

# **CITY-MIND**

## **Meters Management System**

# **User Manual**

**Version 2.0**

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## Chapter1. Preface

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## Chapter2. AMI System Introduction

### 2.1 AMI System Description

ARAD Technologies AMI system (Advanced Meter Infrastructure), providing a data rich communications platform between metered endpoints and the utility. Data flow is structured around three principal areas;  
Data Source (metered endpoints that provide meter data),  
Data Acquisition (the Components responsible for collecting and communicating the data), and Data Control (the software-based processing and control of data).  
Within this simple architecture there are five key components; 3G Endpoints, Booster, Repeater, Concentrator, and **ARAD NET** – Internet Management System Software

The Radio Frequency 3G Endpoints are fully support parallel Mobile AMR (drive-by meter reading) and Fixed Network platforms.

The Radio Frequency Repeaters form a network of data collection points which transmit information acquired from the In-range 3G endpoints back to the utility's communication server.

The Network is capable of 2 way real time communication between the Repeater and the Utility.

Remote network diagnostics enabled between the utility and the Repeaters.

The communications complies with all FCC requirements and remain free of FCC license requirements.

Each unit support 360<sup>0</sup> degree data collection and designed so that a maximum One Repeater is typically required per 2 square mile in a typical deployment.

The Concentrator provides preliminary processing of raw meter data and Integrate data into the Meter Data Management (MDM) Gateway.

The Fixed Network system site requires a single Concentrator unit.

The **ARAD NET** Meter Data Management (MDM) system software provides a consumer login web site where utility employees and customers can view and Manage consumption information. It provides software and database hosting in a secure Data Center. Meter data, stored in a Microsoft SQL Server Database or equivalent, and vendor are Microsoft certified.

## 2.2 CITY-MIND – Internet Management System

The Fixed Network system provides Meter Data Management (MDM) system software and database applications as an integral solution component.

It provides software and database hosting in a secure Data Center.

Optionally, for the utility to choose to host the software and database in their facility, The Meter data stored in a Microsoft SQL Server Database or equivalent, and vendor is Microsoft certified. The MDM software featured, browser based, with an intuitive graphical user interface providing current meter data, customer and service address information to utility employees. The modular structure allows for future components not specific to meter reading but beneficial to utilities such as integral general ledger or a full financial software suite. The MDM software produce meter data in tabular, chart, report, PDF, and CSV (comma separated values) formats and provide automated daily emails or file transfers of daily meter readings, alarms and problem meters.

The MDM system provides flagging and notifications for possible leaks with individual meters and groups of meters commonly referred to as Leak Groups, DMA or District Metered Area. The system provides alerts for High/low/zero/negative consumption, Leak Detection, Magnetic Tamper, Battery Condition and Backflow.

The ARAD NET Internet Management software provides:

- Updating time/load dependent variable rates
- Multiple users-complete transparency
- Consumption data processing by time/load
- Data transfer and connection to all system information
- Data and system access security
- Availability of information anytime, anywhere
- Direct Billing, with no need for intermediaries
- Fully management of System alerts, and Meters alarm.

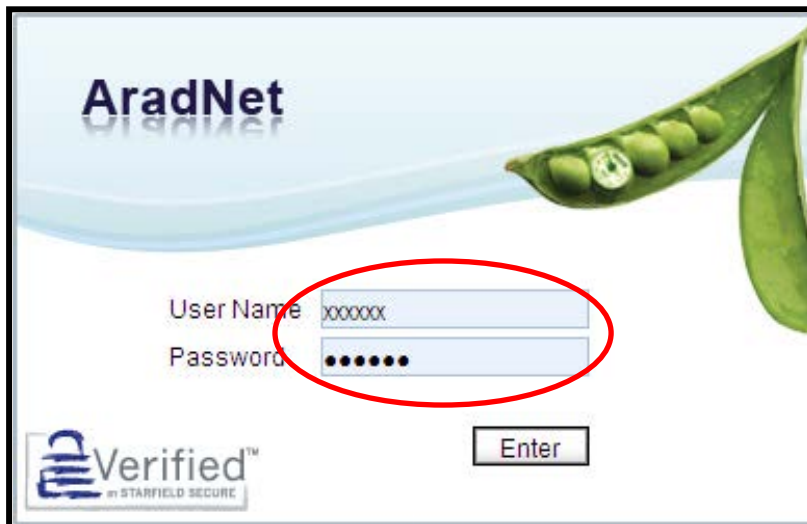
## Chapter3. Entry to the System

### 3.1 Login to the CITY-MIND System site

Internet site address:

[www.City-Mind.com](http://www.City-Mind.com)

Type in the User and Password into the following screen  
Click the 'Enter' Button to login to the system.



The image shows a login screen for 'AradNet'. The title 'AradNet' is at the top left. To the right is a graphic of a green pea pod with several peas inside. Below the title, there are two input fields: 'User Name' with the text 'xxxxxxx' and 'Password' with masked characters '••••••'. A red oval highlights both input fields. At the bottom left is a logo for 'Verified™ BY STARFIELD SECURE'. At the bottom right is a button labeled 'Enter'.

Picture 1

## 3.2 Manager view screen

The 'Manager View' screen is the system main menu and contains the system management functions. Its 'GUI' based menu. The optional functions are limited according to the user authorization rolls.

The main menu presents the systems live alerts to be taken care, consumption and DMA (District Meters Area) loss information.

Direct link to handle the critical alerts is Online, Click the Meter ID to get into the meter card to manage the Meter issues.

### The system Login rolls are:

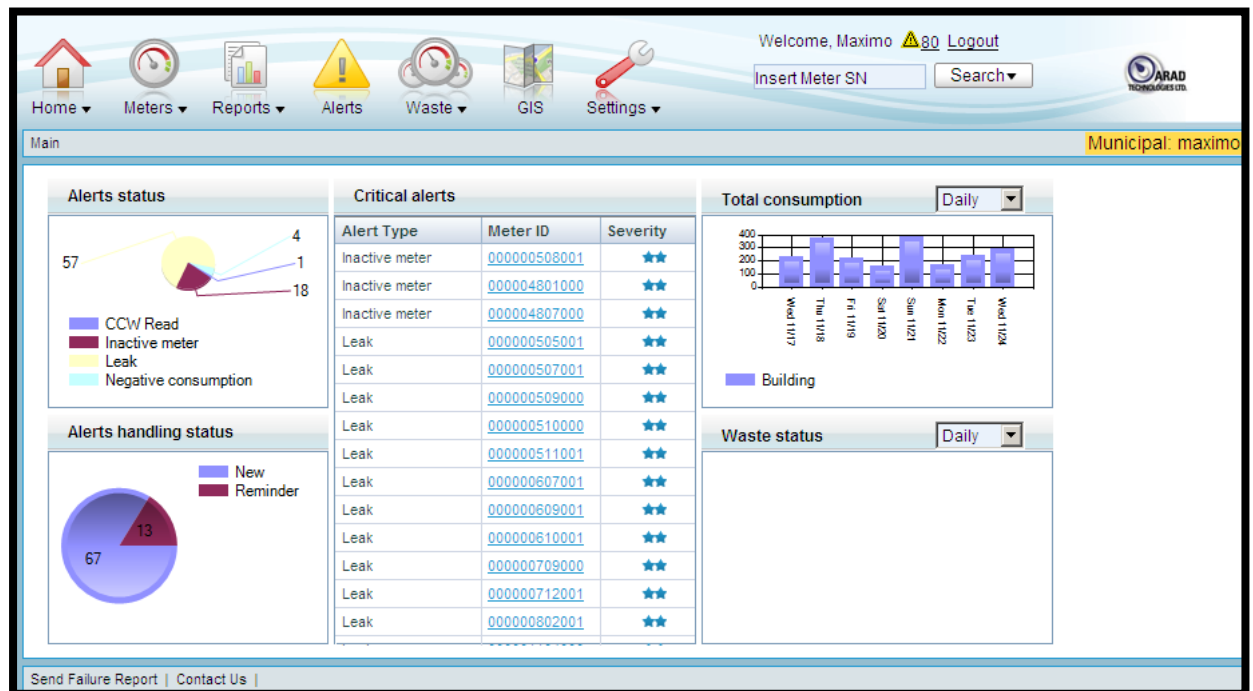
**Technicians:** All the system management functions available,  
Users management Rolls not applicable

**Administrators:** All the system management functions available,  
Users management Rolls applicable

**Managers:**

**Supper Users:**

**Customer Service:** User rolls not applicable, Setting and technician  
Menus are limited



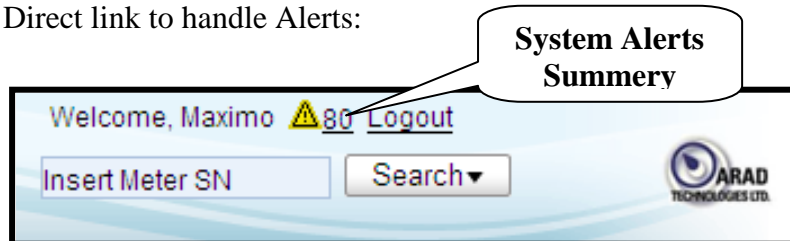
Picture 2



### 3.2 Main Menu short cuts

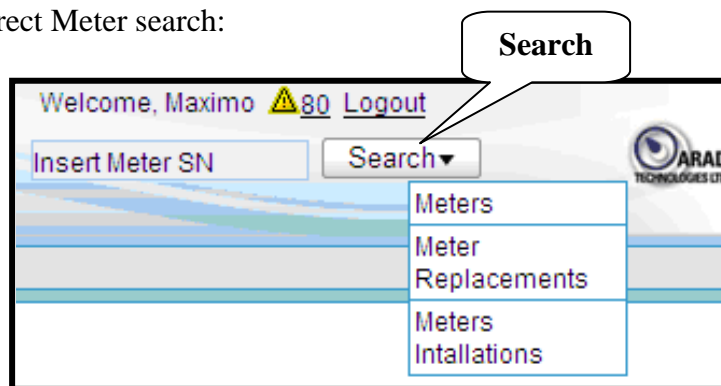
The main menu applies direct link to handle the Alerts, Meter search, Log out etc. Those constant functions eliminate the process of going through the Menu functions to view or update data.

Direct link to handle Alerts:



Picture 3

Direct Meter search:



Picture 4

Click the selected meter search option and type in the Meter identification string or part of it to get a group of meters with the same partial IDs.

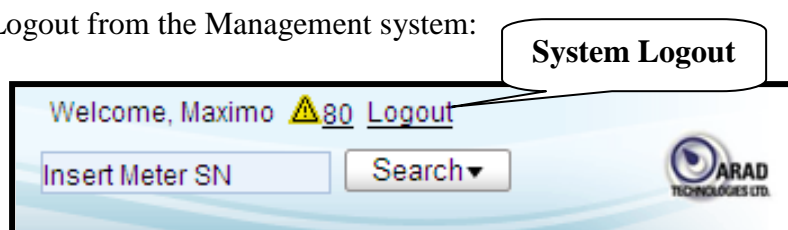
Search Options:

**Meters** selection will view the Meters menu screen, the other Menu access Is via Meters (GUI) > Meters

**Meters Replacement** will view the Meters Replacement screen and details The Menu access is via Reports (GUI) > Operation > Meter Replacement

**Meters Installation** will view the Meters Installation screen and details The Menu access is via Reports (GUI) > Operation > Meter Installation

Logout from the Management system:



Picture 5

Click the Logout to exit from the system and return to the Login menu  
If no changes have been taken for more then one hour the system will log off automatically.

## Chapter4. System Rolls

The CITY-MIND system performs user login roll module, which applies system Management tools feasibility according to the user Roll authorized by the system administrator.

The system administrator authorizes the Roll Access for users as: 'Supper Users' or 'Customer Service' with the same or different levels of Roll (See ).

## Chapter5. System Basic operations

Attached below the CITY-MIND system basic operations Applicable in most of the management menus:

### 5.1 Links

Underlined number or name highlighted as a system hyperlink to a detailed Meter data or report. Attached a sample below as 'Meter ID'

Click 'Meter ID' Link to view the Meter readings, Consumer, tabular and graphic Dashboard, Click the right mouse button to view the Meter menu selection options:

Meter Card		Meter ID	Meter S/N	Property Address	Consumer Name	Zone	Last Read Time	R
On-Line read	<input type="checkbox"/>	All	All	All	All	All	All	
Detailed Consumption	<input type="checkbox"/>	<u>000001410001</u>	3080122	Hill 22 κ	Lincoln Elizabeth	0	28/11/2010	6
Readings Report	<input type="checkbox"/>	<u>000004806000</u>			Josephs Karin	0	28/11/2010	28
Meter Replacements	<input type="checkbox"/>	<u>00000481200</u>			uller Rita	0	31/10/2010	34
Meter Details	<input type="checkbox"/>	<u>000004903002</u>	3943126	Fences 4	Pontes Maria	0	28/11/2010	54
Daily Consumption	<input type="checkbox"/>							

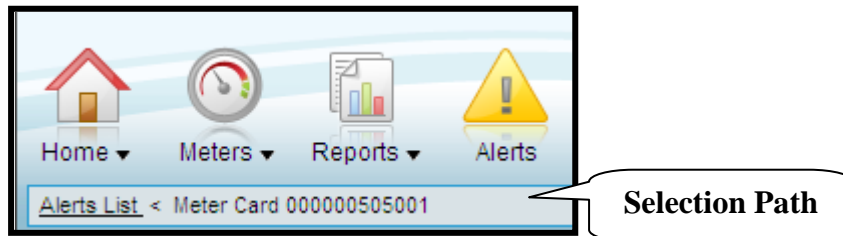
Meters For Building

Total Rows 4 Page: 1 (Of 1)

Picture 6

## 5.2 Path indication

The Selection Path indicates the history of the selected route with return Option via the Linked pre selected objects. It is indicated in the upper part of the Menu as in the Sample below, Keying the 'Alert List' will return to the Alerts Main Menu



Picture 7

## 5.3 Additional information

Quick view of additional information, Click the + for more details

	Meter ID	Meter S/N	Property Address	Consumer Name	Zone	Last Read Time	Re
<input type="checkbox"/>	All	All	All	All	All	All	
<input type="checkbox"/>	<a href="#">000000109000</a>	3926387	Hill 29	Labrune Janine	0	28/11/2010	
Diameter:2" Meter Category:3 Home Phone No.: Mobile Phone: Active: Unit Version:A6.22 Coordinate E: C							
Installation date:29/11/2009							
<input type="checkbox"/>	<a href="#">000000505001</a>	3905283	Hill 2	Anders Maria	0	28/11/2010	
<input type="checkbox"/>	<a href="#">000000506000</a>	3066466	Hill 4	Tonini Daniel	0	28/11/2010	
<input type="checkbox"/>	<a href="#">000000507001</a>	3926878	Hill 3	Wang Yang	0	28/11/2010	
Total Rows 120 Page: 1 (Of 2)							

Picture 8

## 5.4 Sorting of List

The system management data can be sorted online by clicking each header Separately. The table will be sorted according to the selected column. click the arrow to sort it as ascending or descending, Attached below sample of sorting by 'Consumer Name'

		Meter ID	Meter S/N	Property Address	Consumer Name ▲	Zone	Last Read Time	Re
	<input type="checkbox"/>	All	All	All	All	All	All	
+	<input type="checkbox"/>	<a href="#">000001303001</a>	3923046	Hill 56	Accorti Paolo	0	14/11/2010	
+	<input type="checkbox"/>	<a href="#">000004303000</a>	338540	Fences 28	Afonso Pedro	0	31/08/2010	
+	<input type="checkbox"/>	<a href="#">000004804001</a>	3942168	Fences 19	Afonso Pedro	0	14/11/2010	
+	<input type="checkbox"/>	<a href="#">000000505001</a>	3905283	Hill 2	Anders Maria	0	28/11/2010	
+	<input type="checkbox"/>	<a href="#">000000607001</a>	3927861	Hill 20	Ashworth Victoria	0	28/11/2010	
+	<input type="checkbox"/>	<a href="#">000000611001</a>	3926391	Hill 22	Ashworth Victoria	0	08/05/2010	
Total Rows 120 1 2 Page: 1 (Of 2)								

Picture 9

## 5.5 Online data filtering

The system enables a detailed Data filtering and intersections by additional column selections. For example, Meters that received in a specified time (Last Read Time selected) or Meters that listed in the same zone (Click the Zone header).

		Meter ID	Meter S/N	Property Address	Consumer Name	Zone	Last Read Time ▼	
	<input type="checkbox"/>	All	All	All	All	All	All	
+	<input type="checkbox"/>	<a href="#">000004203001</a>	3942681	Fences 59	Franken Peter	0	28/11/2010	
+	<input type="checkbox"/>	<a href="#">000000506000</a>	3066466	Hill 4	Tonini Daniel	0	28/11/2010	
+	<input type="checkbox"/>	<a href="#">000000513001</a>	3900856	Hill 7	MacFeather Stearns	0	28/11/2010	
+	<input type="checkbox"/>	<a href="#">000000601001</a>	3943132	Hill 9	Smith Margaret	0	28/11/2010	
+	<input type="checkbox"/>	<a href="#">000000603001</a>	3038200	Hill 16	Chang Francisco	0	28/11/2010	
+	<input type="checkbox"/>	<a href="#">000000609001</a>	3018649	Hill 15	Smith Meander	0	28/11/2010	
Total Rows 120 1 2 Page: 1 (Of 2)								

Picture 10

## 5.6 Multiple selection

The notation box in the left side enables pre selection of group of Meters for further data manipulation or for all of it.

		Meter ID	Meter S/N	Property Address	Consumer Name	Zone	Last Read Time
	<input type="checkbox"/>	All	All	All	All	All	All
+	<input type="checkbox"/>	<a href="#">000004203001</a>	3942681	Fences 59	Franken Peter	0	28/11/2010
+	<input type="checkbox"/>	<a href="#">000000506000</a>	3066466	Hill 4	Tonini Daniel	0	28/11/2010
+	<input type="checkbox"/>	<a href="#">000000010001</a>	3043132	Hill 5	MacFeather Stearns	0	28/11/2010
+	<input type="checkbox"/>	<a href="#">000000601001</a>	3043132	Hill 5	Smith Margaret	0	28/11/2010
+	<input type="checkbox"/>	<a href="#">000000603001</a>	3038200	Hill 16	Chang Francisco	0	28/11/2010
+	<input type="checkbox"/>	<a href="#">000000609001</a>	3018649	Hill 15	Smith Meander	0	28/11/2010

**Notation Box**

Total Rows 120 1 2 Page: 1 (Of 2)

Picture 11

## 5.7 Printing data

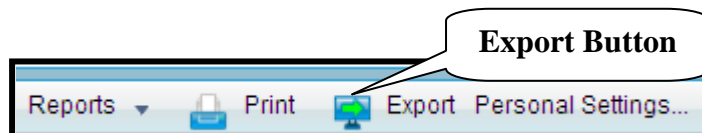
The print option is available from all screens.  
Selecting the Print, open the printing setting and enables to select the printer Configuration and print out the data



Picture 12

## 5.8 Export data

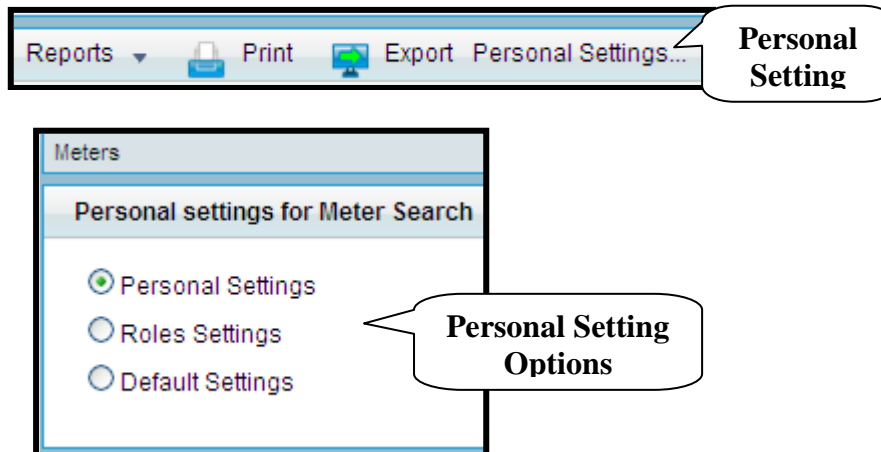
The Export option is available from all screens.  
Selecting the Export, open the Export setting and enables to save the Pre defined data in CSV format for further data manipulation.



Picture 13

## 5.9 System menus customizations

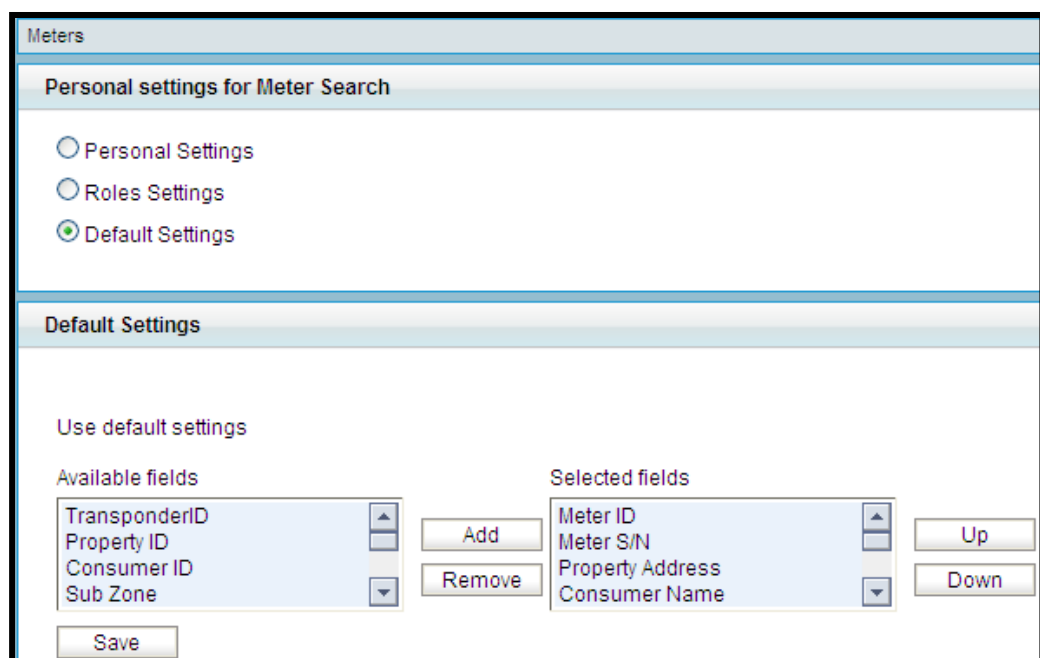
The 'Personal Setting' option is available from all screens.  
Reports customization is available via the 'Personal setting' Button.  
Click the 'Personal Setting' Button and get the Setting options Menu.



Picture 14

- 'Personal Setting' is usefully for specific User
- 'Roles Setting' is usefully for the same group of Roll users
- 'Default Setting' purpose, uses as a default setting for all users

Selecting the Personal setting option will open a Dialog box to customize the selected setting. Each option has its own different parameters, as for Example 'Default Setting' (Picture 15)



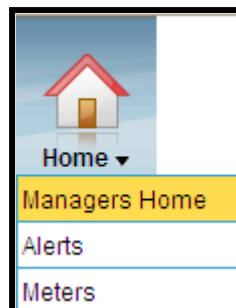
Picture 15

## Chapter6. Home Menu

The Home Menu enables direct access to the common and the most usefully management operations.

### 6.1 Managers Home screen

Select the 'Home' > 'Manager Screen' – The Managers screen shows the Main management menus and the existing system alerts  
(See Picture 2 for details)



Picture 16

### 6.2 Alerts screen

Select the Home > Alerts – The Alerts screen details the existing Meter status and system Alerts to take care of.  
Direct access to the Alerts screens is optional via the Link as marked below  
(In the upper part of the Main menu)

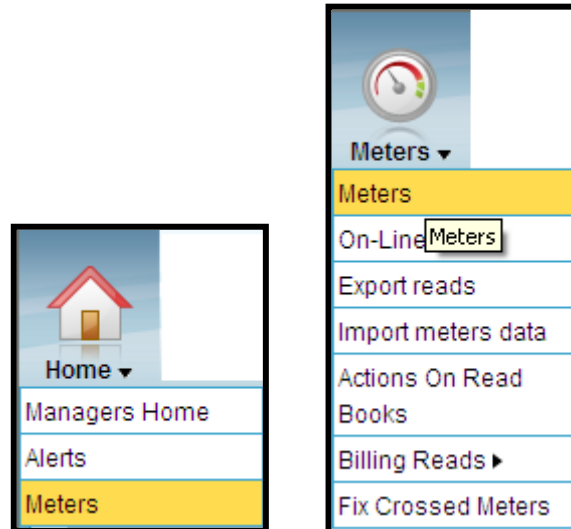


Picture 17

### 6.3 Meters screen

Select the Home > Meters, Or from Meters > Meters.

The Meters screen options applies the meters data management parameters.



Picture 18

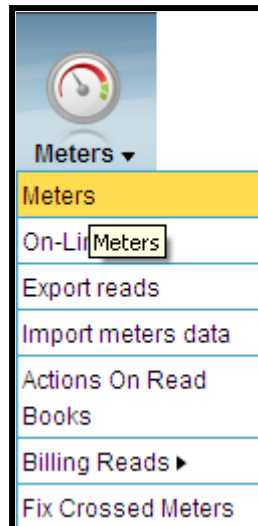


## Chapter7. Meters menu

### 7.1 Meters screen

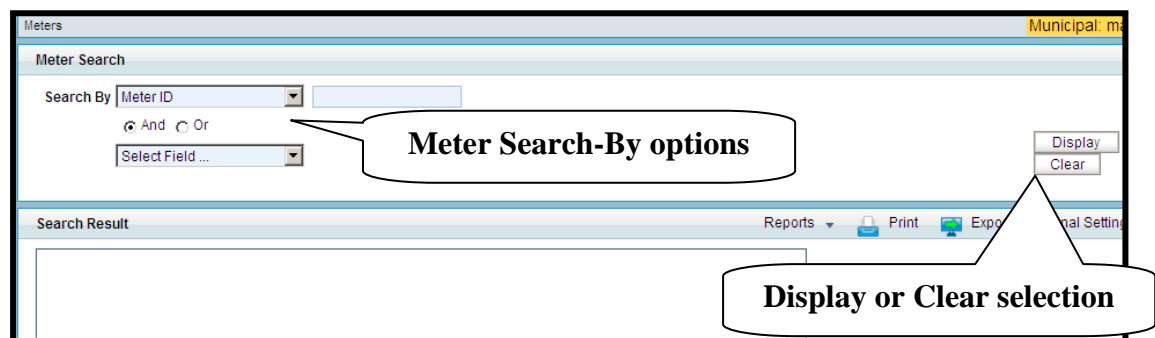
The Meters menu enables fully management of system Meters as:  
Searching module, On-Line Meter reading, Import and export of data files  
Meter Books management for meters reading files to export for billing etc.

Select the Meters > Meters to access the Meter search options



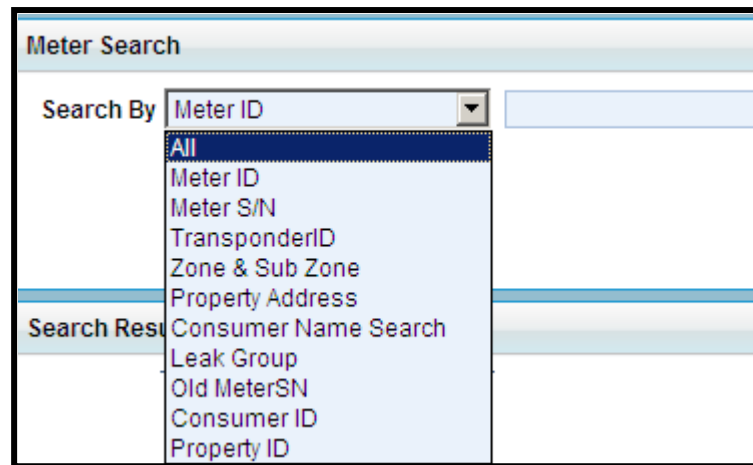
Picture 19

Select the Search By arrow to get the optional Meter search parameters



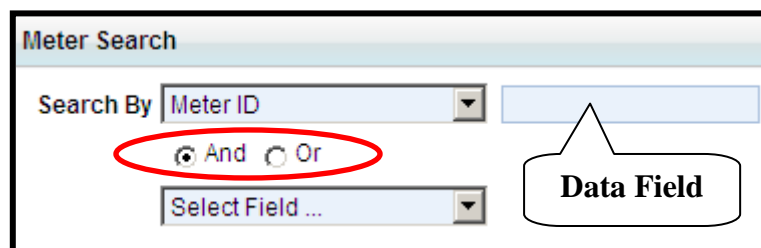
Picture 20

Select All to get the all the list, Or the other optional parameter to classify the search by ID, S/N, Address or other.



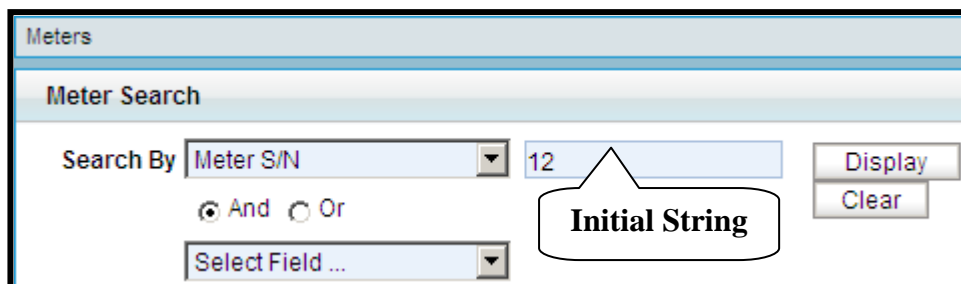
Picture 21

If selected by Meter ID or other, type-in its relevant string in the data field. To clear the data field for new search, click the Clear button (Picture 20). Click the Display (Picture 20) to view the selected item. Advanced search is applicable by more then one option. Selecting the And, enables to search by both optional Search-By combo boxes. Selecting the Or, enables to search by the first parameter, then the other one



Picture 22

To display classified group of meters with detailed data, Type in the initial string of numbers that exist in the system list database and click the Display Button. (See Picture 23, Initial S/N String)



Picture 23

The system will display the pre selected classified list as in Picture 24  
To return to a new search window, Click the marked Return arrow, located in the upper right side of the screen.

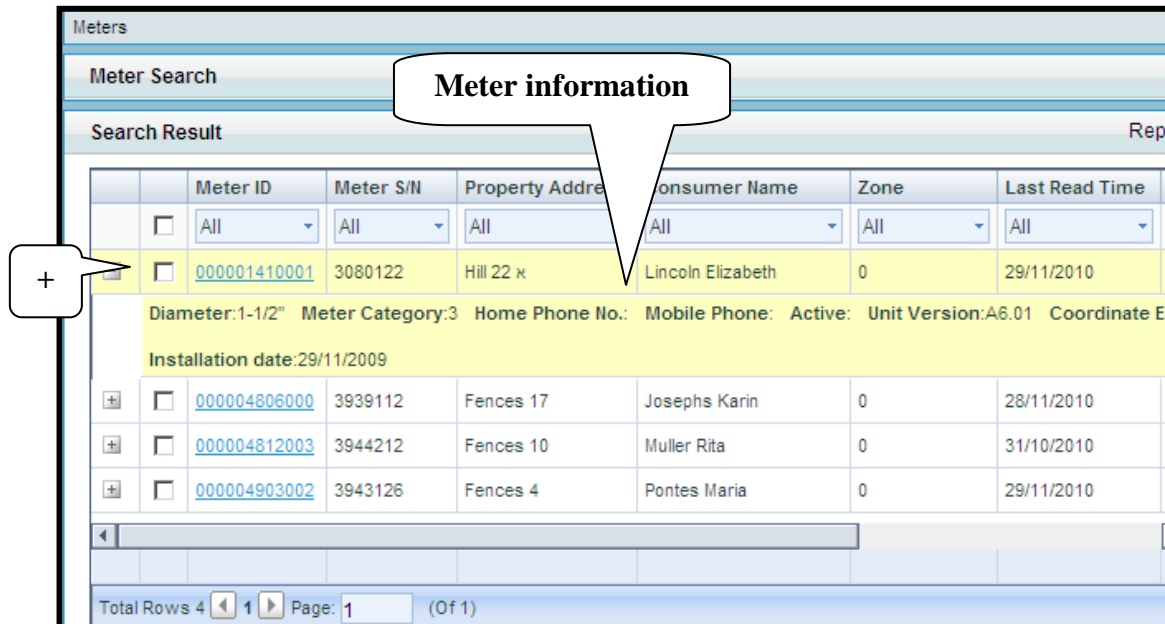


Meters							
Meter Search							Municipal: maximo
Search Result							
	Meter ID	Meter S/N	Property Address	Consumer Name	Zone	Last Read Time	Re
<input type="checkbox"/>	All	All	All	All	All	All	
<input type="checkbox"/>	000001410001	3080122	Hill 22 κ	Lincoln Elizabeth	0	29/11/2010	61
<input type="checkbox"/>	000004806000	3939112	Fences 17	Josephs Karin	0	28/11/2010	28
<input type="checkbox"/>	000004812003	3944212	Fences 10	Muller Rita	0	31/10/2010	34
<input type="checkbox"/>	000004903002	3943126	Fences 4	Pontes Maria	0	29/11/2010	54

Picture 24

## 7.2 Advanced Meter Search screen functions

Additional data on each pre selected Meter is available in the Search Results screen. Click the (+) on the left side of the Meter ID to view additional information related to the meter.



Meters							
Meter Search							Rep
Search Result							
	Meter ID	Meter S/N	Property Address	Consumer Name	Zone	Last Read Time	
<input type="checkbox"/>	All	All	All	All	All	All	
<input type="checkbox"/>	000001410001	3080122	Hill 22 κ	Lincoln Elizabeth	0	29/11/2010	
Diameter:1-1/2" Meter Category:3 Home Phone No.: Mobile Phone: Active: Unit Version:A6.01 Coordinate E Installation date:29/11/2009							
<input type="checkbox"/>	000004806000	3939112	Fences 17	Josephs Karin	0	28/11/2010	
<input type="checkbox"/>	000004812003	3944212	Fences 10	Muller Rita	0	31/10/2010	
<input type="checkbox"/>	000004903002	3943126	Fences 4	Pontes Maria	0	29/11/2010	
Total Rows 4 1 Page: 1 (Of 1)							

Picture 25

The Search result Screen is applicable for On-Line advanced Data filtering in order to analyze any Meter issue or problem

Sorting the data by selecting each of the column headers to sort the List  
For example, The list sorted by Property address (Picture 26), Click again for ascended or descended list.

Meter Search							
Search Result							
		Meter ID	Meter S/N	Property Address	Consumer Name	Zone	Last Read Time
	<input type="checkbox"/>	All	All	All	All	All	All
<input type="checkbox"/>	<input type="checkbox"/>	000004812000	0	Fences 10	Muller Rita	0	
<input type="checkbox"/>	<input type="checkbox"/>	000004812001	0	Fences 10	Muller Rita	0	22/11/2005
<input type="checkbox"/>	<input type="checkbox"/>	000004812002	3943940	Fences 10	Muller Rita	0	30/11/2010
<input type="checkbox"/>	<input type="checkbox"/>	000004812003	3944212	Fences 10	Muller Rita	0	31/10/2010
<input type="checkbox"/>	<input type="checkbox"/>	000004712000	3899902	Fences 27	Jablonski Karla	0	28/11/2010
<input type="checkbox"/>	<input type="checkbox"/>	000004312000	3899290	Fences 33	Fonseca André	0	31/10/2010
Total Rows 18 Page: 1 (Of 1)							

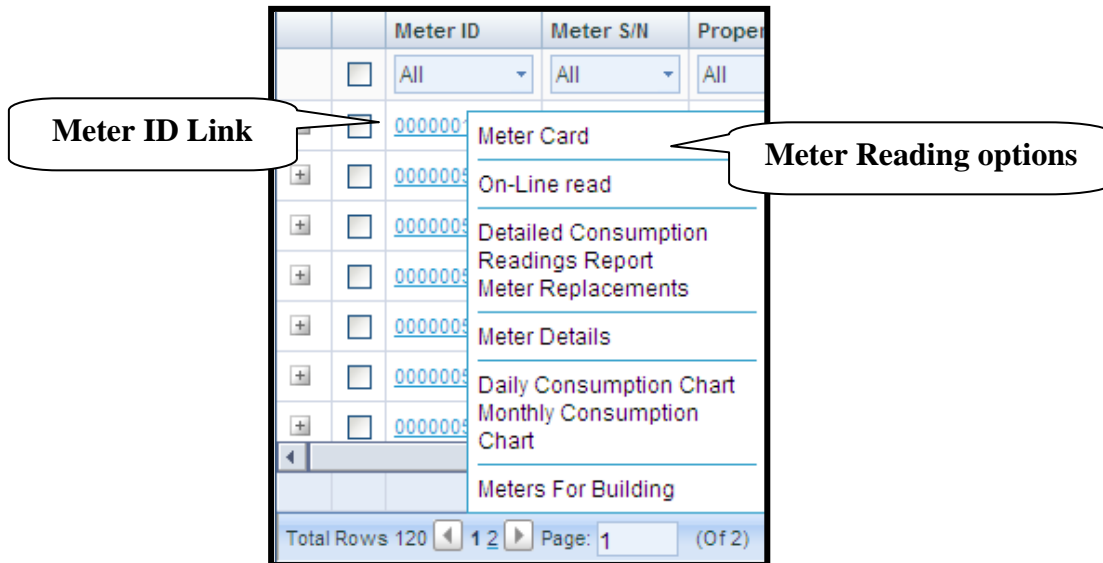
Picture 26

Additional Data filtering can be done by data list header as shown below  
To filter by meter ID, Click the Meter ID (Marked in Picture 27)

		Meter ID	Meter S/N	Property Address	Consumer Name	Zone	Last Read Time
	<input type="checkbox"/>	All	All	All	All	All	All
<input type="checkbox"/>	<input type="checkbox"/>	All	000004812000	Fences 10	Muller Rita	0	22/11/2005
<input type="checkbox"/>	<input type="checkbox"/>	00000612001	6675	Hill 27	Paolino Miguel	0	30/11/2010
<input type="checkbox"/>	<input type="checkbox"/>	000000712004			z Aria	0	30/11/2010
<input type="checkbox"/>	<input type="checkbox"/>	000001202001			Snyder Howard	0	
<input type="checkbox"/>	<input type="checkbox"/>	000001203000	5325	Hill 37	Snyder Howard	0	30/11/2010
<input type="checkbox"/>	<input type="checkbox"/>	000001203001	8022	Hill 37	Snyder Howard	0	30/11/2010
<input type="checkbox"/>	<input type="checkbox"/>	000001203002	2527	Hill 39	Simpson Patricio	0	31/10/2010
Total Rows (Of 1)							
		000001205000					
		000001206000					
		000001207001					
		000001208000					

Picture 27

To filter the specific Meter data, Click the Meter ID Link to view the Meter Card. Click the Right mouse button to view the Meter reading options, as marked in Picture 28



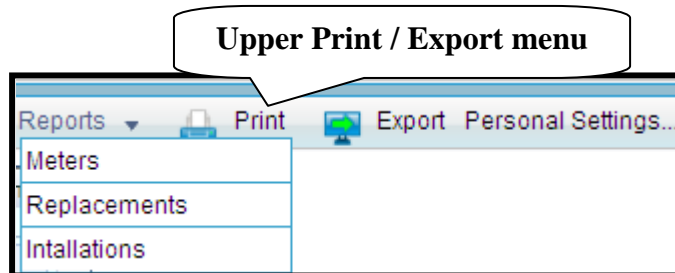
Picture 28

Sample of Ready to publish processed report sorted by Last Read time

Report: Meter Search									
Creation Time: 01/12/2010 10:41			Municipal: maximo				User Name: Maximo		
No.	Meter ID	Meter S/N	Property Address	Consumer Name	Zone	Last Read Time	Readl	Status	Remarks
1	000004202000	3944023	Fences 61	Mendel Roland	0	30/11/2010 04:03	579.0	OK	
2	000004201001	3946009	Fences 40	DeFrance Michel	0	30/11/2010 10:34	1767.3	OK	
3	000004207001	3942207	Fences 57	Roulet Annette	0	30/11/2010 10:34	293.0	OK	
4	000004206000	3935362	Fences 36	Rovelli Giovanni	0	30/11/2010 11:00	1556.0	OK	
5	000004902002	3903222	Fences 9	Devon Ann	0	30/11/2010 11:36	1507.0	OK	
6	000001312001	3905066	Hill 53	Ibsen Palle	0	30/11/2010 13:54	634.4	OK	
7	000001404001	3923292	Hill 62	Karsen Livia	0	30/11/2010 14:09	2980.6	OK	
8	000004813001	3943157	Fences 8	Ringer Anne	0	30/11/2010 14:22	2337.0	OK	
9	000004903002	3943126	Fences 4	Pontes Maria	0	30/11/2010 14:22	546.0	OK	
10	000004806000	3939112	Fences 17	Josephs Karin	0	30/11/2010 14:53	2848.0	OK	
11	000000509000	3897887	Hill 6	Schmitt Carine	0	30/11/2010 14:53	1913.8	OK	
12	000004804001	3942168	Fences 19	Afonso Pedro	0	30/11/2010 15:08	5411.0	OK	
13	000004902001	3943981	Fences 9	Devon Ann	0	30/11/2010 15:08	5942.0	OK	
14	000001310000	3921063	Hill 49	González Carlos	0	30/11/2010 15:13	1085.2	OK	
15	000001307001	3944204	Hill 48	Cramer Philip	0	30/11/2010 15:13	301.0	OK	
16	000004904001	3942615	Fences 7	Henriot Paul	0	30/11/2010 15:23	1062.0	OK	
17	000004906000	3942714	Fences 5	Messner Renate	0	30/11/2010 15:23	1376.0	OK	
18	000004907001	3942475	Fences 3	Pereira Manuel	0	30/11/2010 15:23	1042.0	OK	
19	000004908001	3943662	Fences 1	Latimer Yoshi	0	30/11/2010 15:23	538.0	OK	
20	000004812002	3943940	Fences 10	Muller Rita	0	30/11/2010 15:23	332.0	OK	
21	000004813002	3942471	Fences 8	Ringer Anne	0	30/11/2010 15:23	2015.0	OK	
22	000004915000	3942846	Fences 2	Cramer Philip	0	30/11/2010 15:31	142.3	OK	
23	000001309000	3922482	Hill 47	Cruz Aria	0	30/11/2010 18:15	566.5	OK	

Picture 29

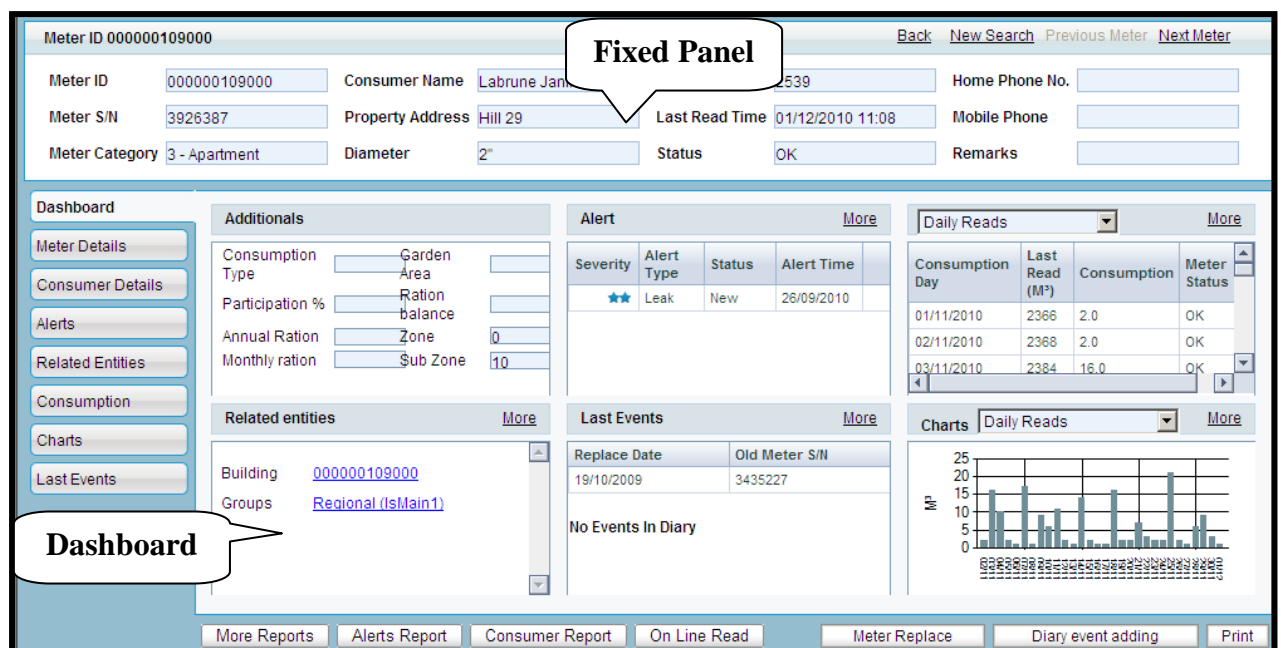
Publishing options of the processed report is applicable directly from the Search Results screen, as Printing or Exporting the file. That alternative is on-screen option to Reports module menu option Selection. Type the Print to get the Printing menu and print-out the report. The Report Menu enables to select the report type as for Meters, Meter replacements and Meter Installations.



Picture 30

### 7.3 Meter Card

The meter card presents two sections; the upper section has a fixed Display panel and the lower section (Dashboard) divided to six sectors, displaying the Meter events, data results and more detailed. The Fixed display Panel, Details the Meter and the customer information. The Dashboard applies more tabular and graphical meter function and detailed below.



Picture 31

## Dashboard Functions

The Dashboard is divided to six different display sectors.

'Additional' Sector displays additional Meter information

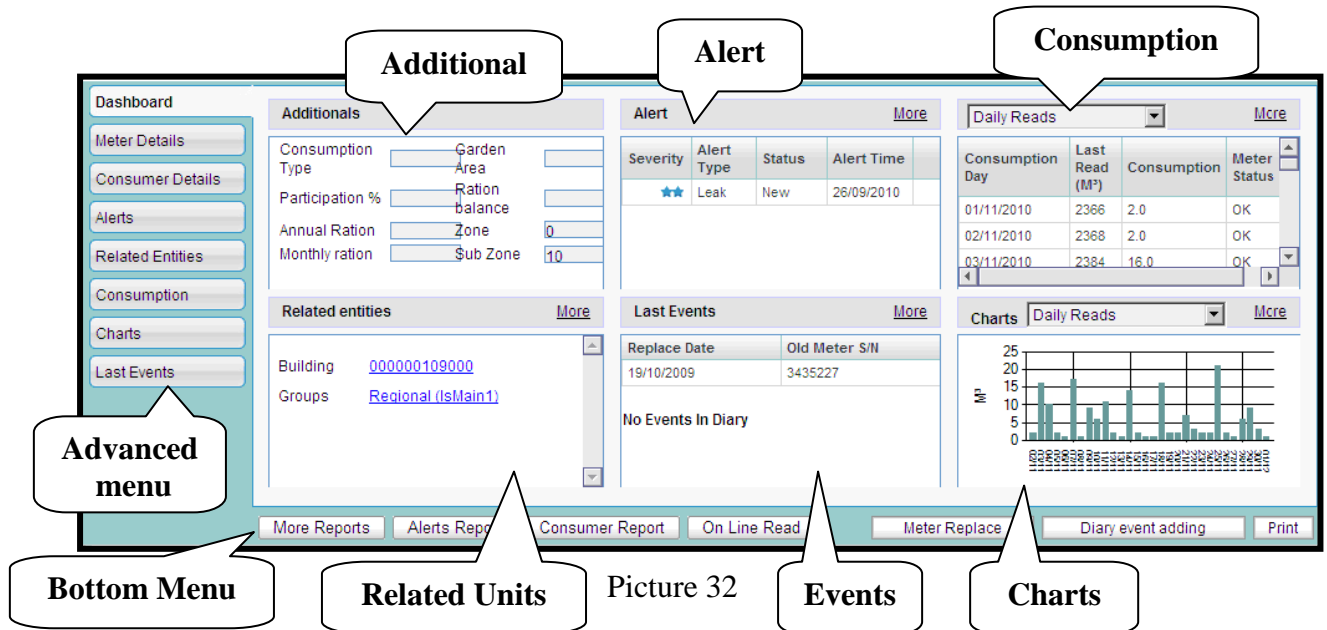
'Alerts' Sector displays the existing Meter alerts.

'Consumption' Sector displays the Meter consumption usage

'Charts' Sector displays the Meter usage in Graphs

'Events' Sector displays Meter Events (Replacement etc)

'Related entities' displays Meters in the same groups or building.



Picture 32

## Dashboard sectors - Advanced options:

The Advanced Menu (right side of the Dashboard) applies more information as:

### 'Meter Details' – More Meter information

Dashboard	Meter ID	000000109000	Edit	<input checked="" type="checkbox"/> Active
Meter Details	Meter S/N	3926387	Category	Apartment
Consumer Details	TransponderID	3926387	Diameter	2"
Alerts	Read Status	OK	Model	Multi-Jet
Related Entities	Concentrator	MishaConcServer	Zone	0
Consumption	Municipal Code	1018	Sub Zone	10
Charts	Type		Read Book	
Last Events	Installation date	29/11/2009	Routing	200318000
	Date Installed To AMR		Coordinate E	
	Unit Version	A6.22	Coordinate N	
	Remarks	Technician Remarks		

Picture 33

'Consumer Details' – Consumer and property details

Picture 34

'Alerts' – Displays the meter alerts status and handling as marked below:

**Type** – Type of alert. **Exist** - Existing alerts to handle.

**Level** – significance level of alert (1-5). **Check** – Check box for multiple Selections. **More** – Click the (+) for more details. **Status** – Handling status

**Letters** – Handling letters status. **Draft** – Alerts draft for comments

Picture 35



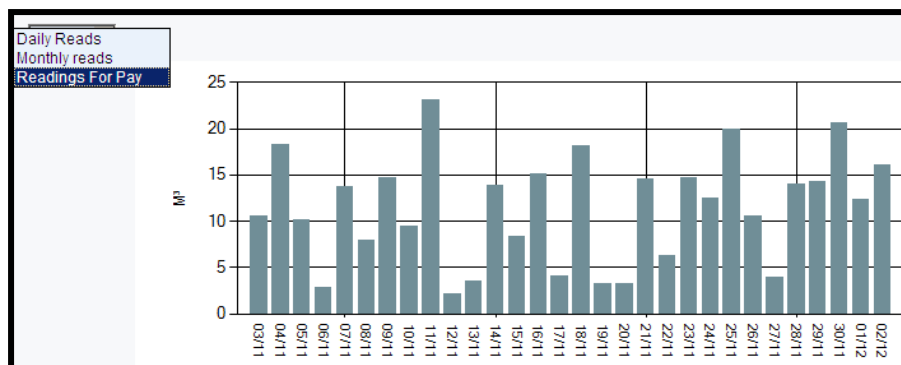
### 'Related Entities' – Displays the related installed Meters

Picture 36

### 'Consumption' and 'Graphic' – Displays the Meter usage and consumption By time range and more options, In tabular and Graphic forms.

Consumption Day	Consumption	Meter Status
03/11/2010	4712.7	OK
04/11/2010	4731	OK
05/11/2010	4741.1	Leak Alarm
06/11/2010	4744	OK
07/11/2010	4757.8	OK
08/11/2010	4765.7	OK
09/11/2010	4780.4	Leak Alarm
10/11/2010	4789.9	OK
11/11/2010	4813	Leak Alarm
12/11/2010	4815.2	OK
13/11/2010	4818.7	OK

Picture 37



Picture 38

'Last Events' – Displays Meters events, as installation, replacement or else.

Dashboard					
Meter Details					
Consumer Details					
Alerts					
Related Entities					
Consumption					
Charts					
Last Events					

Replacements					
Replace Date	New Meter S/N	Old Meter S/N	Old Meter Read	New Read	Reason
27/10/2009	3908366	3259202	39168	0	Periodical

Events			
Date	Kind	Reason	Text
No records to display.			

Picture 39

The Dashboard Buttons Menu – Direct access to the Meter reports from

The Meter card which applies more options as:

'More reports' – Opens additional Meter report options, as: Meter Readings  
Meter Replacements, Consumption for meter and consumers

'Alerts Report' – Open the Meter Alerts report

'On Line Read' – Open the window for Meter On-Line reading by Specific  
Meter ID, Meters in Group or Meter by Prefix, Click the Connect button to  
Activate the selection.

'Meter Replacement' report, Diary of Events related to the Meter or the  
Consumer and Printable report (See Picture 41)

Readings Report						
Meter Replacements						
Consumption For Meter						
Consumption For Consumers						
More Reports	Alerts Report	Consumer Report	On Line Read	Meter Replace	Diary event adding	Print

Picture 40

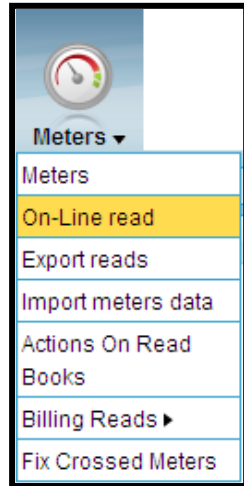
### Meter in minute details Printable Report:

User Name: Maximo Creation Time: 02/12/2010 22:22			
<b>Meter Details</b>			
Meter ID	000001109001	Active	Yes
Meter S/N	3908366	TransponderID	3908366
Last Read (M³)	5044.7	Read Date	02/12/2010 11:12
Meter Status	Leak Alarm		
Concentrator	MishaConcServer	Municipal Code	1018
Zone Name	0	Sub Zone Name	10
Read Book	-1	Routing	0
Installation date	29/11/2009 00:00	Date Installed To AMR	
Diameter	1-1/2"	Model	Multi-Jet
Type	Water	Unit Version	A6.01
Meter Category	3 - Apartment		
Remarks			
Technician Remarks			
<b>Billing Data</b>			
Consumption Type		Participation %	
Annual Ration		Monthly ration	
Ration balance		Garden Area	
<b>Property Data</b>			
Property ID	000070230000		
City	Savion	State	
Street	Hill	House No.	31
Floor	Apartment		
<b>Consumer Data</b>			
Consumer ID	000204913065	State (Consumer)	
Consumer Name	Felipe Izquierdo	Consumer City Name	Savion
Street		House No. (Consumer)	31
Consumer Floor	Consumer Apartment		
Consumer Zip	Email		
Home Phone No.	Work Phone		
Mobile Phone	Fax		

Picture 41

## 7.4 On-Line Reading of Meter

Meters Menu > On-Line read, Enables direct access to the current time Meter reading. Select the On-Line read to get the On-Line Menu



Picture 42

Attached below sample of Specific meter On-Line reading, Activated by Meter ID, Click the Connect button to activate the On-Line reading Process and Score (Picture 43)

On-line reading

☒ Specific Meter
☐ Meters In Group
☐ Meters by prefix

Meter ID 000001406001

Activation

Connect


Cancel

Results

Retrieving data... Meter ID 000001406001

Connection, please wait...

Process



Results						
Meter ID 000001406001						
Meter ID	Meter S/N	Consumer Name	Address	Read Date	Read	Status
000001406001	3924363	Saavedra Eduardo	Hill 59	03/12/2010 14:41	1228.8	Leak Alarm

Picture 43

The On-Line Reading options, enables On-Line reading of Meter groups, By group name, Or Meters assigned with the same Prefix ID, As in the samples below

The screenshot shows a web interface titled 'On-line reading'. It has three radio buttons: 'Specific Meter', 'Meters In Group' (which is selected), and 'Meters by prefix'. To the right of the 'Meters In Group' option is a dropdown menu labeled 'Group Name'. The dropdown is open, showing a list of categories: 'Building A', 'Building B', 'Garden', and 'Regional'. Below the dropdown, it says 'Items 1-4 out of 4'. At the bottom of the interface, there is a section labeled 'Results' which is currently empty.

Picture 44

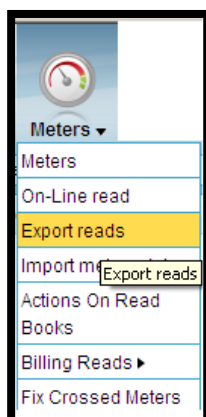
This screenshot shows the same 'On-line reading' interface. In this view, the 'Meters by prefix' radio button is selected. The 'Meter ID' field, located to the right of the radio buttons, contains the text '01004801'. The other options and the 'Results' section are not visible in this specific crop.

Picture 45

## 7.5 Export reads

The Export Reads tool enables to export and save Reading files in a Standard formats (as CSV, Text)

Select the Meters > Export reads to get the Export menu options

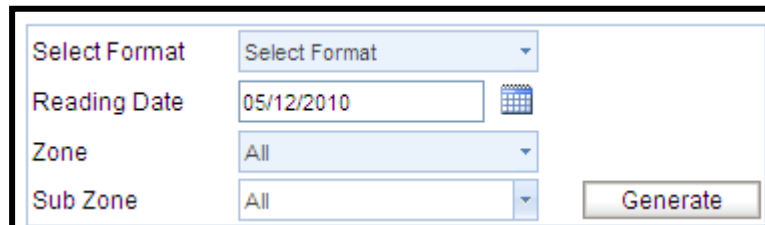


Picture 46

The Export Read menu enables to generate files by:

- Format type (CSV, Txt)
- Reading Date
- Zone and Sub Zone

Click the Generate and select the destination path to save the file

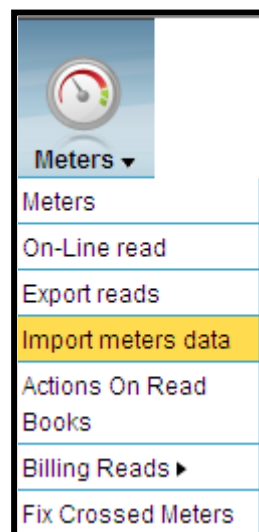


The screenshot shows a web form for generating export files. It contains four input fields: 'Select Format' (a dropdown menu), 'Reading Date' (a text box with a calendar icon), 'Zone' (a dropdown menu), and 'Sub Zone' (a dropdown menu). A 'Generate' button is located to the right of the 'Sub Zone' field.

Picture 47

## 7.6 Import meters data

The Import Meters Data tool enables to import consumers database files in standard and customized formats (as CSV, Text and existing formats from their Billing systems)

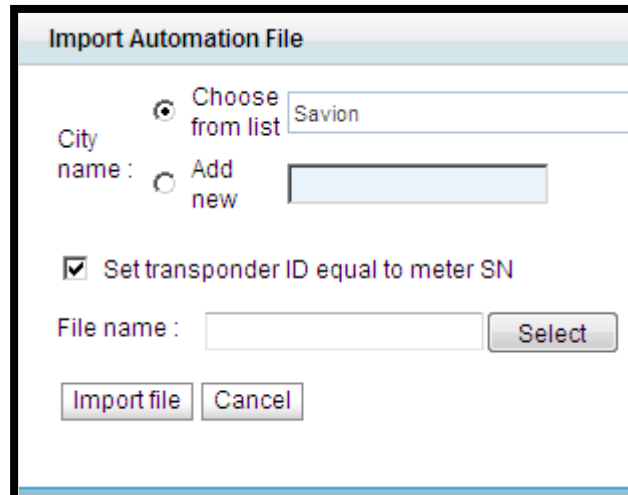


Picture 48

The Import Meters Data is generated by:

- City Name
- File name

Click the Import file button to import the selected file

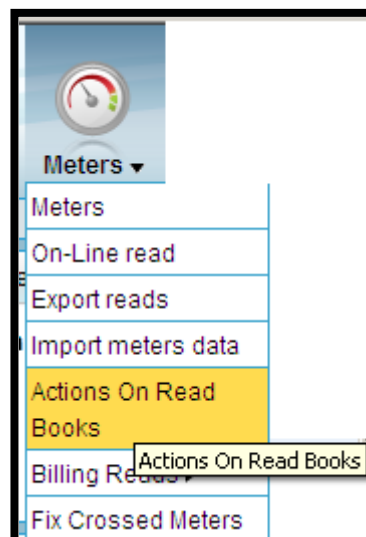


The screenshot shows a dialog box titled "Import Automation File". It has two radio buttons for "City name": "Choose from list" (selected) and "Add new". The "Choose from list" option has a dropdown menu showing "Savion". The "Add new" option has an empty text input field. There is a checked checkbox labeled "Set transponder ID equal to meter SN". Below this is a "File name" label followed by an empty text input field and a "Select" button. At the bottom are two buttons: "Import file" and "Cancel".

Picture 49

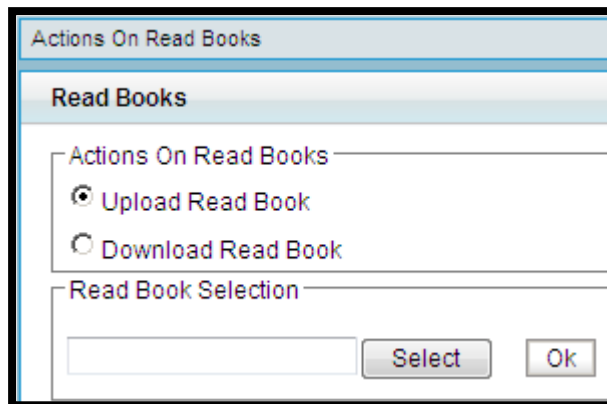
## 7.7 Reading Books interface

'Action On Read Books' interface is applicable for Hand-Held and portable meter reading books transferring. Click the 'Actions On Read Books' to get the Read Books Upload and Download options.



Picture 50

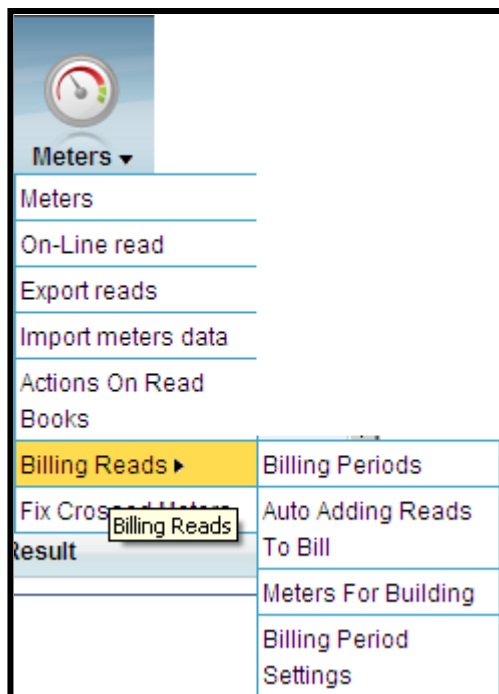
To transfer of meters data books from the portable PC (Laptop), Select the 'Upload Read Books' to transfer the data reading file from the Portable PC. Select the Download Read Books to transfer Data Books to the Portable PC.



Picture 51

## 7.8 Billing Reads Module

The Billing Reads Module purpose is to create and confirm a reading file for Billing with Meters status, Additional comments on history confirmed records, Logical exceptions. The first step is to configure the Billing period of time. Select the Meters > Billing Reads > Billing Period



Picture 52



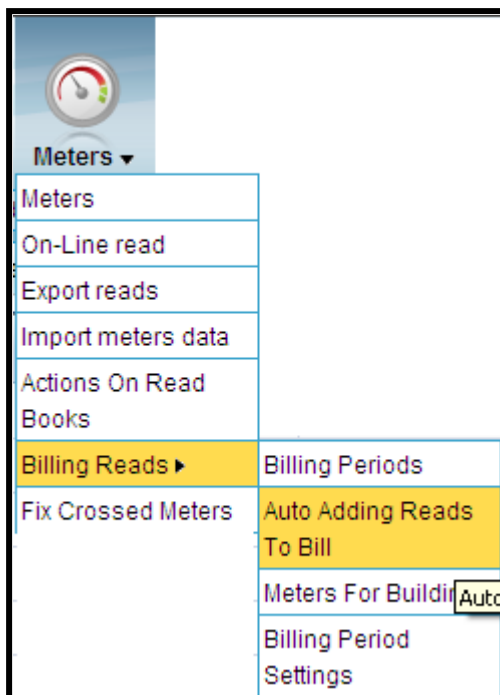
The 'Billing Period List' window is opened with the following column Headers functions:

- Period name (Linked name)
- Year
- From Month to Month
- Reading and Billing date
- Zone and subzone menu
- Period status

Billing periods list							
	Period name	Year	From month	To month	Readings date	Billing date	Zone No
<input type="checkbox"/>	All	All	All	All	All	All	All
<input type="checkbox"/>	<a href="#">1-2/2009</a>	2009	1	2			
<input type="checkbox"/>	<a href="#">7-8/2007</a>	2007	7	8			
<input type="checkbox"/>	<a href="#">3/2007</a>	2007	3	3			
<input type="checkbox"/>	<a href="#">11-12/2006</a>	2006	11	12			
<input type="checkbox"/>	<a href="#">9/2006</a>	2006	9	9			
<input type="checkbox"/>	<a href="#">5-6/2005</a>	2005	5	6			
<input type="checkbox"/>	<a href="#">7 תקופה</a>	2004	11	12			

Picture 53

Open the 'Auto Adding Reads To Bill' window to create the file

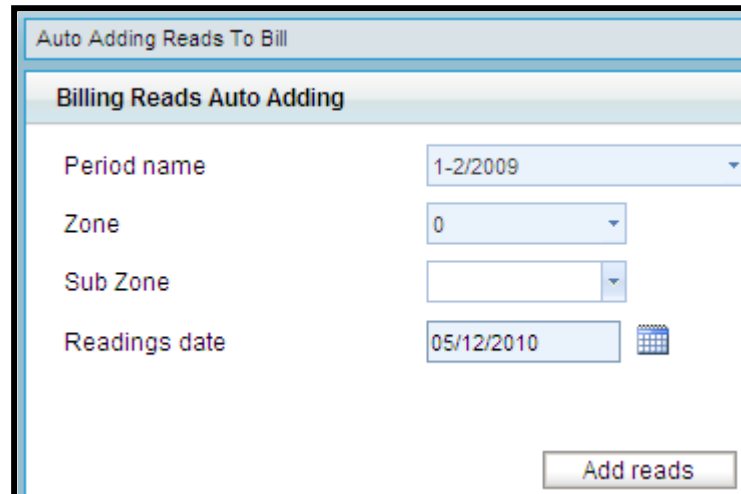


Picture 54

Select the 'Billing Reads Auto Adding' parameters to create the file as:

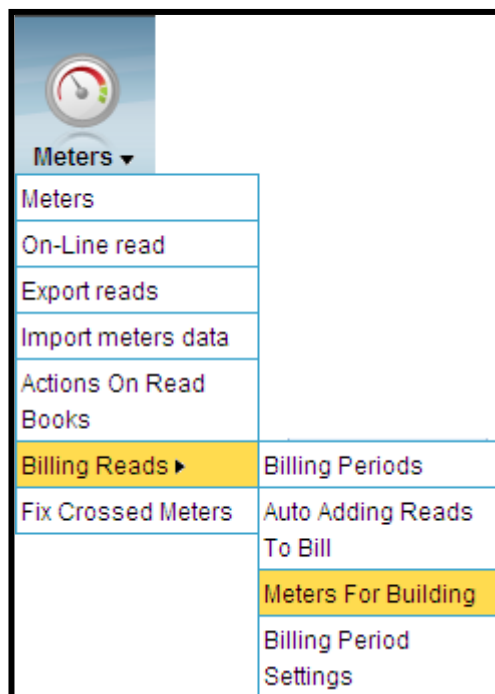
- Period Name (From the List)
- Zone and Subzone (From the List)
- Date

Click the Add reads button to create the file

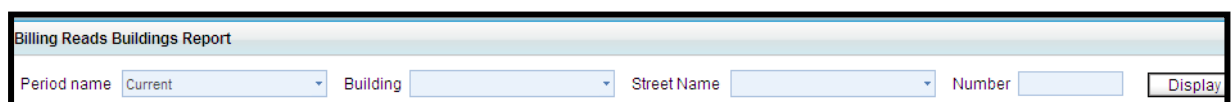


Picture 55

Select the 'Meters for Building' option to display the billing file according to the Building (Current Period default name represents two month period)

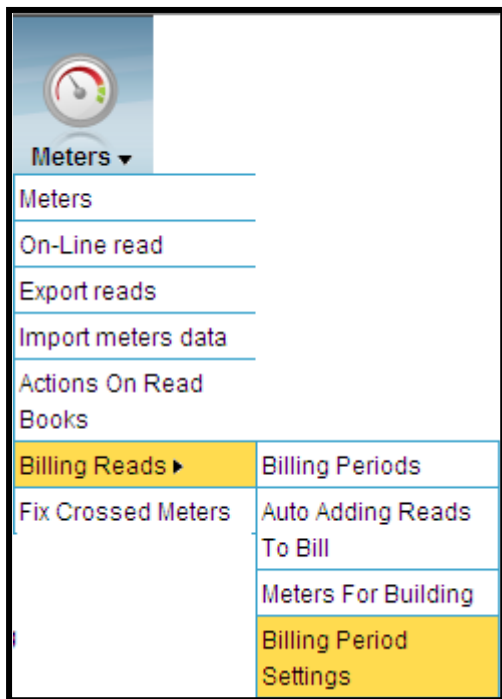


Picture 56



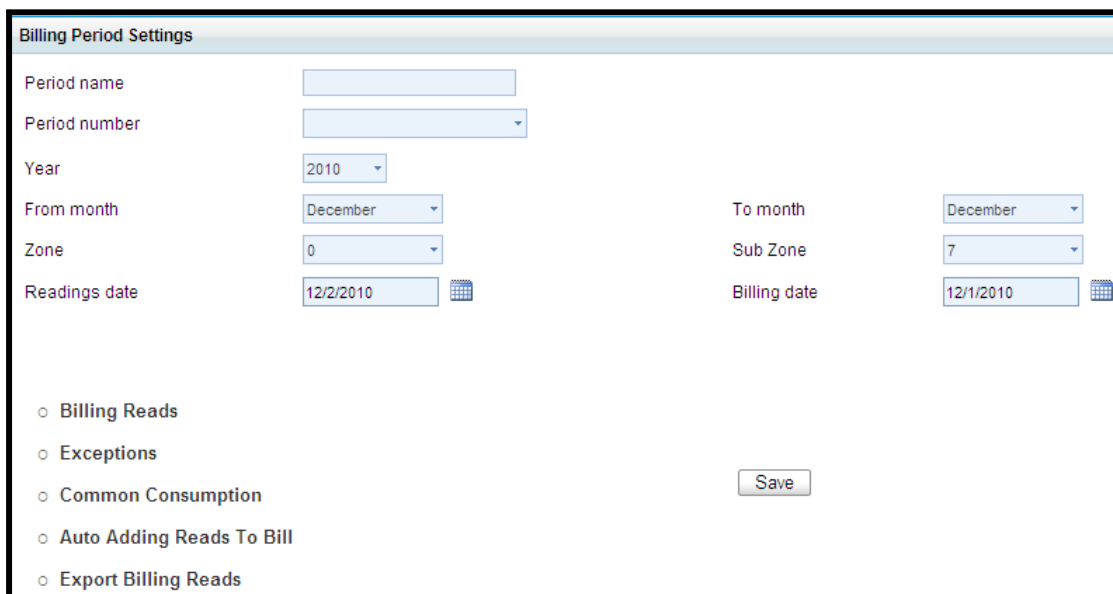
Picture 57

'Billing Period Settings' window enables to update existing Billing Reads file or creating a new file, Selecting the Meters > Billing Reads > Billing Period Setting will open the configuration window.



Picture 58

Selecting of Period Number will update all the other data fields



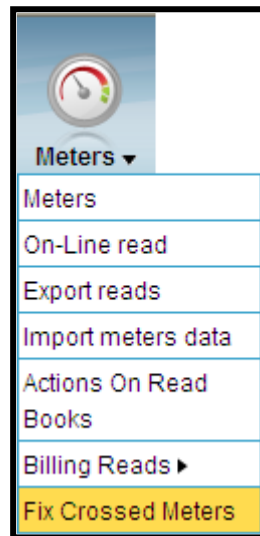
The screenshot shows the 'Billing Period Settings' window. It contains several input fields and a list of options. The 'Period number' field is highlighted, indicating it is the selected item. The 'Period name' field is empty. The 'Year' field is set to '2010'. The 'From month' field is set to 'December'. The 'To month' field is set to 'December'. The 'Zone' field is set to '0'. The 'Sub Zone' field is set to '7'. The 'Readings date' field is set to '12/2/2010'. The 'Billing date' field is set to '12/1/2010'. The 'Save' button is visible at the bottom right.

Picture 59

## 7.9 Crossed installed Meters

During the Meter installation phase, crossing of meters information notation can possibly caused and being saved in the database.

Use the 'Fix Crossed Meters' module to fix that. Select the Meters > Fix Crossed Meters to open the configuration window



Picture 60

Select the Meter IDs in both data fields and click the Ok button



Fix Crossed Meters			
Meter ID	000000505001		
Meter S/N	3905283	Consumer Name	Anders Maria
		Consumer Address	Hill 2
Meter ID	000000507001		
Meter S/N	3926878	Consumer Name	Wang Yang
		Consumer Address	Hill 3

Picture 61

## Chapter8. Alerts Module

### 8.1 General description

The City-Mind MDM performs an effective system Alerts tool. It provides the advanced methods of flagging and notifications for possible leaks with individual meters and groups of meters commonly referred to as DMA or District Metered Area (Leak Groups). The system reports the Unread meters and the Meter status alerts, as for High/low/zero/negative consumption, Leak Detection, Magnetic Tamper, Battery Condition and Backflow.

The alerts mechanism is fully supported by controls and administrative means to point the problem and locations.

The alerts massaging platform provides the administrative implementation to handle the Alerts issues.

#### **Description of the Meter Status and system Alerts:**

Leak Detection- The Endpoint continuously monitor water consumption through the meter and indicate possible leaks as alarm flags whenever the meter has detected continuous flow within a 24 hour period. To protect against false errors and ongoing alarms once leak issues have been cleared, after a continuous 3 hour period of no flow, alarm code will automatically reset the Alarm flag.

Tamper Detection – The Endpoints contain tamper detection circuitry and software, which identifies magnetic tamper as alarm flags, or for external transceivers, whenever the external wires have been cut or disconnected.

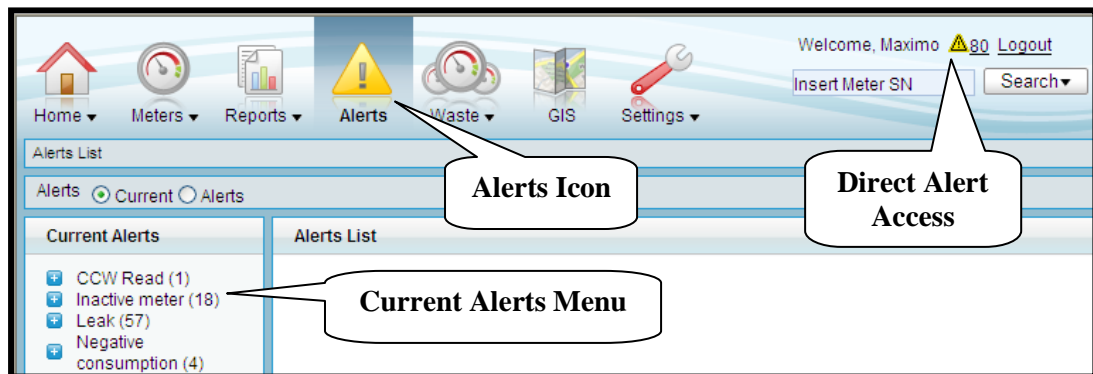
Theft – The Endpoints indicate as alarm flags whenever there is an unusual amount of reverse flow through the meter, possibly indicating theft, backflow conditions, or improper installation.

Zero Consumption - System software-derived notification of an extended absence of zero consumption possibly indicating vacated service, or theft.

Leak Groups Alerts - The System provides Leak Alerts for groups of meters commonly referred to consumption of Leak Groups thresholds.

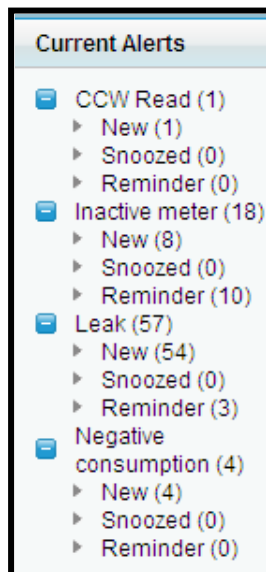
## 8.2 Current Alerts

Click the Icon to view the 'Alerts List' main menu (Access to the Alerts menu is available via the upper menu direct Link or via Home > Alerts)  
The Current is the default option.



Picture 62

The Current Alerts List displays for each type of alert its status and Quantity (In Brackets), Click the (+) to view the redoubled status headers



Picture 63

Click the linked status header to view the details, as in the Inactive Meter list sample (Picture 64)

Inactive meter - New (8)											
			Severity	Meter ID	Meter S/N	Consumer Name	Property Address	Alert Time	Alert Last Received	Alert Last Received	Letters Sent
	<input type="checkbox"/>	<input type="checkbox"/>	All	All	All	All	All	All	All	All	All
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	★	000004802000	3943990	Pedro Freyre José	Fences 23	19/07/2010 18:53	20/07/2010 20:27	20/07/2010 20:27	0
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	★	000008888009	3388569	Locksley Charlene	Fences 21	29/08/2009 08:39	29/08/2009 08:39	29/08/2009 08:39	0
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	★	000004812002	3943940	Muller Rita	Fences 10	29/04/2010 07:30	20/05/2010 23:19	20/05/2010 23:19	0
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	★	000004903002	3943126	Pontes Maria	Fences 4	13/05/2010 09:18	13/05/2010 09:18	13/05/2010 09:18	0

Picture 64

Click the (+) on the left item line side to view the alert handling status  
Follow the menu options to handle the alert as severity, comments, archiving etc. Alert Handling in the window bottom part (Picture 66).  
Direct access to the meter card is available via the Meter ID.

				Severity	Meter ID	Meter S/N	Consumer Name
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All	All	All	All
+	<input type="checkbox"/>			★	<a href="#">000004802000</a>	3943990	Pedro Freyre José
-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	★	<a href="#">000008888009</a>	3388569	Locksley Charlene
Handling Time				Handling Type	Status	User Name	
No							

Link ID

Handling Status

Picture 65

Alerts Handling		
Status	<input type="button" value="Keep Current Status"/>	Handling <input type="button" value="Letter sent(using Aradnet)"/>
		Comment <input type="text"/>

Picture 66

### 8.3 Alerts

The Alerts window applies all the system alerts, as Current and archived.  
select the Alerts and display by several options as Search By, And Or  
Additional Field Selection. Click the Display button to view the results.

Alerts <input type="radio"/> Current <input checked="" type="radio"/> Alerts	
Meters Alerts	
Search By	<input type="button" value="Meter ID"/> <input type="text"/> <input type="button" value="Search"/>
	<input checked="" type="radio"/> And <input type="radio"/> Or
	<input type="button" value="Select Field ..."/>
Alert Type	<input type="button" value="All"/>
Alert Status	<input type="button" value="All"/>
Alert Time	<input type="button" value="All"/>
	<input type="button" value="Display"/> <input type="button" value="Clear"/>

Picture 67

## Chapter9. Reports Module

### 9.1 General description

The System Report module produces meter readings, Usage and consumptions in tabular and charts, provides automated emails and file Transactions and transfers of daily meter readings, beneficial to the utilities such as integral general ledger or a full financial software suite. Integral geospatial display of meter locations positioned using latitude and longitude coordinates (detailed in the GIS Module).

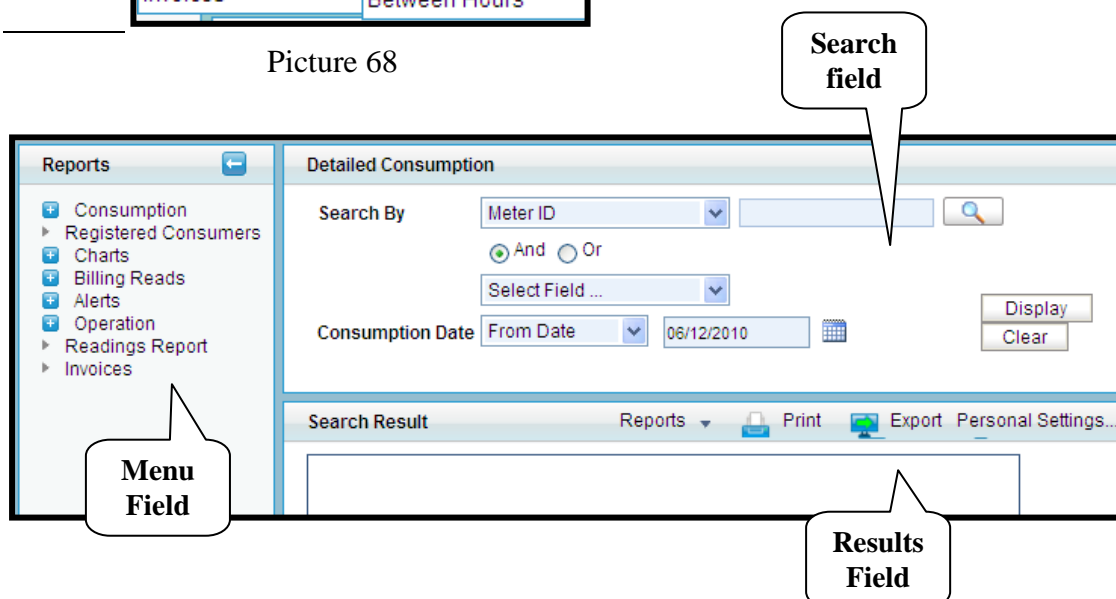
### 9.2 Consumption report

The Consumption report presents variable of options to display and analyze the Meter and the system consumption.

Select the Report > Consumption > Detailed Consumption (Picture 69)  
Select the desired options in the Search and Menu fields and click the display Button to display the results



Picture 68





Picture 69

Selecting the Reports > Consumption (+) in the Menu Field, opens additional options to view detailed reports as for Meter, Consumers, Leak Groups and by period



Picture 70

For example, Filtering consumption report by Leak Group or Zone, Click the Display Button to display the results (Picture 72)

**Detailed Consumption**

Search By:

☐ And ☒ Or

Consumption Date:

Picture 71

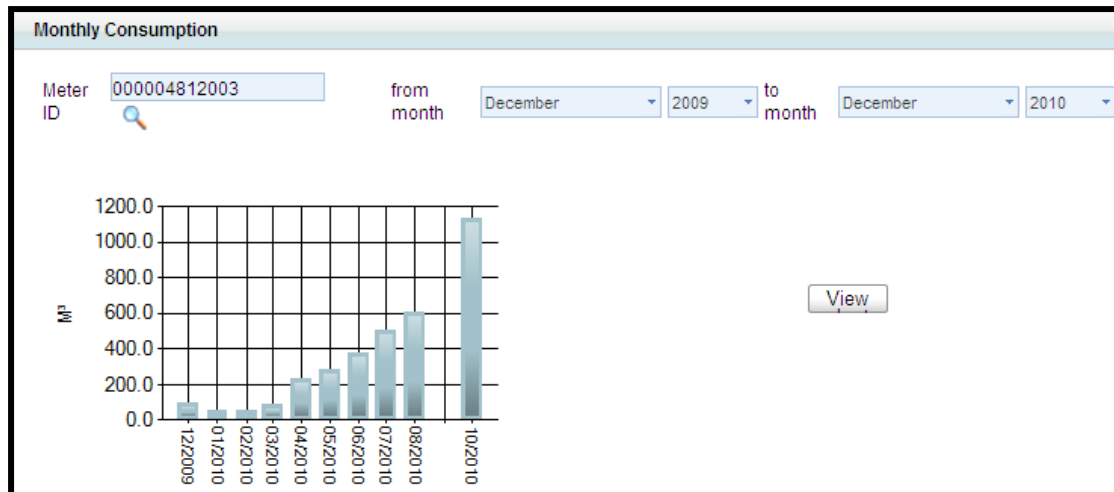
Search Results window

Detailed Consumption					
Search Result					
		Meter ID	Meter S/N	Property Address	Consumer Name
	<input type="checkbox"/>	All	All	All	All
<input type="checkbox"/>	<input checked="" type="checkbox"/>	000004203001	3942681	Fences 59	Franken Peter
<input type="checkbox"/>	<input checked="" type="checkbox"/>	000004902002	3903222	Fences 9	Devon Ann

Picture 72

Sample of monthly consumption Chart for consumer.

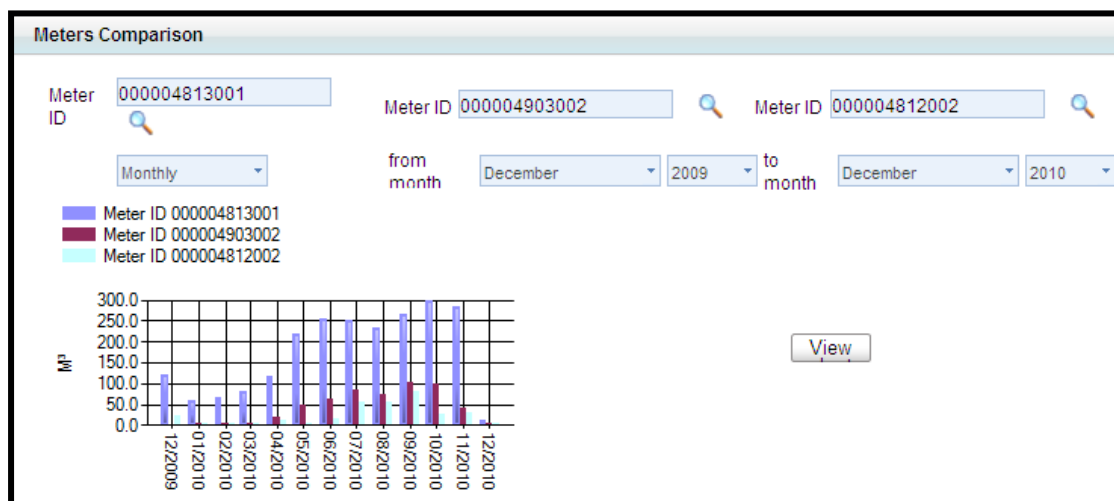
Select the Reports > Charts > Monthly consumption by Meter ID and key the View Button.



Picture 73

Sample of monthly consumption comparison Chart for 3 consumers.

Select the Reports > Charts > Compare Meters Chart by Meter ID and key the View Button.

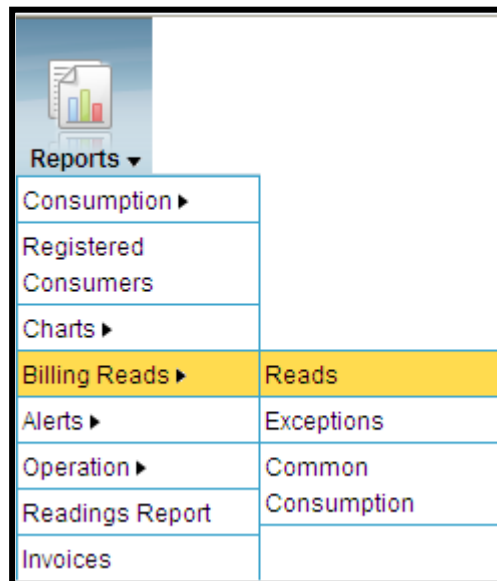


Picture 74

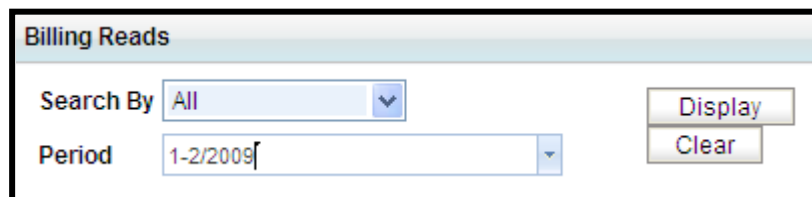
### 9.3 Billing Reads reports

The Billing Reads Module, enables to produce Billing Reads files that previously created in the Meters > Billing Reads module (7.8 Billing Reads Module).

Select the Reports > Billing Reads > Reads and select the Period file name (Picture 76)



Picture 75



Picture 76

The Billing Reads file created with logical exceptions, Notes and center points of consumptions (Common Consumptions buildings)

Select the Reports > Billing Reads > Exceptions for logical exception files

Exceptions	
Search By	All
Period	1-2/2009
Status	All
Logic Status	All Exceptions
<input type="button" value="Display"/> <input type="button" value="Clear"/>	

Picture 77

And the Reports > Billing Reads > Common Consumption

Common Consumption Report					
Period name	1-2/2009	Zone	0	Sub Zone	
Street Code		Number		Min. waste	
					<input type="button" value="Display"/>

Picture 78

## 9.4 Alerts report

The Alerts report displays the General Alerts rules as: Meters status alerts, Non counting (Static) meters and error readings. Select the Reports > Alerts to display the options.

Reports	
Consumption	
Registered Consumers	
Charts	
Billing Reads	
Alerts	Meters Alerts
Operation	Static Meters
Readings Report	Unread meters
Invoices	Reading Errors
	Low Consumption

Picture 79

Select the Alert Type to view the list of Alert Types options.

The screenshot shows the 'Meters Alerts' window. At the top, there's a 'Search By' dropdown set to 'Meter ID' with the value '000004812003'. Below it are radio buttons for 'And' (selected) and 'Or'. A 'Select Field ...' dropdown is also present. The 'Alert Type' dropdown is open, showing a list of options: All, CCW Read, Chasis Open, Cut wire, Flow Above QMax, High Flow, High Level, Inactive meter, Leak, Logic Value Changed, and Low battery. The 'Alert Status' dropdown is set to 'All'. The 'Alert Time' dropdown is set to 'All'. The 'Search Result' section is empty.

Picture 80

Select the Alert management Status or Alert Time to view the handling and the timing options

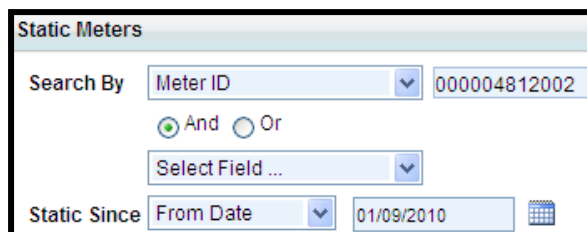
The screenshot shows two dropdown menus. The 'Alert Status' dropdown is set to 'All'. The 'Alert Time' dropdown is open, showing a list of options: All, From Date, Today, In Date, Between Dates, Yesterday, This Week, In Week, In Year, In Month, In Two Month, and This Year.

Picture 81

The screenshot shows the 'Alert Time' dropdown menu open, displaying a list of options: All, From Date, Today, In Date, Between Dates, Yesterday, This Week, In Week, In Year, In Month, In Two Month, and This Year.

Picture 82

Or non reading and non counting list Meters (See Picture 79)



Static Meters

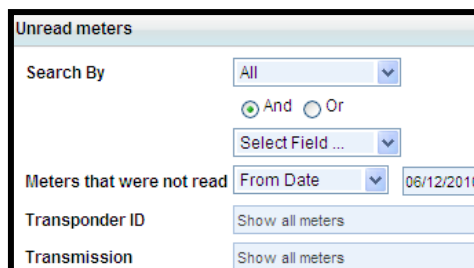
Search By: Meter ID (dropdown), 000004812002 (text input)

And (radio button selected) Or (radio button)

Select Field ... (dropdown)

Static Since: From Date (dropdown), 01/09/2010 (calendar icon)

Picture 83



Unread meters

Search By: All (dropdown)

And (radio button selected) Or (radio button)

Select Field ... (dropdown)

Meters that were not read: From Date (dropdown), 06/12/2010 (calendar icon)

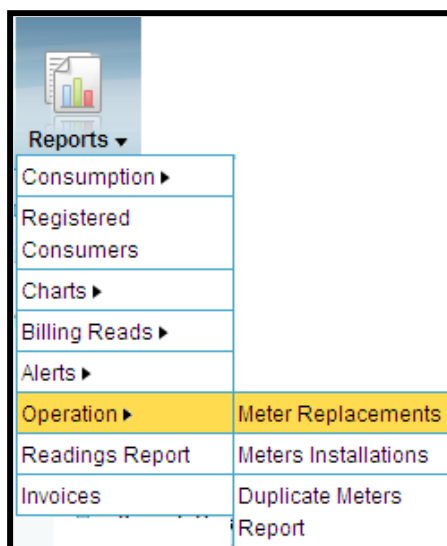
Transponder ID: Show all meters (button)

Transmission: Show all meters (button)

Picture 84

## 9.5 Operation Report

The Operation menu is a tool for Meter Installation, Replacement or duplication management. The Installation date information will be helpfully for the long term system management and maintenance. The Duplication tool will help to fix manual error in the data base (The Meter Electronic number cannot be duplicated in the system)

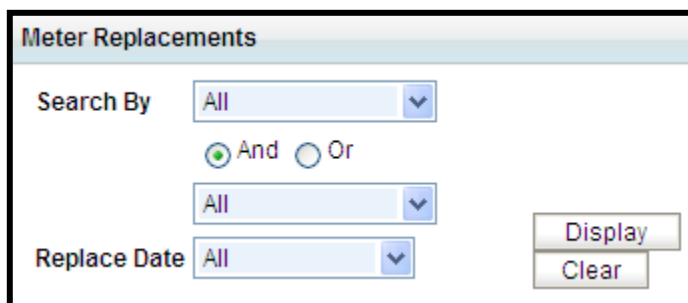


Reports

- Consumption
- Registered Consumers
- Charts
- Billing Reads
- Alerts
- Operation
  - Meter Replacements
  - Meters Installations
  - Duplicate Meters
  - Report
- Readings Report
- Invoices

Picture 85

As for example, Displaying of Meter replacement report.  
Select the Operation > Meter Replacement with its identification and click  
The Display Button (See the report in Picture 87)



Meter Replacements

Search By: All (dropdown)

And (radio button selected) Or (radio button)

All (dropdown)

Replace Date: All (dropdown)

Display (button)

Clear (button)

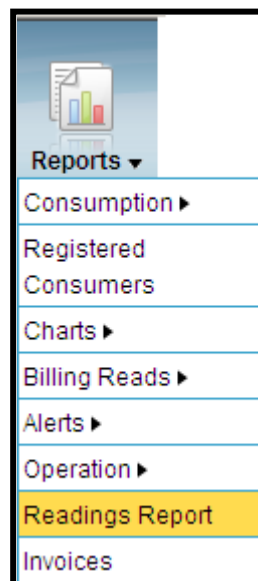
Picture 86

Meter Replacements					
Search Result					
	Replacement ID	Meter ID	Property Address	Zone No.	Sub Zon
<input type="checkbox"/>	All	All	All	All	All
<input type="checkbox"/>	79	000000505001	Hill 2	0	10
<input type="checkbox"/>	326	000000505001	Hill 2	0	10
<input type="checkbox"/>	547	000000506000	Hill 4	0	10
<input type="checkbox"/>	86	000000506000	Hill 4	0	10
<input type="checkbox"/>	130	000000506000	Hill 4	0	10
<input type="checkbox"/>	996	000000507001	Hill 3	0	10
Total Rows 131 1 2 Page: 1 (Of 2)					

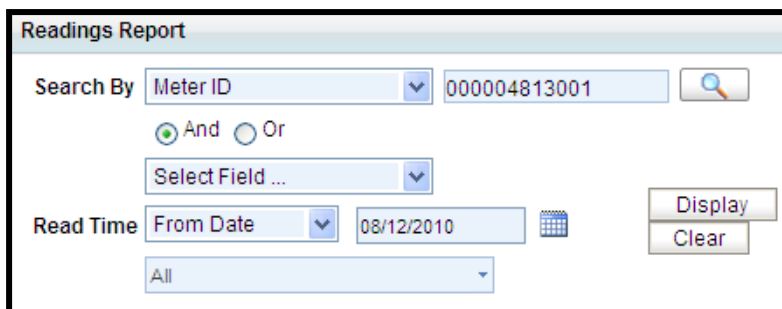
Picture 87

## 9.6 Readings Report

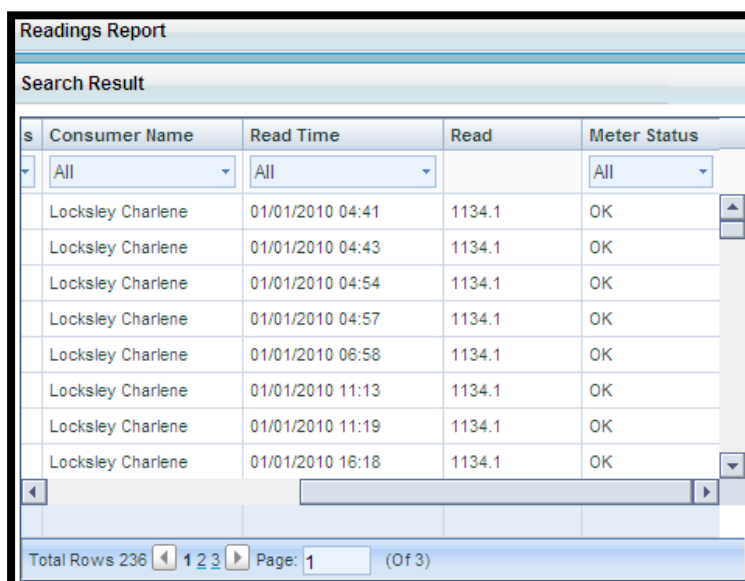
The Reading Report, displays the Meters reading history and its statuses  
Select the Meter ID and its Reading Time range.



Picture 88



Picture 89



s	Consumer Name	Read Time	Read	Meter Status
	All	All		All
	Locksley Charlene	01/01/2010 04:41	1134.1	OK
	Locksley Charlene	01/01/2010 04:43	1134.1	OK
	Locksley Charlene	01/01/2010 04:54	1134.1	OK
	Locksley Charlene	01/01/2010 04:57	1134.1	OK
	Locksley Charlene	01/01/2010 06:58	1134.1	OK
	Locksley Charlene	01/01/2010 11:13	1134.1	OK
	Locksley Charlene	01/01/2010 11:19	1134.1	OK
	Locksley Charlene	01/01/2010 16:18	1134.1	OK

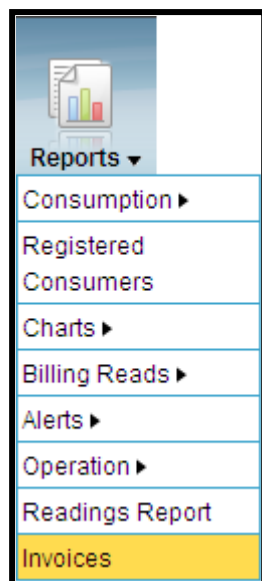
Total Rows 236    1 2 3    Page: 1 (Of 3)

Picture 90

## 9.7 Invoices Report

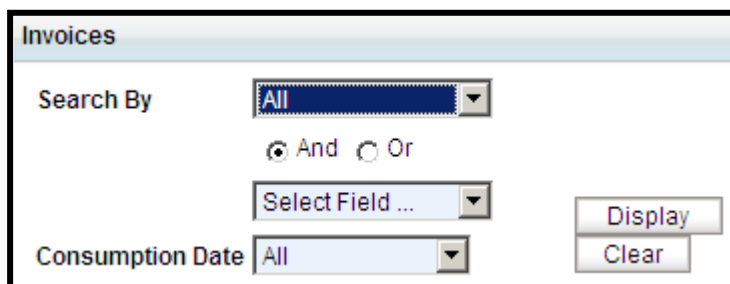
The Invoices Report enables to produce periodical report summery with the Reading and consumption combined with direct Billing debit.





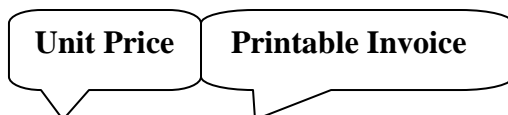
Picture 91

Select the Reports > Invoices to view the Invoices window, Click the Display button to get the Invoices report.



Picture 92

Select the Update Parameters to define the consumption unit price (Picture 94) and produce the updated Invoice report to publish.



Invoices					
Search Result    Update Parameters    Invoices Print    Print    Export    Personal Settings...					
Lead	Previous Read (M³)	Last Read Time	Last Read (M³)	Consump...	Total Price (\$)
		All		All	All
004	309.0	08/12/2010 23:02	2562.0	18202.0	91010.0
004	140.0	08/12/2010 23:08	305.3	6903.3	34516.5
004	68.0	08/12/2010 23:02	760.2	6499.2	32496.0
004	286.0	08/12/2010 22:37	3046.0	26395.0	131975.0
				-	-5993168090.0
				119863361...	
Total Rows 114    1 2    Page: 1    (Of 2)					

Picture 93

Unit Price

VAT

Picture 94

## Chapter10. Waste Module

### 10.1 general Description

The 'Waste' Module is based on groups of meters commonly referred to the same consumption line as DMA (District Metered Area).

The System analyze the Leak Alerts for hierarchy groups of meters Commonly referred to consumption of Leak Groups thresholds and its Meters Status data. It is an effective tool to control the physical and the Administrative consumption loss.

The system reports the DMA data continuously, and helps the supervisor to locate and find the cause for the loss.

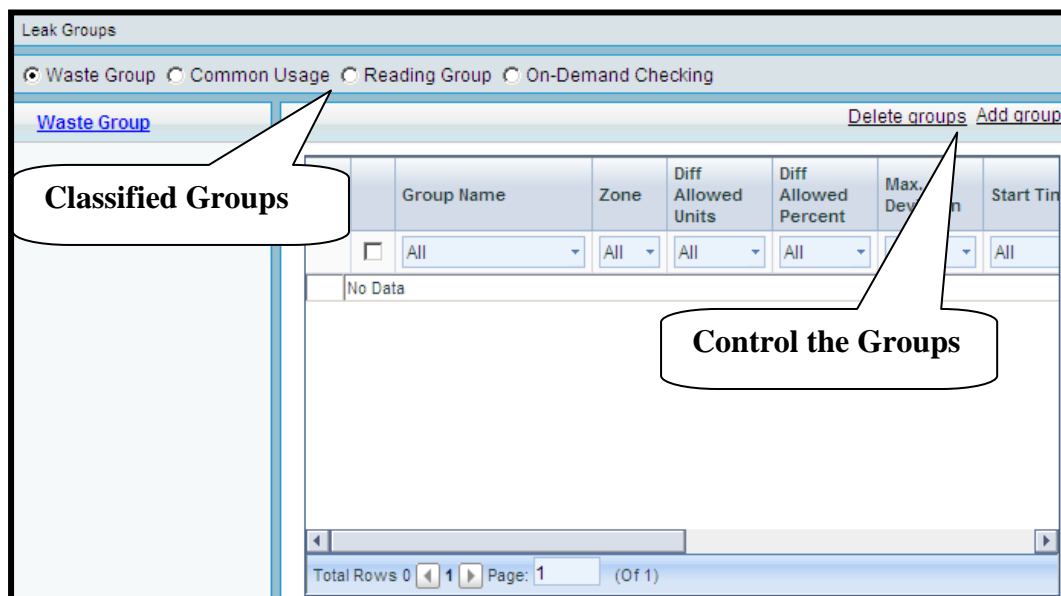
In order to operate this module, the groups have to be defined and classified in the CITY-MIND system.

## 10.2 Leak Groups

Select the Waste > Leak groups to open the Leak Groups management Window (Picture 96)



Picture 95



Picture 96

There are 4 types of classified groups as:

- Waste Groups – Physical Leakage Groups to manage the loss
- Common Usage – List of common consumption buildings
- Reading Groups - Randomly defined consumption groups
- On-Demand Checking – Non alert consumption groups

Select the Groups Control (Picture 96) – 'Add Group' to add and classify new group. Define the Group type and then the other setting parameters As in the sample below (Picture 97).

Leak Groups < Group Card

☒ Waste Group ☐ Common Usage ☐ Reading Group ☐ On-Demand Checking

**Group Settings**

Group Name: Nolan Av

Group Type: Waste Group

Pressure Zone: 5

Difference: 10

Difference (%): 10

Max. Deviation (%): 15

Minimal time between readings: 0

Percentage of meters not read in allowed time: 5

Parent Group: [Dropdown]

Update

**Area name and Alert Threshold**

Picture 97

Add physical installed Meters IDs to the configured group.

Group Name : Nolan Av

Delete meters Add meters Add group

Group Type: Waste Group Pressure Zone: 5 Main Meters Count: 0

Difference M: 10 Difference (%): 10 Max. Deviation (%): 15

Meter ID	Property ID	Consumer ID	Consumer Name	Add
<input type="checkbox"/> All	All	All	All	All

No Data

**Add Meters to the Group**

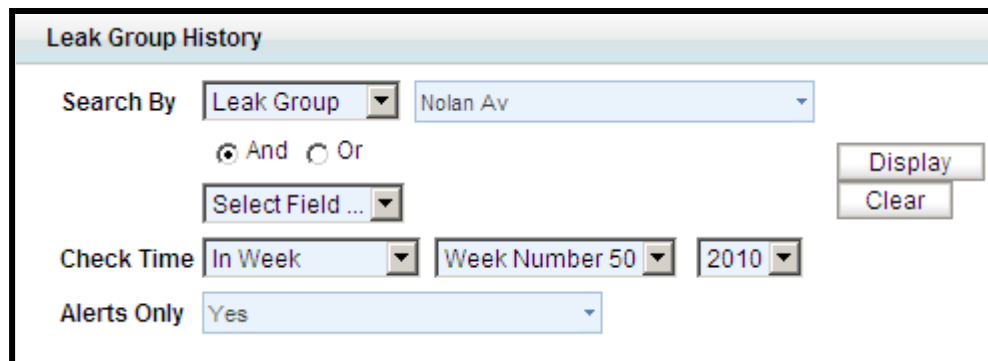
Picture 98

### 10.3 Leak Groups History

Select the Leak Group History and schedule to display the Leak Group Detailed consumption data or history summary report in time ranges.



Picture 99



Picture 100

## Chapter11. GIS Module

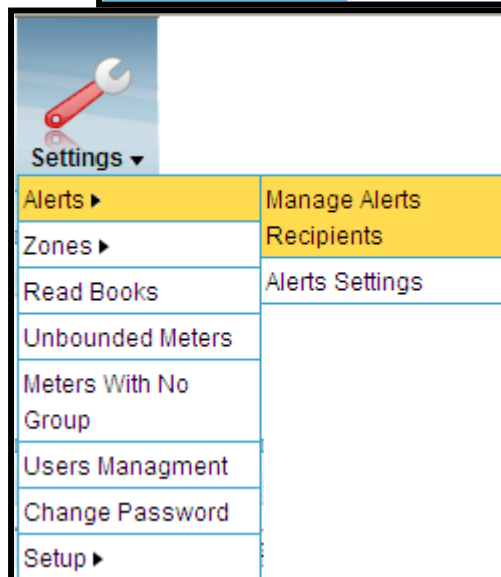
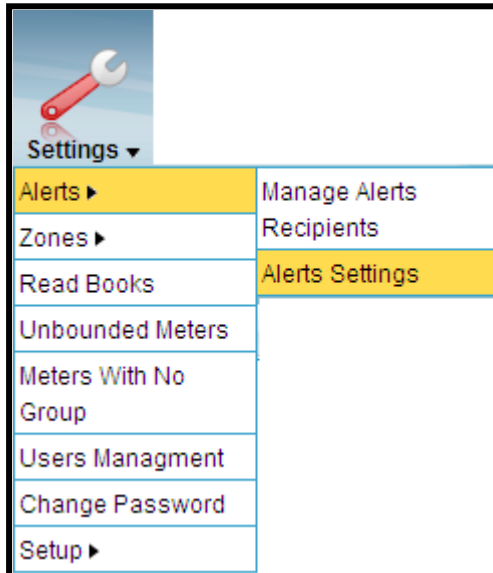
To Be Implemented

## Chapter12. Setting Module

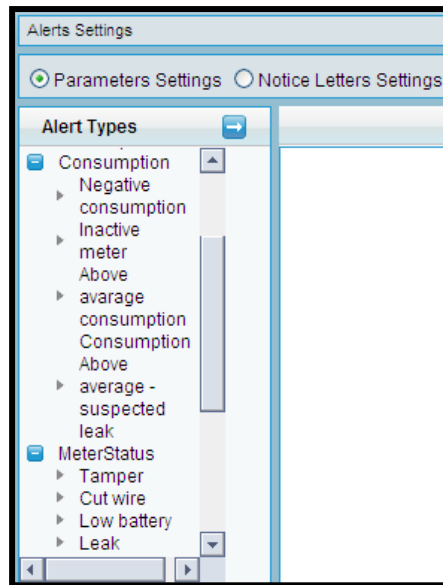
### 12.1 General Description

The Setting is the main System tool to for the supervisor to configure the system definitions as: Users roll management, Reading Books, Alerts, and Meters groups.

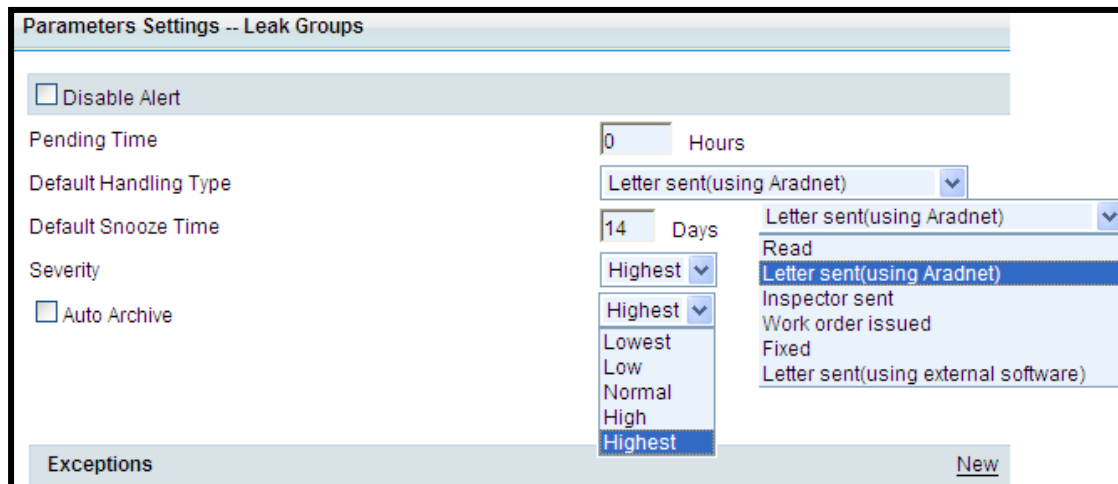
Select the Setting > Alerts > 'Alerts Setting' and then the 'Manage Alerts Recipients' to supervise the Alert Type severity and it's administrative status care (See Picture 102 and Picture 103)



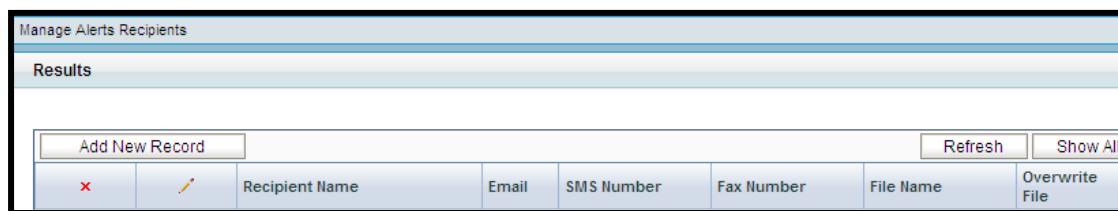
Picture 101



Picture 102

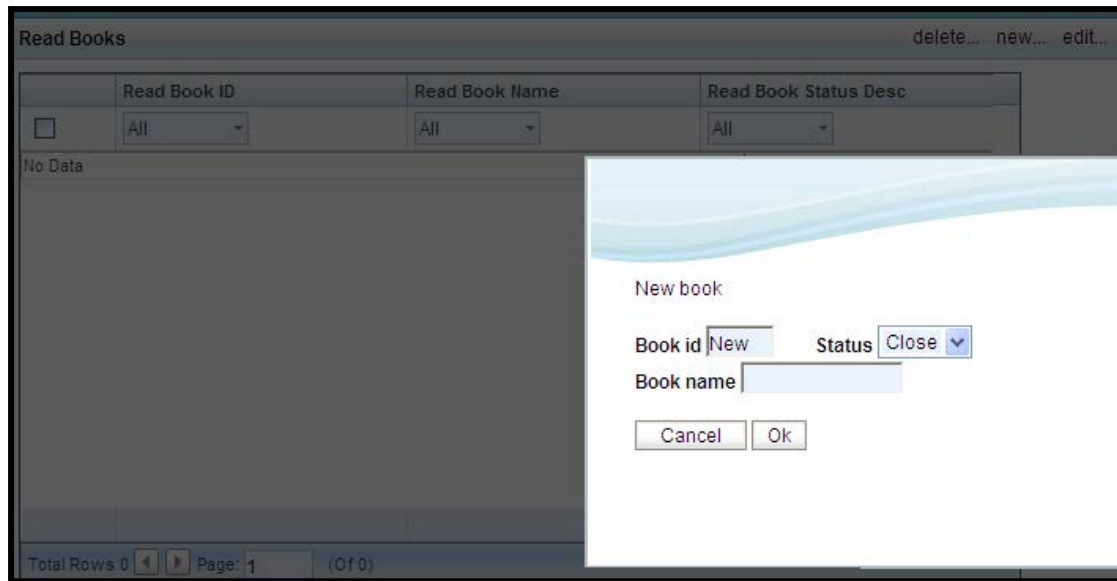


Picture 103

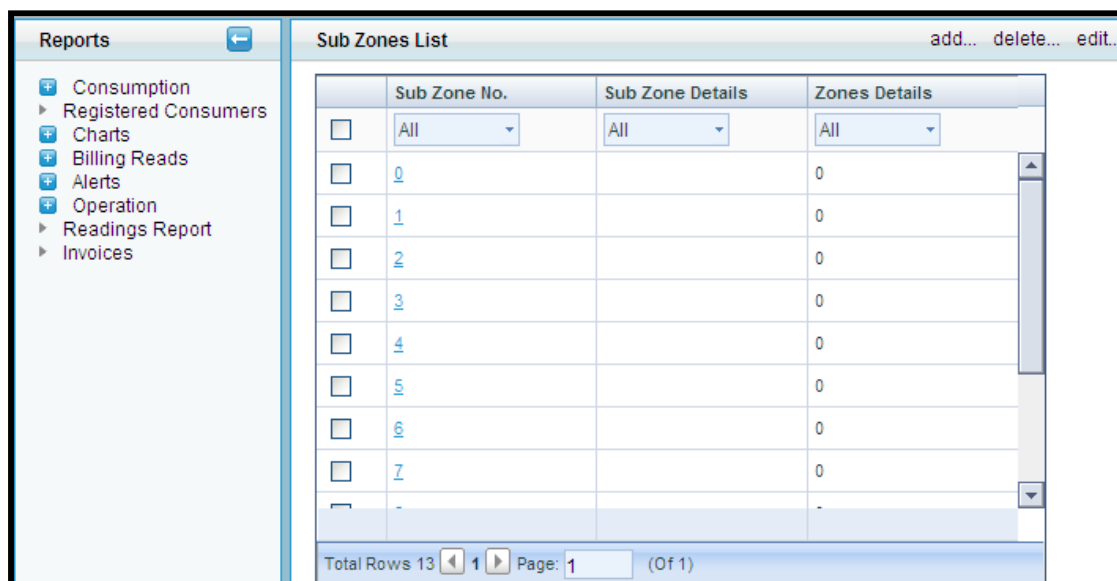


Picture 104

Samples of More Setting Menu functions as: Read Books, Zone and Sub Zones Management and Meters that not related to Group or unbounded in the system attached below (Configurable via the Report Module as well)



Picture 105



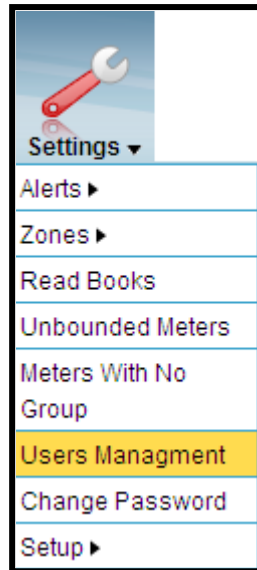
Picture 106

## 12.2 User Roll Management

The 'Setting' Users Management tool, applies the system technician or Supervisor to provide and manage the system users rolls  
(See 3.2 Manager view screen)

Select the Setting > User Management to open the Login Setting window  
(See Picture 108)





Picture 107

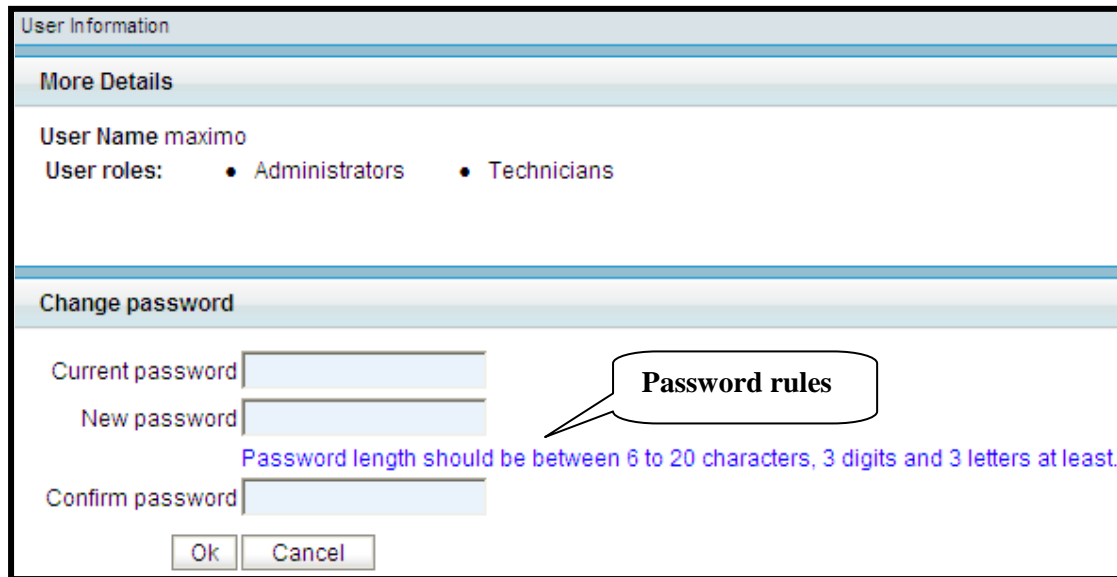
Click the 'Add New Record' button to configure new user in the system  
(See Picture 109)



Picture 108

Picture 109

Select the Setting > Change Password to display the User Roll and the Change Password editing boxes (Pay attention to the Password rules)



**User Information**

**More Details**

User Name **maximo**

User roles: ☒ Administrators ☒ Technicians

**Change password**

Current password

New password

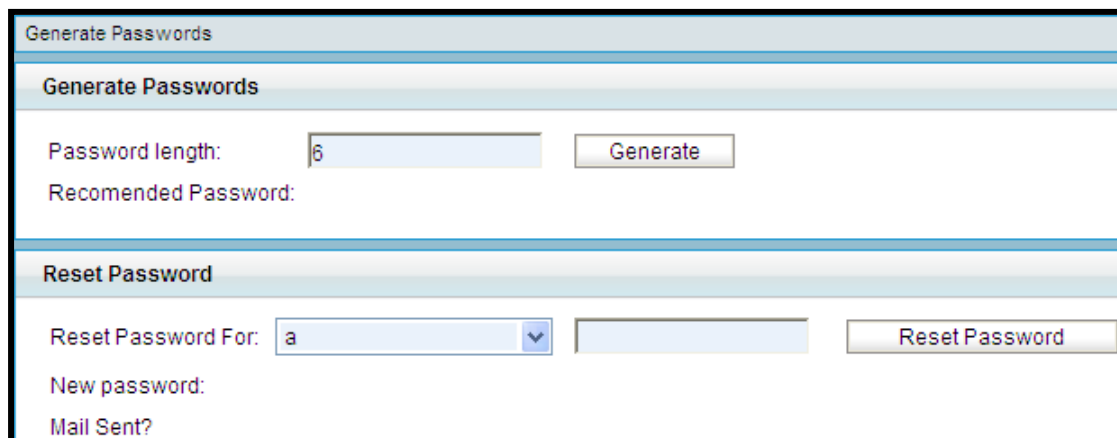
Confirm password

**Password rules**

Password length should be between 6 to 20 characters, 3 digits and 3 letters at least.

Picture 110

Select the Setting > Setup to generate new Password and Reset an existing Password



**Generate Passwords**

Password length:

Recommended Password:

**Reset Password**

Reset Password For:

New password:

Mail Sent?

Picture 111

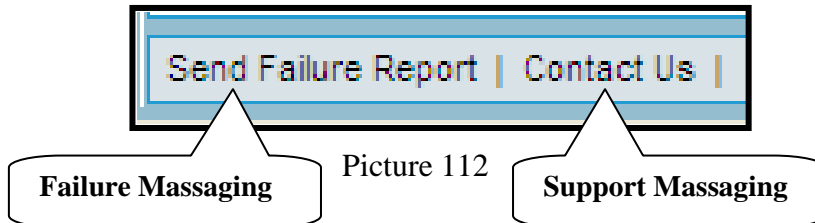
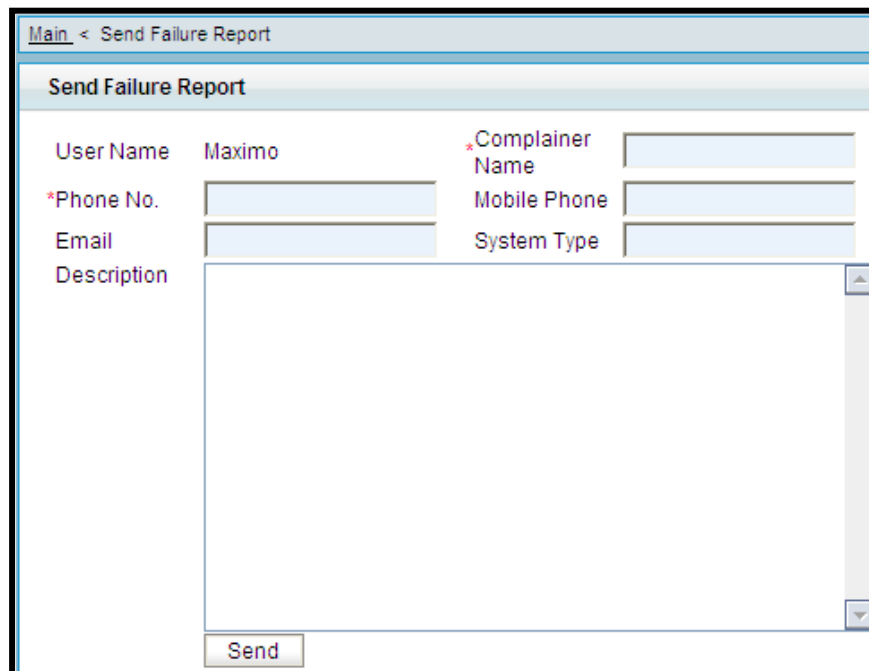
## Chapter13. Contact details and Failure report

### 13.1 Main screen Contacts and reports

The Main Home screen (See Picture 2) enables direct contact for messaging to the customer support in the lower part of the screen.

## 13.2 Failure Report Massaging

Select the 'Send Failure Report' to describe and send Failure report (Picture 113)

Main < Send Failure Report

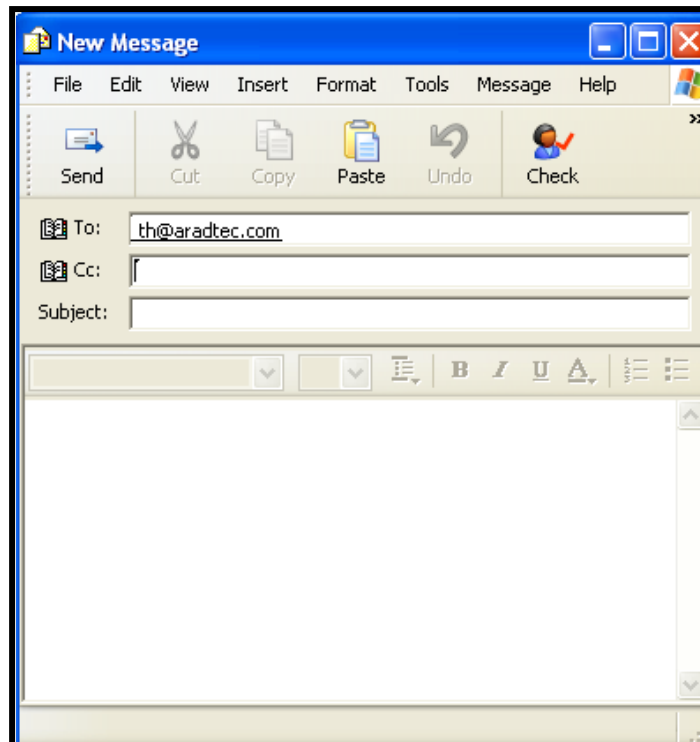
**Send Failure Report**

User Name	Maximo	*Complainer Name	<input type="text"/>
*Phone No.	<input type="text"/>	Mobile Phone	<input type="text"/>
Email	<input type="text"/>	System Type	<input type="text"/>
Description	<input type="text"/>		

Picture 113

## 13.3 Contact massaging

Select the Contact Us button to open customer support window and Email The Message



Picture 114