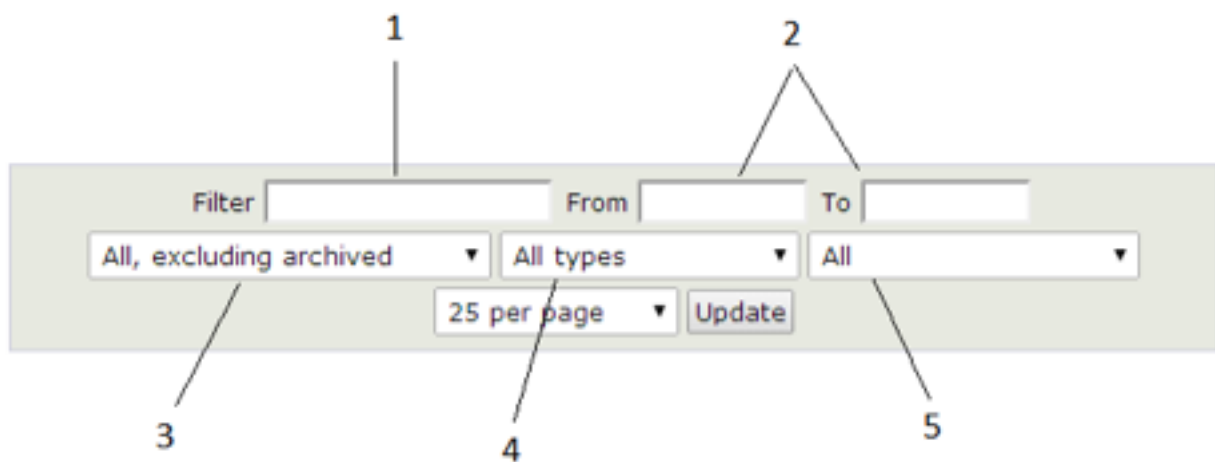
From here we can see such details as the route sequence number, account reference number, account holders name, type of meter etc.

In networks where the  icon appears, you can click this and create a scheduled route from routes list page.

## Routes – Schedules



Schedules is where you can view all scheduled routes within your network. Schedules are passed to us from the billing system with the expected read dates and all information needed to read the meter. There is a filter tool to assist you to view the appropriate routes.



1. If you want to perform a quick search, you can insert what data you have in here to narrow your search down. e.g. part of or all of the route reference or the name of the person the route is assigned to.
2. The dates between which you want the routes displayed
3. This is a drop down menu of the status of the routes. You can select routes that are assigned, Unassigned, completed, not started, unfinished etc.
4. This is to choose the types of routes i.e. current georoutes, current requested, every georoute, every requested.
5. This is an 'assigned to' drop down list of names.

### Scheduled Routes

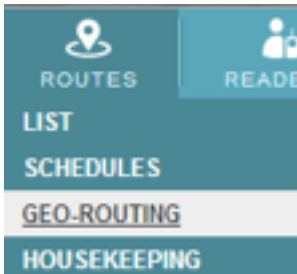
Ref		From	To	Meters	Reads	Skips		Assigned
<input type="checkbox"/> <a href="#">Area A1 Read Book 001</a>		26/06/14	30/06/14	889	0	0	0%	Derek Dehn, <a href="#">Change</a>
<input type="checkbox"/> <a href="#">Priority2 Jun 2014</a>		26/06/14	30/06/14	0	0	0	0%	<a href="#">Assign</a>
<input type="checkbox"/> <a href="#">APRoute Jun 2014</a>		17/06/14	17/07/14	56638	4	0	1%	<a href="#">Assign</a>
<input type="checkbox"/> <a href="#">BASS Jun 2014</a>		23/06/14	23/07/14	2600	247	0	10%	<a href="#">Assign</a>
<input checked="" type="checkbox"/> <a href="#">CY 140008</a>		28/07/14	03/08/14	1	0	0	0%	<a href="#">Assign</a>
<input type="checkbox"/> <a href="#">CY 140025</a>		18/08/14	24/08/14	29	0	0	0%	<a href="#">Assign</a>
Totals for 6 matching routes				60,157	251	0	0%	

Actions: [Archive](#) [Load into geo-routing](#) [Assign](#) Routes to [None](#) [Assign](#) From  To  [Update](#)  
 Exports: [ODM](#) [CSV](#) [Details CSV](#) [Reads CSV](#) [Street Plan CSV](#) [Leakage Data](#) [KML](#)

Each schedule represents a group of meters (often a route)

# Routes – Geo-routing

Geo-routing is a planning tool for assigning or reassigning reads. It is an intuitive and interactive page for large scale meter management. Meter readers are allocated work based on their geographical area. When meter readers become unavailable, due to holidays, illness or equipment failure, their reads need to be reassigned. Geo-routing is used for this. The geo-routing screen is split in two. On the left hand side is information about your readers and on the right hand side is a map showing all your meters scheduled for reading.



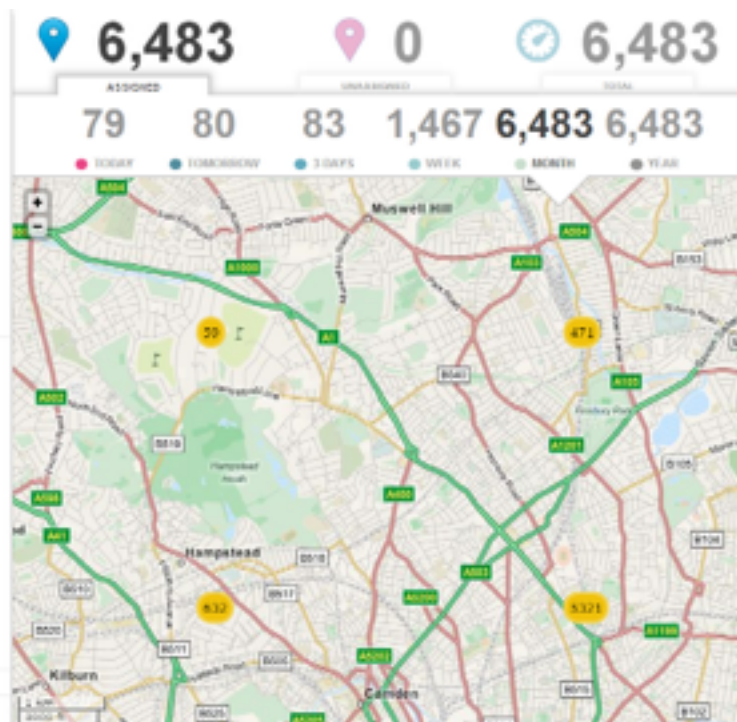
Filter

**Users**  
Show users in this area only  Key Account Reader:   
Team: **All** Sub-Team: **All**

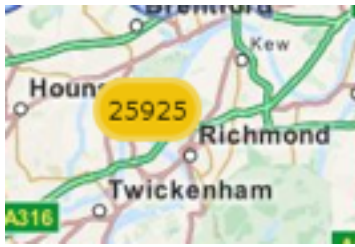
**Filters**  
Quarterly:  Half Yearly:  Evening Read:   
Heavy Cover:  Dirty Meter:  Arrange Access:   
TMA Required:

**Request Type**  
Cyclical:  Manual:  Key Account:  SPB:   
2x50:  24 Hour:  3 Days:  5 Days:   
DOB:  Drought:  Slip:

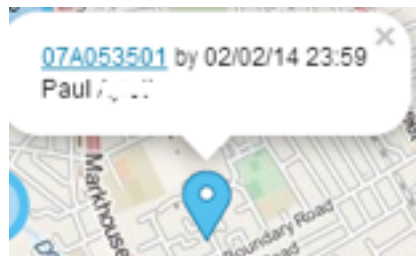
NAME	WORKLOAD	TOTAL
William T...		4736
Rachel...		1734
Reginald...		1576
Lloyd...		1544
Nancy...		1476
Adrian...		1409
Marion...		1389
David...		1385
Paul...		1350
Winston...		1339
Donald...		1311



On the map you will see meters or clusters of meters (Clusters are groups of meters too close together to be shown individually). The amount of meters contained within a cluster will be displayed on the cluster. As you zoom in on the map the clusters break into smaller clusters until they are displayed as individual meters as seen below.



When you hover over a meter pin you see the meter details, the deadline for reading and whether it has been assigned to a meter reader. Clicking on the link takes you to the full meter details.



Above the map you see detailed information about what is being displayed. This tool allows you to select which meters are to be displayed. You can display assigned, unassigned or all meters. You can also see the deadline for the meters. In the example below we can see that 14 meters need to be read today and 15 tomorrow in the area displayed on the map. There are 1,364 assigned meters and zero unassigned meters.

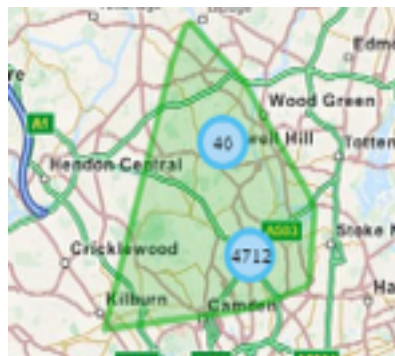


On the left hand side you can see the meter readers that are available for meter reading. Their current work load is displayed as a bar. The colours on the bar use the

same key as the map. Pink showing their scheduled work load today, dark blue for tomorrow and so on. When you hover over a meter reader on the list you will see some icons appear on the right hand side.

NAME	WORKLOAD	TOTAL
Warren [.....]		4738

The first icon (the little house) when hovered over will show you the boundary of the meter readers home zone. This is the geographic area within which they normally work.



The second icon (the arrow) when hovered over will display the boundary of their workload within the current period, if you change the time period at the top of the map the boundary will change to reflect this.



The third icon (the little person) when clicked on will show you only the meters assigned to that meter reader.

## Filters

Filter

---

### Users

Show users in this area only  Key Account Reader:

Team  Sub-Team

---

### Meters

Quarterly:  Half Yearly:  Evening Read:   
Heavy Cover:  Dirty Meter:  Arrange Access:   
TMA Required:

---

### Request Type

Cyclical:  Manual:  Key Account:  SPS:   
2x10:  24 Hour:  3 Day:  5 Day:   
DG8:  Drought:  Skip:  PMP:   
PMPV:

The free text filter field above can be used to search through all meter readers on your network.

By tapping the icon next to the text field you can show / hide the list of custom fields for your network.

Fields can be added and removed on request, but are dependent on the data stored within Temetra.

## Users

This allows you to filter for particular users on the geo-routing page. The drop down menus will contain the list of teams and sub teams in Temetra and only show the meter readers within the selected groups.

We can also add check boxes as above to only show key account meter readers, or meter readers operating in the geographical area shown.

### Meters

---

Quarterly:       Half Yearly:       Evening Read:   
Heavy Cover:       Dirty Meter:       Arrange Access:   
TMA Required:

### Request Type

---

Cyclical:       Manual:       Key Account:       SPS:   
2x10:       24 Hour:       3 Day:       5 Day:   
DG8:       Drought:       Skip:       PMP:   
PMPV:

## Meters

This allows you to filter by custom meter information. some examples can be seen above.

## Request Type

This section allows you to filter by the request type. See above for image examples.

## Map Searching

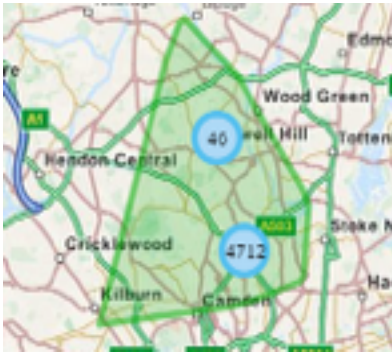
On the bottom right hand side of the map, there is a search box. This will search your networks area for any text typed in. This includes postcodes, towns and street




addresses. The map will automatically zoom to the area.

### *GeoRouting Auto assign*

Auto assigning can be carried out using the meter readers home areas.

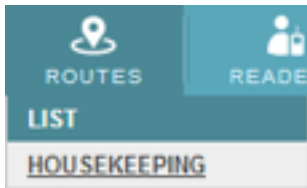


Home areas are set using the reader zone text field on the edit user page. The input can be GPS points (multiple format supported) or can be set by postcodes. The objective is to provide a polygon area that the meter reader will operate in.

The polygon can be seen by hovering over the  icon on the GeoRouting page.

All meters that need to be read will populate on the map as unassigned meters. Any unassigned meter that falls within a meter readers home area will be automatically assigned to them immediately. These meters will then be available on the handheld Temetra Reader software when the meter reader next logs in.

# Routes – Housekeeping



The HOUSEKEEPING menu on Temetra allows the user to see a summary of the issues within the selected network.

Opening the HOUSEKEEPING menu will show a list of groups that Temetra will create for any problems that have arisen.



This list is shown below:

**CONNECTION REFS** will show a list of any duplicate connection references on the network.

**DUPLICATE MIUs** shows a list of all meters with the same Meter Interface Unit information

**DUPLICATE METER REFS** shows a list of all Meter References with identical information

**BILL GROUPS ANOMALIES** include accounts with meters split across different routes, or with meters in different billing groups.

**BILL GROUPS SUMMARY** provides a list of billing groups, including the total number of meters and the most common route within that billing group.

**EMPTY DMAs** give a list of District Meter Areas (DMAs) in your area that have no meters in them . You can delete all empty DMAs by clicking the link [Delete all empty DMAs](#)

**DUPLICATE READS** shows a list of the first 25 exact duplicate reads in the network. It gives an option to delete all duplicate reads by clicking. [Delete all duplicate readings](#)

**GPS** gives a list of all meters with GPS location problems on the network.

**DERIVED METERS** shows derived meters with data anomalies and with problem expressions. Click the link [Automatically fix all simple problems](#) to remedy problems. This is a safe operation, just cleaning up the data for derived meters, excluding from

handheld, excluding from network consumption



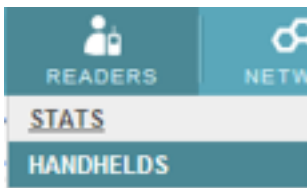
**READS AFTER REPLACEMENT** shows a list of all incorrectly recorded readings since the time of replacement. This may occur due to reading a meter that is not in current use. All readings can be fixed by clicking the link [Fix all readings incorrectly recorded after replacement, by moving to replacement meter](#) .

**IMPOSSIBLE INDEX** shows all meters in the network that have an index which is incompatible with the meter format.

**AMBIGUOUS READS** gives a list of all reads with the same time but a different index.

**REPLACED METER ANOMOLIES** shows the replaced meter and the replacing meter, while describing the reason for the anomaly.

## Readers – Stats



STATS provides the statistics on meter readers. You will see a summary of the number of readers on a particular route, the number of reads and the number of skip on the route. It will also provide an average of the reads per day on the route.



The search tool allows you to quickly access reader data, based on information you supply e.g. dates, teams, sub-teams.

### Active Readers

From  To  Team  Sub-Team

You are provided with a list of the active readers and if you click on a readers name you will be presented with the individual statistics for this reader. It will show you a list of all the assigned routes for that reader and the statistics associated with them. These include the date for completion, number of Meters to be read, number of meters already read, number of skips and the percentage of the route completed.

Name	Reads	Reads/day	Skips	Skips/day	Skips %
<a href="#">Dilly Collett</a>	433	108	23	5	5
<a href="#">Hazel Ishwood</a>	237	59	24	6	9

If you click on the highlighted name you will see the assigned scheduled routes for this meter reader and also the statistics for the assigned routes



Routes

21



Meters

21



Reads

614



Reads/day

87

### Assigned scheduled routes

21 matching

Ref:

From

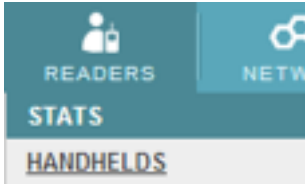
To

All Types

Page 1   [Next](#)

Ref	From	To	Meters	Reads	Skips	Complete
<a href="#">Ext-1500_1530 - 23 Dec 2013-CE</a>	02/12/13	10/01/14	228	227	1	100%
<a href="#">Ext-1500_1545 - 23 Dec 2013-CE</a>	02/12/13	10/01/14	70	74	2	100%

## Readers – Handhelds



Handheld gives a list of all your current handhelds. It will tell you information associated with each one e.g. the serial number, who is using it, what version of Temetra Reader is installed on it etc.

### Handhelds: 4 matching

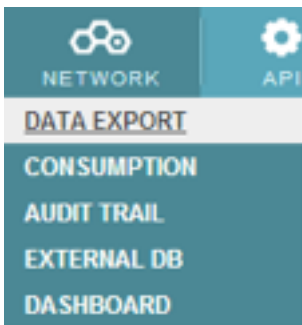
Ref	Info	Serial	VGA	Soft Key	Pending Configs	Uploads	User	Version (4.48)
<a href="#">ANON40373</a> (333) <a href="#">Edit</a>	<span style="color: green;">●</span> Unknown	765be673...a21d0600	YES	NO	NO	<a href="#">Uploads</a>	jimmy.omahony	4.48-dev2
15/01/14 11:44, Jimmy Collected Gzip/XML Office testing/001,002,Route 66,Tem1								

If you click on the reference number of the handheld, the historical data of the handheld will be displayed. It will display what has been collected and uploaded by this handheld, when it was done and who by. This can be filtered as desired.


### Recent Events for ANON40373

When	User	Info	IP
15/01/14 11:44:30	jimmy.omahony	Collected Gzip/XML Office testing/001,002,Route 66,Tem1	10599/89.234.72.54/p-89-234-72-54.dnmi.metro.digiweb.ie/DIGK
15/01/14 11:43:17	jimmy.omahony	Collected Gzip/XML Office testing/001,002,Route 66,Tem1	10599/89.234.72.54/p-89-234-72-54.dnmi.metro.digiweb.ie/DIGK

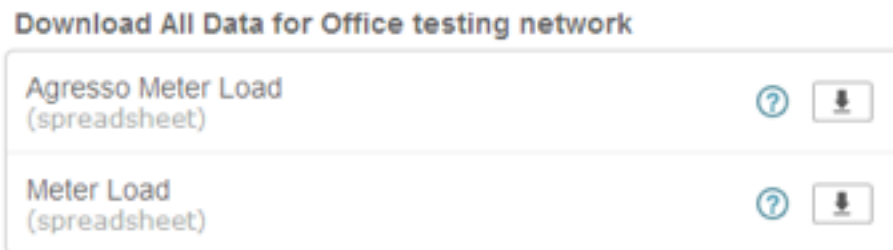
## Network – Data Export



Under the NETWORK tab, DATA EXPORT allows you to download data. These downloads differ from the those under the READINGS menu in that you can download the readings for **all** the meters in your network. These are useful when you need to generate bills in an external billing system and need the readings for all the billing meters in your network.

Each data export can be downloaded by clicking the  button on the desired section.

### Download all data for entire network



This download allows you to access all the data about your network that resides in Temetra. In other words, if you want a complete snapshot of all the data in XML format, use the “Meter Load” download. The “Agresso Meter Load” is a specific subset of this data, formatted suitable for loading into Agresso.

## Download data for use on a GPS device



This download option enables the data to be transferred to a GPD device, with details restricted by its capabilities. Each option has information on the type and detail of data provided by the download.

## Download Customer details



This will download the details of all customers within the selected network. This can be used to identify the size of the network and its details. The file contains the customers details such as names, address, phone numbers, billing address, meter account, balance, etc..



Download summary information for every meter.

#### Summary with median flow rate



Summary with flow rate  


This download gives the summary of each meter on the network. Information such as location and route, if its billable, meter consumption rate, median flow rate, average flow rate, last 5 reads, etc. This report is useful for quick access to the networks meters and their performance.

#### Download set of readings for billing

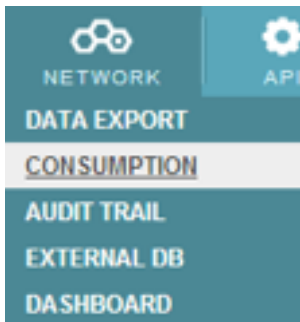
The lower block is designed for downloading readings for billing purposes. You can download the readings as a CSV spreadsheet file, and select a cut-off date for readings based on any tour data in Temetra using the pop up list.

#### Download readings up to and including most recent tour

Agresso Readings  
(spreadsheet)  

Last readings on or before:  

## Network – Consumption



Network consumption tries to calculate the total metered flow through your network for a period of time. It's very unlikely you will have readings for every meter on the dates you enter, so there are a number of strategies used by Temetra to provide an exact or approximated reading for each meter. Meters with insufficient data, or those specifically excluded from network consumption, are not taken into account.

To access the data, type the desired dates into the fields as below and click recalculate.

**Consumption for DMAs from 10/10/13 to 09/01/14 (91 days)**

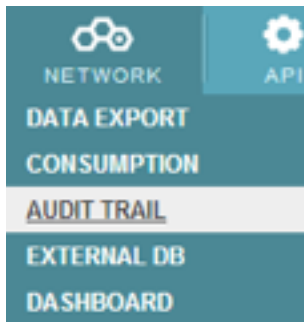
DMA	Total consumption	Daily flow	Meters used	Active Meters
<a href="#">test</a>	862 m <sup>3</sup>	9.00 m <sup>3</sup>	30	30
<a href="#">SE</a>	0 m <sup>3</sup>	0.00 m <sup>3</sup>	4	5

**Total consumption 862 m<sup>3</sup> , total daily flow rate 9.47 m<sup>3</sup>**

*Total of 11 meters used in calculation, of 35 live meters in your network.  
[Click here for an explanation of how Temetra calculates network consumption](#)*

This will also give the top 20 consuming meters in the network and their respective details. At the end of the consumption page is the option of downloading consumption data and summary as a CSV file.


## Network – Audit Trail





AUDIT TRAIL allows a user with sufficient privilege to access all network admin changes over a specific period of time. The audit trail report contains information on the change made, the user who changed it, the time of change and a link to the changed item. For all changes made to meters, the meter account can be accessed via the blue link on screen as normal.

To obtain a specific and relevant audit trail report the user can filter the results as follows. Leaving any of the fields blank will show all results for that field.

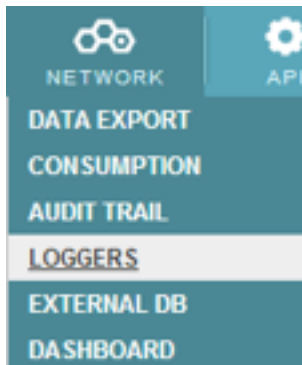
1. Choose the type of change required from the drop down menu.
2. Choose the field the change was made to.
3. Choose the items that were edited, such as meters, loggers, routes etc.
4. Choose the time frame required for the search.
5. Choose the number of items to be shown on the report.
6. Fill in the start date and end date for required search.

The report with its selected filters can be downloaded at the bottom of the page by clicking the  button. It will download in CSV format.

#### Download Audit Trail

Audit Trail  

# Network – Loggers



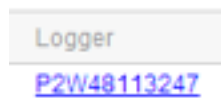
If you have GSM loggers on your network, then the NETWORK – LOGGERS tab will display a list of all the loggers, their channels and the meters to which these channels are attached.

Filter:  Filter Show All

Channels

Ref	Meter / Sensor	Channel	Logger	Status
8001084	<a href="#">ESB ESTATE MANAGEMENT</a>	<a href="#">P2W48113247-1</a> Volumetric Flow Pulse	<a href="#">P2W48113247</a>	

To view more details on a logger (installation dates, SIM card details, GSM signal strength history etc.), click on the desired link in the Logger column.



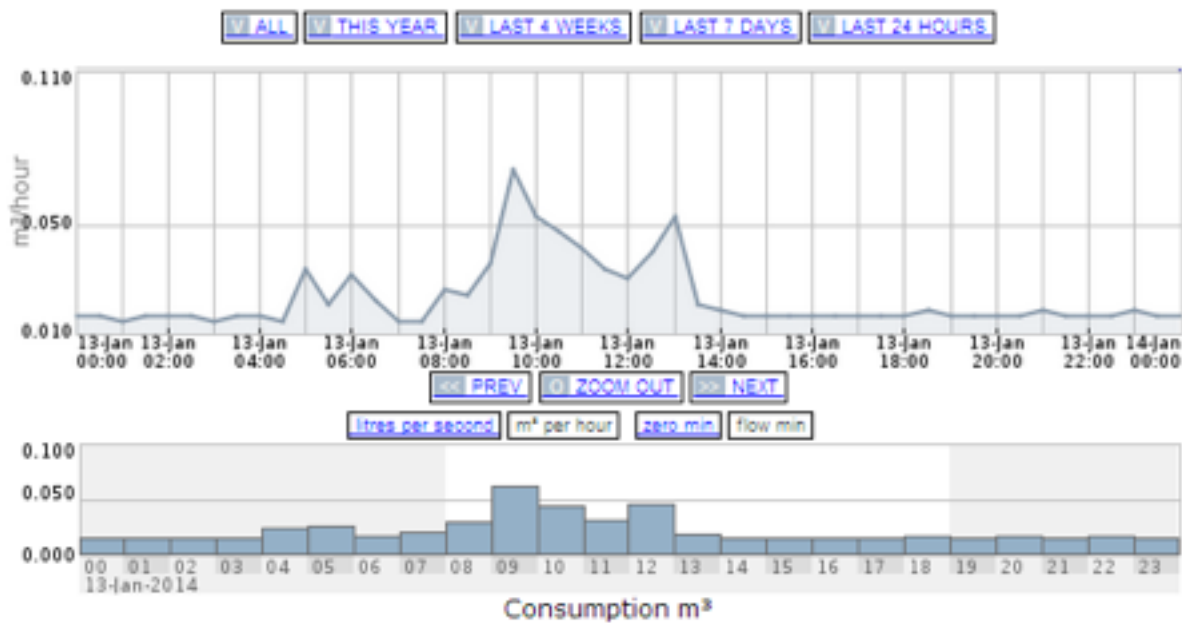
To view the logged data from a channel on the logger, click on the link with the serial number of the meter.



To view the logged data on the logger, click the desired link in the Meter / Sensor column.



After a link in the Meter / Sensor column has been clicked, you will be taken back to the standard Account view, but with the logger tab selected by default, and the logged data being displayed below. Initially, this displays the last interval of data from the logger channel (usually the last 24 hours of data). The display always has two components for a flow channel – the instantaneous flow in m<sup>3</sup> / hour, and the consumption data for the same period.

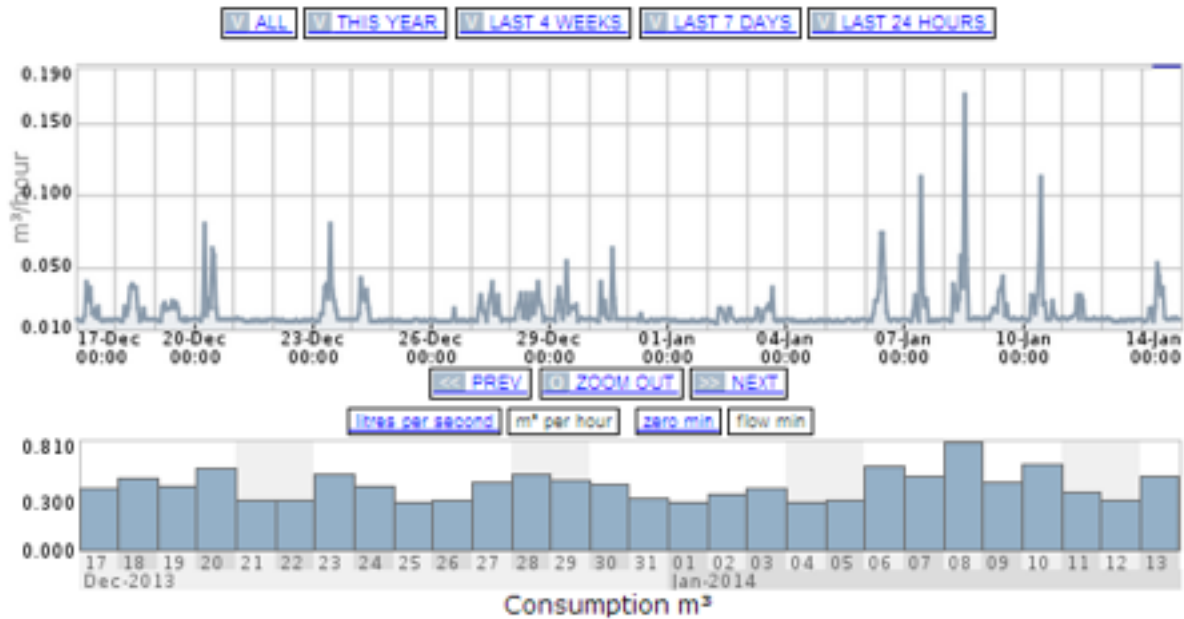


### Navigating the logged data

Surrounding these two views are some buttons that allow you to move around the data quickly.



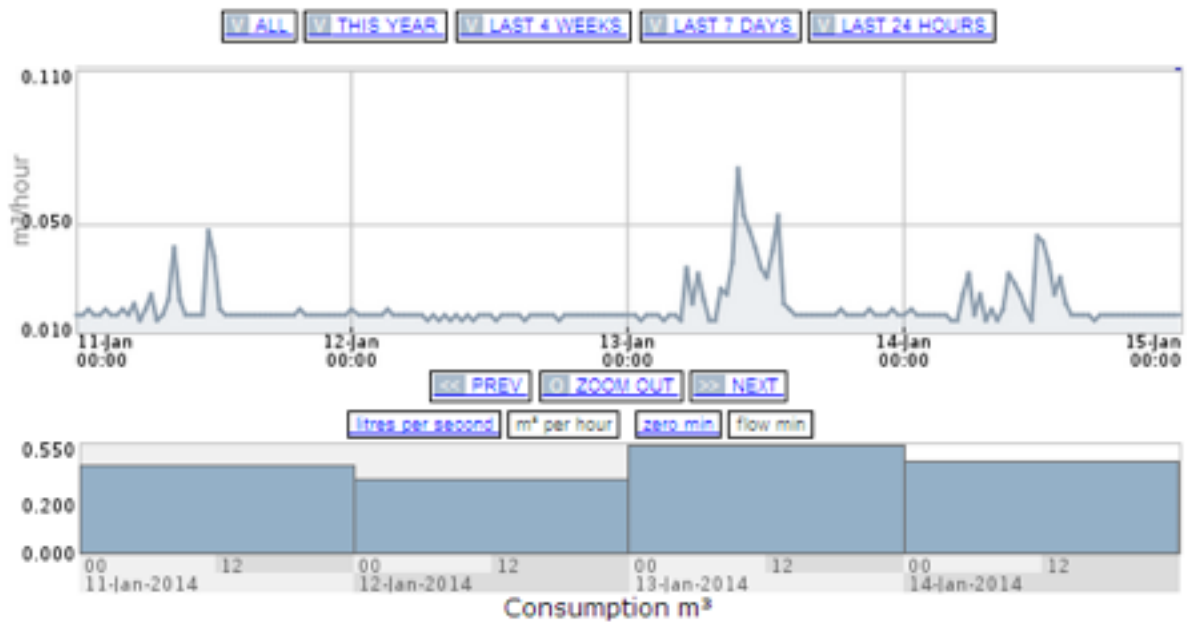
So, for example by click the LAST 4 WEEKS button, the view switches to the last four weeks of data available as shown in the screen shot below.



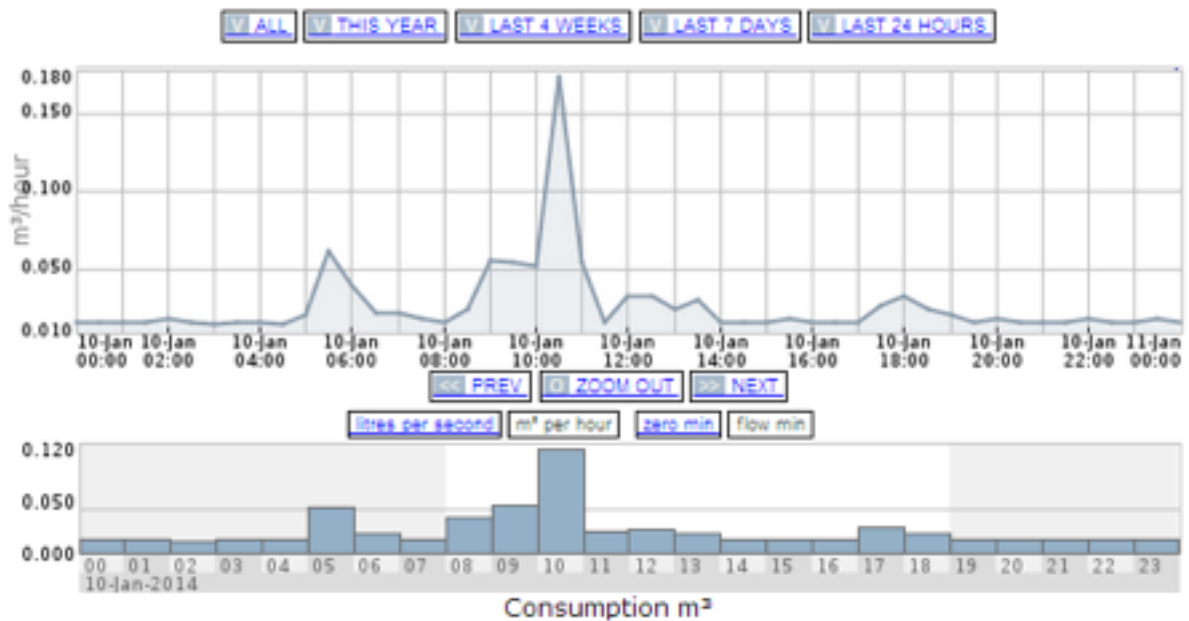
The consumption histogram now shows the consumption in the most logical time period for this view – in this case four weekly consumption blocks.

The PREV and NEXT buttons shown above are used to navigate backwards and forwards through periods of time. So for example, if a graph is showing data for the last four weeks and the PREV button is pressed, the graph will then show data for the previous four weeks (if any).

The ZOOM OUT button is used to “zoom out” from the graph and provide a wider range of data. By clicking this button the graph will display data for longer periods of time.



By clicking on either graph it is possible to zoom into a particular time period (Month, week, day). For example, by clicking on the above graph between the x-axis points of 12<sup>th</sup> January and 13<sup>th</sup> January, you will zoom into that particular day of data as shown below.





You may have noticed also that at the top of each line graph there is a small black line being drawn, and this shows you your position within all the data from this channel in exactly the same way a scroll bar does on a computer.

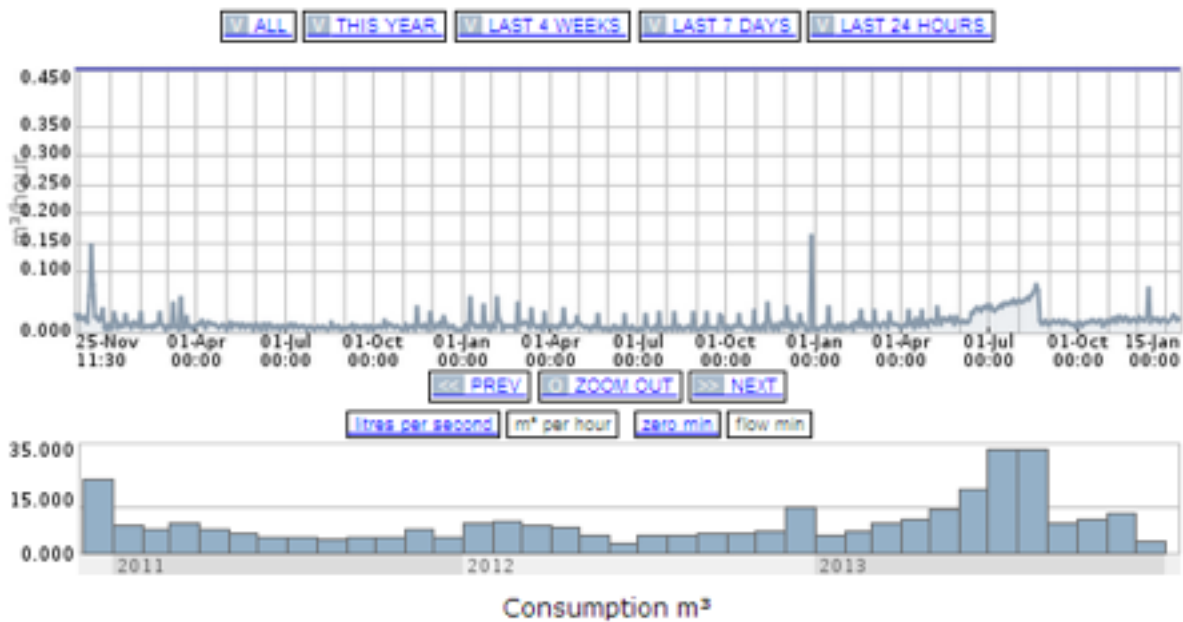
When looking at the last 24hrs of the example data, the line appears like so:



When viewing the last 4 weeks of data, the line appears like:



When it is desired to view all the available data for a given logger, the ALL button can be clicked to display all the available data for that logger as shown below.



If you look in the browser window below the graphs, you will see extra information about the displayed period regarding the exact start and end index during this period, the total consumption during this period, the average consumption per day and per hour and the consumption rate in litre per second.

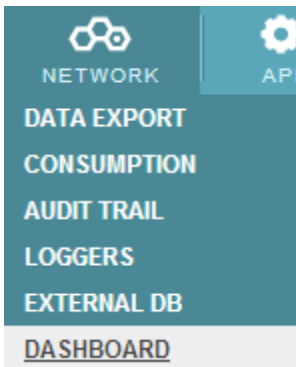
### Logger Values in displayed period

Start index	2459.001
End index	2842.938
Consumption	383.937 m <sup>3</sup>
Average per day	0.335
Average per hour	0.014
Litres per second	0.004

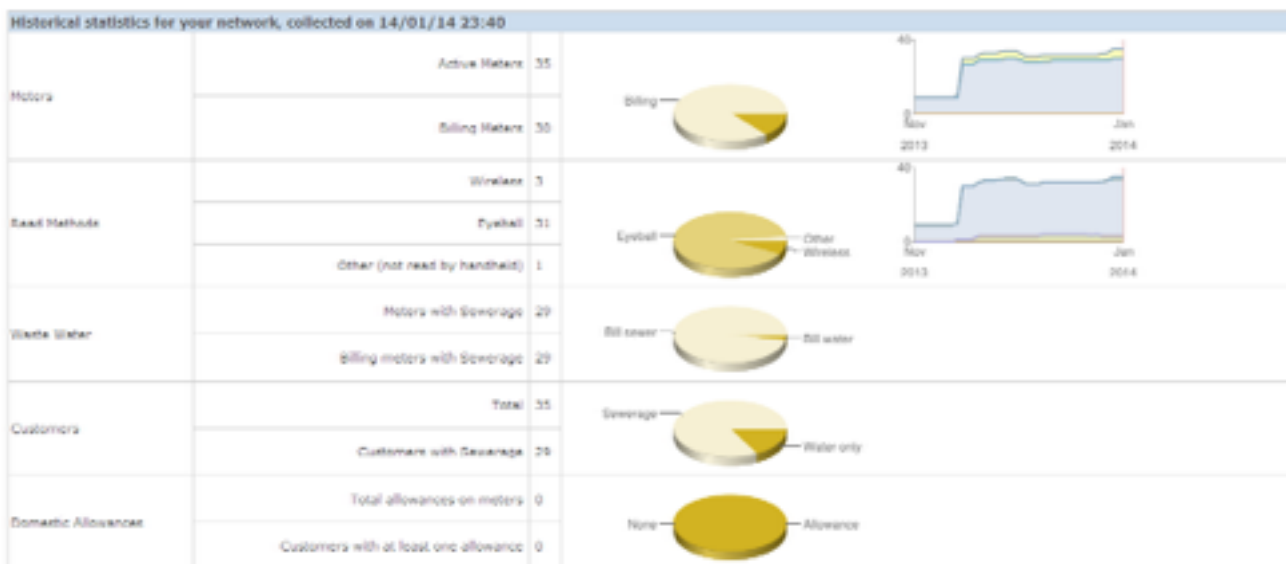
Additionally, you can export all the logged data from the displayed period by clicking the yellow button in the “Download Logger flow data for displayed period” section at the bottom of the page.



# Network – Dashboard



The dashboard shows an overview of the networks progression since it started using Temetra. The dashboard shows statistics for 10 separate categories within the network, each one with sub-categories. This information is then relayed via pie chart and/or line graph.

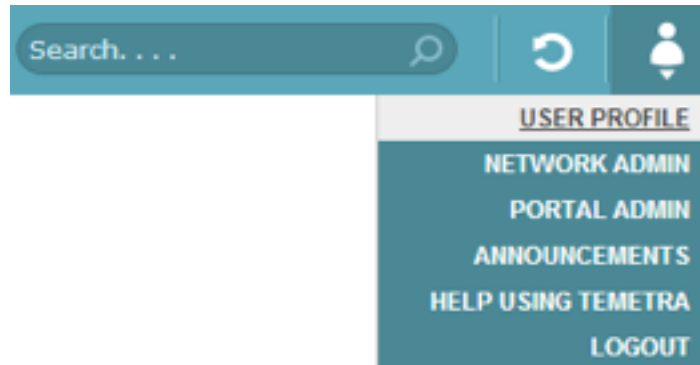


By filling in the field at the top of the page, you can find historical statistics at different stages of the networks development throughout its life with Temetra.

To set this filter, fill in the date in the field and click search.

Find historical statistics closest to

## Setup – User Profile



USER PROFILE gives the user access to their personal information saved on Temetra. Clicking the [Edit](#) button at the top of the table, will allow you to change or create your details. In the edit section you can also choose to receive email notifications from Temetra for network updates and/or uploads from a handheld. Your account password can be changed by hitting the button.

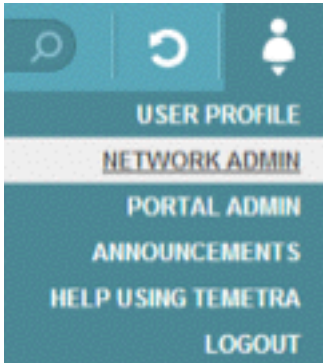
**CHANGE PASSWORD**

### Your Details [Edit](#)

User Id	eimear.sheehan
Password	****
Name	Eimear Sheehan
email	eimear.sheehan@temetra.com
Phone	
Temetra News Mailing List	NO
Email Notification of Tour Uploads	NO
Email Notification Filters	NO
Prefer logger display in LPS	NO

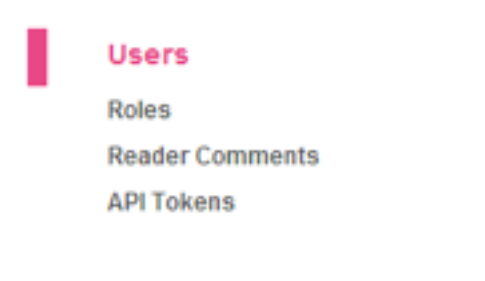
**CHANGE PASSWORD**

## SETUP – Network Admin



The NETWORK ADMIN menu is only accessible to users with network administration privileges. It shows the details of all users and permits certain editing features for your network and its personnel accounts.

Clicking on the NETWORK ADMIN menu will open a page with the following sub menu to the left hand side of the screen.



### Users

*Users* provides a list of all users on the network and their respective privileges within your Temetra network.



An icon will be marked under the allowances and privileges that the user has been awarded. If the user does not have access to these privileges the space will remain blank.

Results can be filtered by filling in the empty field over the table with any (or part of a) user name or id and clicking on filter.

Filter  Role **None**  Show Disabled

3 Users

id	Name	Hand held Enabled	Meter Only	Meter Reader	Edit Note	Edit Acc	Edit Meter	Add Reads	Edit Reads	Edit Routes	See Audit Trail	View Scheds	Srvs	Portal Admin	Net Admin	Last Visit	Role
<a href="#">emer.sheehan</a>	Emer	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	09/01/14 10:28	

Clicking on the 'Password Policy' button will open a summary of the selected users password policy, as seen below. All these details can be changed by pressing the 'Edit' button.

## Password Policy

[Edit](#)

<b>Minimum Password Length</b>	6
<b>Password must include alpha characters</b>	NO
<b>Password must include numerals</b>	NO
<b>Password must include punctuation</b>	NO
<b>Reject common weak passwords</b>	NO
<b>Maximum days between password changes</b>	1000
<b>User locked out after idle days</b>	1000
<b>User locked out failed logins</b>	10
<b>Password cannot be same as previous</b>	0
<b>Message in event of failure</b>	

Clicking on the 'New User' button will allow the admin user to create new users for their network and set their privileges.

On clicking this button, you will firstly be presented with a form as seen below. This form must be filled with the new users details. Edit the *email content* section to include the users name, user name, initial password and senders name. When the details are saved this email will be automatically sent to the new user with their login details.

Create new user

Id:	<input type="text"/>	<a href="#">i</a>
Initial Password:	<input type="text" value="fyev493"/>	<a href="#">i</a>
email:	<input type="text"/>	<a href="#">i</a>
Real Name:	<input type="text"/>	
email content:	<div style="border: 1px solid #ccc; padding: 5px;"><p>Please find your username and password for Temetra below.</p><p>Using this account you can see how we provide the infrastructure for meter data collection, delivering the data and management facilities over the internet.</p><p>This includes manual reads, walk-by wireless AMR, and dial-up GSM loggers, with all data visible anywhere with Internet access. All data, including extended AMR data is accessible through XML, with fully itemized printer-ready bills.</p><p><a href="http://www.temetra.com/">http://www.temetra.com/</a></p><p>Username: &lt;id&gt; Password: &lt;password&gt;</p><p>Regards,</p></div>	
	<input type="button" value="Save"/>	<input type="button" value="Cancel"/>

*This is the first part of setting up a new user.  
Once you've completed this form correctly, an email will be sent to the user with details,  
and you will be presented with a second form to complete other details like edit privileges and network access.*

Once these details have been saved, the admin user will be presented with a second form to set the new users privileges. These can be set by simply checking or unchecking the relevant tasks. Once this second form has been completed, click 'Save' to return to the user list.

By clicking on a user id, as seen below with the blue link, the admin user can edit the users profile and change their permissions.

id	Name	Enabled	Hand held Only	Meter Reader
<a href="#">emer.sheehan</a>	Emer	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The profile can be changed by clicking the 'Edit' button. When you have made the required changes to the profile, click on the 'Save' button.

If a user requires a password reset for Temetra, this is where a person with Network Administrator rights can reset it for them. Select the user id of the person whose password you need to reset and then click on [Send a password reset email](#). This sends an email to the user requesting that they change or renew their password.

Clicking [Merge this user into another](#) joins two accounts, simply select the other account from the list and both will be merged.



## Details for user Emer

[Edit](#)

<b>Id</b>	emer.sheehan
<b>Name</b>	Emer
<b>email</b>	eimear.sheehan@temetra.com
<b>Phone</b>	
<b>Enabled</b>	YES
<b>Handheld Only</b>	NO
<b>Meter Reader</b>	YES
<b>Limited Temetra Reader Settings</b>	NO
<b>Meter Reading Team</b>	
<b>Edit Notes</b>	YES
<b>Edit Meters</b>	YES
<b>Delete Photos</b>	YES
<b>Edit Photos</b>	YES
<b>Add Reads</b>	YES
<b>Edit Reads</b>	YES
<b>Delete Reads</b>	YES
<b>Edit Routes</b>	YES
<b>See Audit Trail</b>	YES
<b>Billing</b>	YES
<b>Surveys</b>	YES
<b>Network Admin</b>	YES
<b>Portal Admin</b>	YES
<b>View Scheduled Routes</b>	YES
<b>Edit Scheduled Routes</b>	YES
<b>Temetra News Mailing List</b>	YES
<b>Email Notification of Tour Uploads</b>	YES
<b>Email Notification Filters</b>	NO
<b>Tags</b>	
<b>Reader Zone Locations</b>	

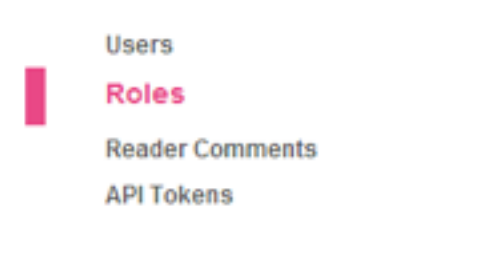
[Send a password reset email](#)

*An email will be sent to eimear.sheehan@temetra.com that contains a link to Temetra. Upon clicking this link, they will be brought directly to a page on Temetra to edit their password. As a security measure, this email link will work just once, and is valid only for the next 48 hours.*

[Merge this user into another](#)

*After this, click on the user you want to merge into, and you'll be given the option to merge*

## Roles

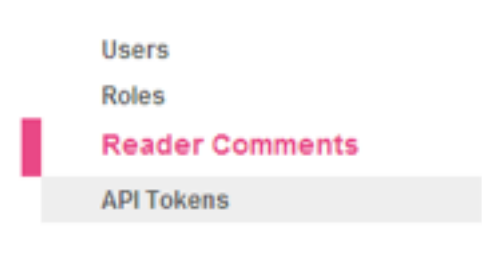


Roles can be created to suit the needs of your company. Example: Meter Reader, Manager, Team Lead, Network Administer etc.. Privileges can then be granted as per necessity of the role. To create a new role, click on 'New Role'.

6 Roles New Role ?

Name	Enabled	Hand held Only	Meter Reader	Edit Note	Edit Acc	Edit Meter	Add Reads	Edit Reads	Delete Reads	Edit Routes	See Audit Trail	View Scheds	Edit Scheds	Srvys	Portal Admin	Net Admin	Last Visit
<a href="#">meter reader</a>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>														
<a href="#">team leader</a>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>								<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
<a href="#">planner</a>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				

## Reader Comments



Reader Comments shows the customised comments that are displayed on Temetra Reader for this network. If the user has sufficient permissions they may edit/delete current comments or add new ones.

## Pre-set comments to display on the handheld for Cahir (Demo network)

[ADD COMMENT](#)

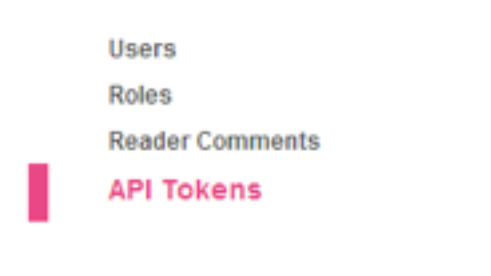
Sequence	Comment	Type
----------	---------	------

## Pre-set comments to display on the handheld for everyone

[ADD COMMENT](#)

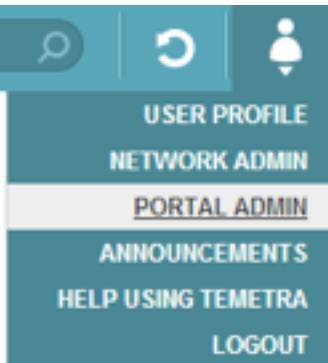
Sequence	Comment	Type	
1	Previously overestimated	Standard	<a href="#">Edit</a> <input type="checkbox"/>
50	Checked OK	Standard	<a href="#">Edit</a> <input type="checkbox"/>
51	Leak before meter	Standard	<a href="#">Edit</a> <input type="checkbox"/>
52	Leak after meter	Standard	<a href="#">Edit</a> <input type="checkbox"/>
53	Damaged	Standard	<a href="#">Edit</a> <input type="checkbox"/>

## API Tokens



API Tokens allow communication between specific parts of Temetra and customers software, such as Agresso. Entering this menu gives a summary table with the token, its permissions, ref, the network and an events summary.

## Setup – Portal Admin



PORTAL ADMIN shows a list of users on the network who have an account with access to Meter.ie. Meter.ie is the customer access site for Local Authorities, Group Water Schemes and other suppliers who use the Temetra meter management service.

Results can be searched and filtered by filling in the boxes at the top of the Portal Users table and clicking update.

The screenshot shows the meter.ie logo at the top. Below it is a search filter section with a text input field labeled "Filter", a dropdown menu set to "All emails", and an "Update" button. The main content area is titled "Portal Users, 10 in total" and includes a yellow "NEW SHIPPER ADMIN" button. Below this is a table with the following data:

User	Type	Time	Shipper Admin For
<a href="#">ciaran.</a> <a href="#">@esb.ie</a>	<span style="color: green;">●</span> Attempted login failed	16/01/13 14:08	

Results can be downloaded at the bottom of the page.

A button labeled "Download Portal Users" with a question mark icon and a download icon to its right.

Clicking on the user link highlighted in [blue](#) will display a summary of the users portal account details for meter.ie, as seen below.

Access to meter.ie for ciara @esb.ie

---

Account	<a href="#">ESB</a>
email	ciara @esb.ie
Password	<input type="text" value="Set New Password"/>
Access to ESB meters?	YES <input type="button" value="DISABLE"/>
User sent access details?	YES
User has used meter.ie?	YES
What this email user sees on meter.ie	1 meter in this network and 37 in other networks
See what this user sees in meter.ie	<input type="button" value="VIEW IN meter.ie"/>

---

Clicking on the account name will bring you to the user's Temetra account. Also in this menu, there is a history of the user's access.

## Setting up a customer with portal access:

To set up a user with access to the portal (meter.ie), you go to the account details and add their e-mail address and tick the box entitled 'Allow e-mail access via meter.ie':

Once you have done this, you will see the e-mail address in the main meter view.


There will be a little grey icon beside the e-mail address :


Customer   

Account Ref	OFFIC3295885-10002
Name	Mr. A
Address	Unknown
email	 eimear.sheehan@temetra.ie

If you click on this grey icon it will bring you into the portal account details where you can send the access details by clicking on the 'send details' button beside the question 'User sent access detail?'

When the user has their details and has logged into meter.ie the icon beside their e-mail in the customer view will change colour:

Customer   

Account Ref	OFFIC3295885-10002
Name	Mr. A
Address	Unknown
email	 eimear.sheehan@temetra.ie

# Customer Portal: Meter.ie

Temetra has a built in customer portal. This is located at <https://meter.ie> and is completely internet based. The customer can view only their own data, but can view multiple meters if they are attached to the account.

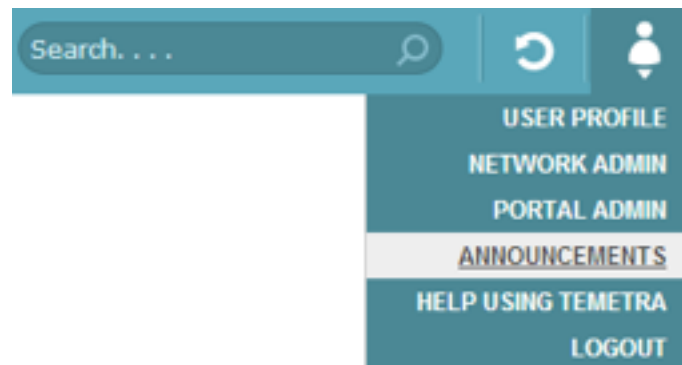
The screenshot shows the meter.ie website interface. At the top left is a logo consisting of a grey circle with a white needle pointing to the right, followed by the text "meter.ie" in a bold red font and the tagline "see your consumption" in a smaller grey font. Below the logo is a dark grey navigation bar with a red underline, containing the links "Home", "Login", "About", and "Contact". The "Home" link is highlighted with a red background. The main content area is split into two columns. The left column is titled "More" and lists four categories: "Gas Readings" (Understand your gas meter readings), "Water Readings" (Understand your water meter readings), "Water Bills" (Your water bill explained), and "Compare" (Your consumption over time). The right column is titled "Welcome to meter.ie" and contains a welcome message: "We help you visualize the information from your meter readings and bills. You're probably here because you received a link to the website on your water, gas or heat metering bill. It's a short step to seeing detailed information from your meter - we just need to make sure that you're authorized to see it." Below this is a prompt: "Enter your email and previously saved password now to access your meter data." This is followed by two input fields: "Email" and "Password". A "Sign In" button is positioned to the right of the password field. At the bottom of the right column, there are two lines of small text: "You meter operator or Local Authority will need to authorize your password for use with meter.ie See details on your recent bill for more details" and "Already set up on meter.ie but can't remember your password?". The footer of the page is a dark grey bar with "Copyright © 2014 Temetra Ltd." on the left and the Temetra logo on the right.

Data is displayed visually using graphs. Customers can view the consumption and there is also the facility to download the consumption data for the meter.

The screenshot displays the 'meter.ie' web application interface. At the top, there is a navigation bar with 'My Meters' and 'My Profile' links. The main content area is titled 'Meter Details METER123' and includes account information such as 'Account Ref: Demo1234', 'Name: Clonmel Factory', and 'Meter Serial: METER123'. Below this, there are four summary cards showing consumption values: '45,215 m³ (ALL)', '4,816 m³ (LAST 4 WEEKS)', '1,012 m³ (LAST 7 DAYS)', and '134 m³ (LAST 24 HOURS)'. To the right, a 'Tariff Details' section indicates 'No Billing Info Available'. A large bar chart shows consumption data for the period '23/03/11 00:00 To 24/03/11 00:00', with a y-axis ranging from 0 to 25,000 m³. Below the chart are navigation buttons for 'PREV', 'ZOOM OUT', and 'NEXT'. A summary box on the right provides 'Meter values in displayed period': Start 69937.900 m³, End 70071.000 m³, Consumption 133.100 m³, Average per day 133.100 m³, Average per hour 5.546 m³, and Litres per second 1.511. At the bottom, there is a 'Download consumption data for displayed period' section with a 'Consumption Data CSV' link and a 'DOWNLOAD' button. The footer contains '© 2013 Temetra Ltd.' and the Temetra logo.

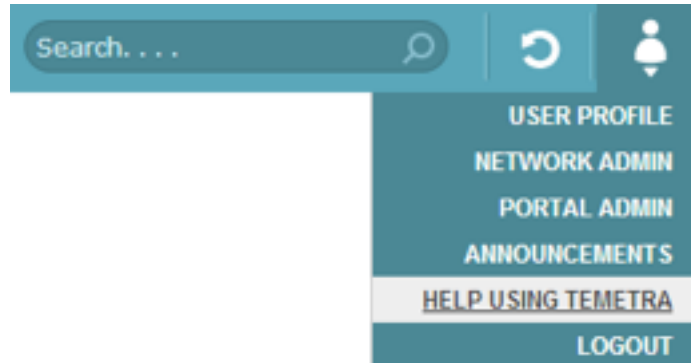


## Setup – Announcements



The announcements section shows all the recent announcements made on Temetra. These are usually an overview of the latest updates to the Temetra website and system. The announcements are all recorded here in chronological order. Older messages can be viewed by clicking the [Older messages](#) link.

## Setup – Help Using Temetra



**HELP USING TEMETRA** provides you with a support page. There is a link to user manuals and also frequently asked questions (FAQs)

We have more help available in our support section including our official help documents. [Support](#)

You can find feature specific help here

[Temetra Billing](#) , how to use the billing system

[Derived Meters](#) , how to set them up and derive meter readings

[Network Consumption Calculations](#) : How Temetra calculates

[Uploading batch files to Temetra](#) : Use a spreadsheet to update many items at once

[Cyble RF FAQ](#) : Information about the Actaris AMR transponders

[Temetra Reader FAQ](#) : Handhelds, Temetra Reader and how they interact with Temetra

[GPS formats](#) : WGS84 and variants, UTM and Irish Grid

[Reading Graphs](#) : More information on how Temetra visualizes readings

[Detailed Reading Graphs](#) : More information on the detailed readings graph

[Issue Tracker help](#) : How to use the Issue Tracker to post issues

[FAQ](#) : Frequently Asked Questions

If you need further help or clarification with any of our features, just email us at [support@temetra.com](mailto:support@temetra.com)