

Tel: +90-216 466 84 60 Fax: +90-216 364 65 65 datakom@datakom.com.tr http://www.datakom.com.tr

Rainbow Scada User Guide V-3.5				
Written By:	Tugay Okatan			
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Issue	02			

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1.INTRODUCTION

Rainbow Scada is an internet based, multi-functional remote monitoring system which supports all Datakom products and third party products like energy meters and industrial controllers.

You will need a username and password to login to the monitoring system. Please contact Datakom technical support team at below address for any additional support to this document.

technical.support@datakom.com.tr

2.MANAGER ACCOUNT LOGIN

Click on the below link to connect to Rainbow Scada

http://rm.datakom.com.tr/

🕲 Rainbow Scada X	*	-	σ	×
← → C O Güvenli değil rm.datakom.com.tr		\$	4	:
Rainbow Scada Login				
Username				
Password				
Login				
Manage				
· · · · · · · · · · · · · · · · · · ·				
This application requires one of these browsans. Freedox 23+. Chrome 20+. Safato 6+ or IE-10+				



Rainbow Scada application requires Firefox 23+, Chrome 29+, Safari 6+ or IE 10+

Network and an and a second degree of the second

If you have a manager account, enter your username/password and click Manage button.



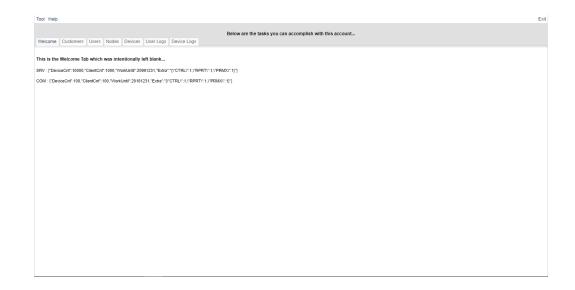
If this is not a manager account, the system will automatically login to the monitoring page even when you click the Manage button.

The "**About**" screen will open, click \bowtie button to continue.

Tool Help		Exit					
Below are the tasks you can accomplish with this account							
This is the Welcome Tab which was intentionally left blank							
SRV : {"DeviceOnt":10000,"ClientOnt":1000,"WorkUntil":20991231,"Extra":"{\"CTRL\":1,\"RPF	T\":1,\"PRMX\":1}"}						
COM : {"DeviceCnf":100,"ClientCnf":100,"WorkUntil":20181231,"Extra":"{\"CTRL\":1,\"RPRT\"	1,\"PRMX\":1}"}						
	Rainbow Scada 3.5						
	Copyright © 2012-2017 Datakom Elektronik Mühendislik Sanayi ve Ticaret A.Ş.						
	www.datakom.com.tr						

The main page is the Welcome page which is intentionally left blank.

The Line starting with COM displays information about Device Count, Client Count, and Expiration Date.



Click **Customers** tab, you will display your account settings.

Tool Help			Exit					
Below are the tasks you can accomplish with this account								
Refresh Save ges Licensing Edit Customer								
ID Name 237 COMPANYA Rainbow Scada User Manual	Details	Email-1 @	Phone-1					
Customers								

Configure Name, Address, Details, E-mail and Phone.

Name: Customer name.

Address: Customer address.

Details: Detailed info about the account can be written in this section.

E-mail-1, E-mail-2: E-mail addresses can be written in this section.

Phone-1, Phone-2: Phone numbers can be written in this section.

Press enter button, system will warn to save the changes.

Click Save Changes tab.

Tool Help			Exit
Below are the Welcome Customers Users Nodes Devices User Logs Device Logs	asks you can accomplish with this account		
Refresh Save Changes Licensing Edit Customer !!! There are chan	nges to be saved !!!		
10 237 COMPANYA Rainbow Scada User Manual Save Changes	Details	Email-1 Phone ₫	-1

Click on customer and click Licensing tab to view license details.

Tool Help	Tool Help Exit								
Welcome	Below are the tasks you can accomplish with this account								
Refres	Refresh Save Changes Licensing Edit Customer								
ID	Name	Adda	Details	Email-1	Phone-1				
237	COMPANYA	Rainbo cada User Manual		a					
	237 COMPANYA Rannot ede User Manual a								

Customer Licene information will be displayed.

Customer License			X
Device Count:		100	
Client Count:		100	
Works From:	1.01.2010	¥	
Works Till:	31.12.2018	¥	
Info:	Options is a JSON-like	e string, Values must be Numeric only !	
Options:	{"CTRL":1,"RPRT":1,"P	RMX":1}	
Info:	You may enter anything	g you want in the TextBox below	
Details:			
			🔡 Save

Device Count: This is the maximum number of devices that this account is allowed to monitor.

Client Count: This is the maximum number of sub_users that can be created under this account.

Works From-Work Till: This is the time interval of license activation.

Options: These are the customer roles.

"CTRL":1= Account will have the ability to control devices.

"RPRT":1= Account will have the ability to analyze and to report.

"PRMX":1= Account will have the ability to edit parameters.

If you click on **Save** button, the system will warn you to contact the service provider.

Device Count:	100			
Client Count:	100	<		
Works From:	1/1/2014			
Works Till:	12/31/2014			
Info:	Options is a JSON-1	Contact Service Provider	meric only !	
Options:	{"CTRL":1,"RPRT":1,			
Info:	You may enter anyth	(yonet/firm task/-1003)	elow	
Details:		0		



Click **refresh** tab to refresh the page.

Tool Help			Exit
Welcome Customers Users Nodes Devices User Logs Device Logs	Below are the tasks you can accomplish with this account		
Refrest Save Changes Licensing Edit Customer			
ID Name Address	Details	Email-1	Phone-1
237 COMPANYA Rainbow Scada User Manual		¢.	
Refresh			

Click **Users** tab to display all users under this customer account.

Tool Help			Exit				
Below are the tasks you can accomplish with this account							
Welcome Customers Users Nodes Devices User Logs Device Logs							
Refresh Save Change Licensing Edit Customer							
ID Name Address	Details	Email-1	Phone-1				
237 COMPANYA sinbow Scada User Manual	•	e					
Users							

2.1.CREATE NEW USER

Click New User tab;

Tool Help					Exit			
	Below are the tasks you can accomplish with this account							
Welcome	Customers	Users Nodes Devices U	Jser Logs Device Logs					
COMPA	ANYA	▼ Refresh	New User Save Changes Delete User Edit User					
ID 770	Valid 1	Login user		Email-1 user_770_499080421	Phone-1			
835	1	kullanıcı1	B140A8000745484CA02	user_835_499092735	•			
	New User							

A new user row will be created.

Tool Help	p				Exi			
Welcome	Below are the tasks you can accomplish with this account							
	PANYA	 Refresh 		r				
ID 770	Valid 1	Login user	Pass 38881FDDAFD9A8AD47E4C1F7EA3DC686A6398682	Email-1 user_770_499080421	Phone-1			
835	1	user_835_499690342		user_835_499690342	-			
			New User F	Row				

Double click **Login**, enter login name and then press enter button.

/elcome	Customers	Users Nodes	Devices I	Jser Logs Device		elow are the tasks y	ou can accomp	plish with this account		
СОМРА	NYA	v	Refresh	New User	Save Changes	Delete User	Edit User	III There are changes to be saved III		
D 70	Valid 1	Login user		Pass 38BB1FDDAFD9/	ASAD47E4C1F7EA3DC6	586A639B682		Email-1 user_770_499080421	Phone-1	
35	1	user1	~					user_835_499690342	•	

Double click Pass, enter password and then press enter button.

user1 user12	ser Save Changes Delete User Edit Use	r III There are changes to be saved III	Phone-1				
Refresh New I Login User User1 User123	ser Save Changes Delete User Edit Use	Email-1 user_770_499080421	Phone-1				
Login Pass user 38881FD user1 user12	AFD9A8AD47E4C1F7EA3DC686A639B682	Email-1 user_770_499080421	Phone-1				
user 38881FE user1 user12		user_770_499080421	Phone-1				
user1 user123							
·			· · · · · · · · · · · · · · · · · · ·				
Bis 1 user1 [UNER252] Password							
		F	Password				

Only an encrypted form of the password is displayed !

Double click **Email-1**, **Phone-1** to enter email address / phone numbers and then press enter button.

COMPANY		Vsers Nodes Refresn	-mail Address	Phone Number	J
ID Va 770 1	Valid 1	Login user	Pass 38881FDDAFD9A8AD47E4C1F7EA3DC686A639B682	Email-1 user_770_499080421	Phone-1
835 1	1	user1	E8B7A094006477AF4B3E03F507FC9834636AB004	user_835_499690342	

The system will warn to save the changes.

Click Save Changes tab.

Tool Hel	ID.				B	elow are the tax		Changes		
Welcome	e Customers	Users Nodes	Devices	Jser Logs Device		cion are the las				
COM	PANYA	Ŧ	Refresh	New User	Save Changes	Delete User	Edit User			
ID 770	Valid 1	Login user		Pass 38881FDDAFD94	8AD47E4C1F7EA3DC	686A639B682		Email-1 user_770_499080421	Phone-1	
835	1	user1		E8B7A09400647	7AF4B3E03F507FC9	834636AB004		user_835_499690342		



The password must be at least 8 characters long.

2.1.1. Edit User Roles

User accounts may have different roles. A basic user account will have permission to do monitoring only.

To edit user roles; click user's row and then select Edit User.



Available User Roles will be displayed.



Device Monitoring Only: This feature must always be selected. Otherwise, user can not login monitoring.

Device Start/Stop/Command: If this feature is selected, user can control devices remotely.

Device Parameter Change: Kullanıcı, uzaktan izleme hesabında ekli olan cihazların parametrelerini değiştirebilir.

SCADA Configuration: User can use SCADA Configuration feature.

SCADA Viewer Role: User can monitor the remote monitoring screen prepared by SCADA Configuration feature.

Device / User / Node Operations: If this feature is selected, the user will have permission to manage the account.

Click **Save** button to save changes.

User Roles	\mathbf{X}
Device Monitoring Only: Device Start/Stop/Command: Device Parameter Change: SCADA Configuration: SCADA Viewer Role: Device/Node Operations: Device/User/Node Operations:	Save
🕌 Sa	ve

To delete one of the user accounts, select the user row and then click **Delete User**.

Tool Help				Ex					
Welcome	Below are the tasks you can accomplish with this account								
COMP	COMPANYA Refresh New User Save Changes Delete User Edit User Delete User Delete User								
ID 770	Valid 1	Login user	Pass 38881FDDAFD9A8AD47E4C1F7EA3DC686A639B682 user_770_4	Phone-1					
835	1	user1	E8B7A094006477AF4B3E03F507FC9834636AB004 user_835_4	9690342 .					

2.1.2. Create Nodes

To create nodes for the existing accounts, click **Nodes**.

Welcome	Customers	Users Nodes Devices	User Logs Device Logs	Below are the tasks you can	accomplish with this account				
	COMPANYA Refres New User Save Changes Delete User Edit User								
ID 770	Valid 1	Login user	Para	3DC 686A639B682	Email-1 user_770_499080421	Phone-1			
835	1	user1	Nodes	FC9834636AB004	user_835_499690342				

On this page, nodes can be created and linked to user's accounts.

Root Node is the main node and sub-nodes can be created under this main node.

To create a root node, click on **Create RootNode**.

Tool He	lp		E						
Welcom	Below are the tasks you can accomplish with this account								
All Use	Isper(s)	Create Root	Customer(s) COMPANYA RootNode(s) NONE Link User(s) Unlink User(s) Unlink User(s)						
ID 770	Name user	E-mail user_770_499080421	Create RootNode						
835	userl	user_835_499690342	Delete RootNode						

Write a name and then click **Sav**e.

Tool He	lp				Exit
Welcom	e Customers Users Nodes Devices User Logs D		ow are the tasks you can accomplish with this accou	int	
Node I ID	Iser(s) Name	E-mail		Customer(s)	
				RootNode(s)	
	Node	Name		View User(s) Link User(s)	
All Use	er(s)	$\overline{}$		Unlink User(s)	
ID 770	Name user	E-mail user_770_499080421	Node Name: Katobow Scada Demo	Create RootNode	
835	userl	user_835_499690342		Delete RootNode	

Root Node will appear at the right column.

Araçlar Yar	dım		Çıkı
Hoşgeldiniz	: Müşteriler Kullanıcılar Dizi	Aşağıdakiler Yön nler Cihazlar Kullanıcı Hareketleri Cihaz Hareketleri	etim Yetkisinin size sunduğu işlevlerdir
Dizin Kul ID	lanırıları İsim	E-mail	COMPANYA COMPANYA Root Node FaDizin(ler) Emo Kullanicilari Listele Kullanici Bağla
Tüm Kull	anıcılar		Kullanıcı Eksilt
	Isim user	E-mail user_770_499080421	AnaDizin Yarat
835	kullanıcı1	user_835_499092735	AnaDizini Sil

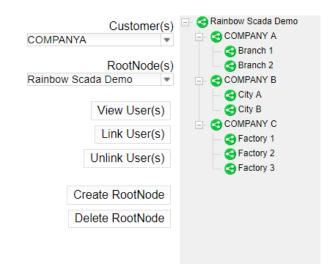
To add sub-nodes, right click on the root node and then select Add Node.

Customer(s)	Rainbow S Add Node	
COMPANYA	Del Node	
RootNode(s) Rainbow Scada Demo	Rename Add Responsible	
View User(s)		
Link User(s)		
Unlink User(s)		
Create RootNode Delete RootNode		

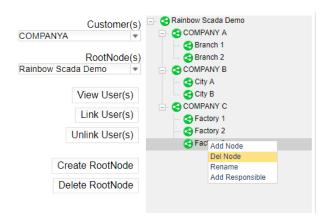
Write a node name and click **Save**.

Tool Help				Exit						
	Below are the tasks you can accomplish with this account Welcome Customers Users Nodes Devices User Logs Device Logs									
Node I Is ID		evice Logs E-mail	Customer(s) COMPANYA	Rainbow Scada Demo						
		Node Name	RootNode(s) Rainbow Scada Demo View User(s)							
All User(Creating Hode ?	Link User(s) Unlink User(s)							
ID 770 835	Name user user1	E-mail user_770_499080421 user_835_499690342 Wode Name: COMPANY A	Create RootNode Delete RootNode							
		in Sare								

A sample node structure can be seen below:



To delete any of the nodes; right click on the node and select Del Node.



Tool Hel	lp				Ex
Welcom	e Customers Users Nodes Devi	ces User Logs Device Logs	Below are the tasks you can accomplish with this account		
Node I ID	Name	E-mail		COMPANYA COMPANYA NotNode(s) tow Scada Demo * View User(s) Link User(s) Unlink User(s)	Rainbow Scada Demo GOMPANY A GOMPANY A GOMPANY B GOMPANY B GOMPANY B GOMPANY B GOMPANY C GOMPANY C Gratony 1 Gratony 2
ID 770 835	Name user user1	E-mail user_770_49908 user_835_49969	Do you really want to delete this Node ?	Create RootNode Delete RootNode	

To delete the **RootNode**; select the RootNode and click **Delete RootNode**.

Tool Help						ſ	0.1	- (N			Exit
Welcome	Customers L	sers Nodes	Devices	User Logs	Device Logs	Below are the tasks you	Select Ro	otinode			
Node LI	or(s)								\sim	Rainbow Scada Demo	
ID	Name				E-mail			COMPANYA	Customer(s)	- COMPANY A	
										Branch 1	
									RootNode(s)	Branch 2	
								Rainbow Scada D	emo 💌	COMPANY B	
								Vie	w User(s)	City B	
						Delete	RootNode	1.6	nk User(s)	COMPANY C	
						Delete				— Sectory 1 — Factory 2	
All User	(c)							Unli	nk User(s)	Sectory 3	
ID	Name				E-mail					•	
770	user				user_770_49908	0421		Create	RootNode		
835	user1				user_835_49969	0342		Delete	RootNode		
Tool Help											Exit
		and the star				Below are the tasks you can	accomplish with this account				
	Customers L	sers Nodes	Devices	User Logs	Device Logs						
Node Lk ID	Name				E-mail				Customer(s)	Rainbow Scada Demo GOMPANY A	
							Click YES	ANYA	Ŧ	- Company A	
								S F	RootNode(s)	Branch 2	
						l	<u> </u>	ow Scada D	emo 🔻	COMPANY B	
								16-		- City A	
									ew User(s)	City B	
								Li	nk User(s)	Sectory 1	
								Unli	nk User(s)	- S Factory 2	
All User	(s)									- S Factory 3	
ID	Name				E-mail	Do you really want to delete thi	s RootNode ?	Create	RootNode		
770 835	user user1				user_770_49908 user_835_49969		ES TE NO	Delete	RootNode		
	03C11				030, 2000 4000			Delete	1100th0000		

If RootNode is deleted, all its sub-notes will also be deleted.

All user accounts are viewed on this screen.

Tool Help)		Exit
Welcome	Customers Users Nodes Devices User Logs Devic	Below are the tasks you can accomplish with the Logs	his account
All User	All Users	E-mail	CUIStomer(s) COMPANYA RootNode(s) Rainbow Scada Demo Rainbow Scada Demo ComPANYA View User(s) Unlink User(s) ComPANYA
ID 770	Name user	E-mail user_770_499080421	Create RootNode
835	user1	user_835_499690342	Delete RootNode

It is possible to link users for the related nodes. Thus, all users will only have permission to access their own nodes.

Select a user from all users list.

				w are the tasks you can accomplish with this account	L	
Welcome	Customers Users	Nodes Devices	User Logs Device Logs			
Node II ID	cor(c) Name		E-mail	Select User	Customer(s) COMPANYA Rainbow Scada Demo View User(s) Link User(s)	Commission Scade Demo Commission Scade Demo Commission Commissio
All Use	(s)			\sim	Unlink User(s)	G Factory 3
ID 770	Name user		E-mail user_770_499080421		Create RootNode	
835	user1		user_835_499690342	V	Delete RootNode	

Select a Node to link the user.

Below are the tasks you can accomplish with this account	
Welcome Customers Users Nodes Devices User Logs Device Logs	
Node Ilser(s) Customer(s) Customer(s) Customer(s) Customer(s) Customer(s) Companya	Demo
All User(s)	
ID Name E-mail 770 user user_770_499080421 Create RootNode	
835 user1 user_835_499690342 Delete RootNode	

Click Link User(s).

Tool Help			Exi
Welcome	Customers Users Nodes	Below are th Devices User Logs Device Logs	e fasks you can accomplish with this account
All User(Name	E-mail	Customer(s) Customer(s) PANYA RootNode(s) Dow Scada Demo Customer(s) Panya New User(s) Link User(s) Unlink User(s) Unlink User(s) Customer(s) Customer(s) Panya Customer(s) Panya Customer(s) Panya Customer(s) Panya Customer(s) Panya Customer(s) Panya Customer(s) Panya Customer(s) Panya Customer(s) Companya Customer(s) Custom
ID 770	Name user	E-mail user_770_499080421	Create RootNode
835	user1	user_835_499690342	Delete RootNode

User(s) will be listed under the **Node User(s)**.

Tool Help		Exit
Welcome Customers Users Nodes Devices User Logs Devic	Below are the tasks you can accomplish with this acc e Logs	ount
All User(s)	E-mail user_835_499690342	CUSTORIES COMPANYA RootNode(s) Rainbow Scada Demo COMPANYA RootNode(s) View User(s) Unlink User(s) Companya
ID Name 770 user	E-mail user_770_499080421	Create RootNode
835 user1	user_835_499690342	Delete RootNode



More than one user can be linked to a Node.

To view a Node's User(s), select the node and then click View User(s).

		Below are the	tasks you can accomplish with this account	
Welcome	Customers Users Nodes Device	S User Logs Device Logs		
Node I ID 835	Iser(s) Nane user1	£-ma11 user_835_499690342	View Users	Customer(s) Grainbow Scala Demo ANYA GONNAN RootNode(s) Grainbow Scala Demo View User(s) Link User(s) Grainbow
All Use	r(S) Name	E-mail		Unlink User(s)

To unlink a user, select it from Node User(s) List and then click Unlink User(s).

Tool Help					Exit
Welcome	Customers Users Nodes Devices User Logs D		can accomplish with this account		
Node Lis ID 835	Name user1	E-mail user_835_499690342		Customer(s)	Company A Compa
Se	elect User			RootNode(s) Rainbow Scada Demo * View User(s)	Company B Company B City A City A Company C
All User	(S) Name	E-mail	Inlink User	Unlink User(s)	G Factory 1 Factory 2 Factory 3
770	user user	user_770_499080421 user_835_499690342		Create RootNode Delete RootNode	

User(s) will be deleted from Node User(s) list.

Tool Help									Ex	tit
Welcome	Customers	Users N	lodes Devices	User Logs	Device Logs	Below are the tasks you can acco	mplish with this account			
Node LIS ID	Name				E-mail			COMPANYA * RootNode(s) Rainbow Scada Demo * View User(s) Link User(s) Unlink User(s)	ComPany Cada Demo ComPany A ComPany A ComPany A ComPany B ComPany B ComPany B ComPany C Comp B ComPany C Comp Cado Comp C	
ID 770	Name user				E-mail user_770_499	9080421		Create RootNode		
835	user1				user_835_499	9690342		Delete RootNode		

2.1.3. Add Device

To add devices, click **Devices** tab.

Tool Help)			E
Welcome	Customers Users Nodes Devices User Logs Devi	Below are the tasks you can accomplish with this acc	ount	
All User	Devices	[E-mail user_835_499690342	COMPANYA * RootNode(s)	Rainbow Scada Demo COMPANY A Branch 1 Branch 1 Company Carlow Company B Company B Company Carlow Company
ID 770	Name user	E-mail user_770_499080421	Create RootNode	
835	user1	user_835_499690342	Delete RootNode	

If there is no device added on account, device list will be empty.

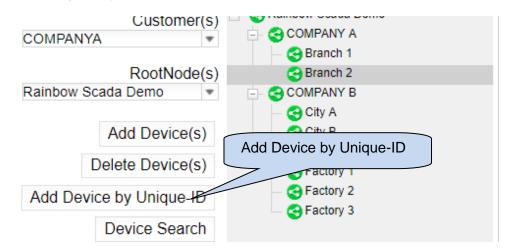
Customers Users Nodes Devices	Below are the tasks you can accomplish with this account	
Unique-ID Site-ID	Customer(s) Device List Monthode(s) KOM INDIA Customer(s) Company A Company A Customer(s) Company A Company A Customer(s) Company A Customer(s) Company A Customer(s) Company A Customer(s) Company A Customer(s) Company A Customer(s) Company A Customer(s) Company A Customer(s) Customer(s) Customer(s) Company A Customer(s) Customer(s) Customer(s) Company A Customer(s) Custome	

To add a device, its Unique ID number must be known.

The Unique ID number can be found on screen of the device.

ENGINE STATUS	DEVICE UNIQUE ID NUM
Mains Failure	19 DØ ØØ Ø9 64 98 D4 AF 4D 11 67 50

Click Add Device by Unique ID.



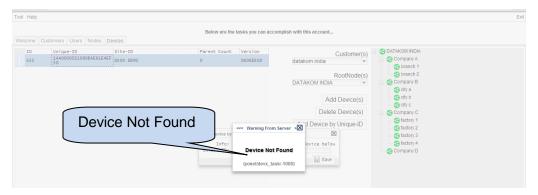
Write the Unique ID number on the viewed screen and click Save.

Tool Help							Exit
Welcome Customers Users Nodes De	evices User Logs Device Logs	Below are the tasks y	you can accomplis	h with this accou	int		
ID Unique-ID 9006 1BF0FF0FC994BEAE6A196056	ENGINE SITE ID	Engine-SN	Parent 0	Version DK0AD500)	Customer(s) COMPANYA	
					į	RootNode(s) Granch 1 Rainbow Scada Demo	
						Add Device(s)	
	Unique					Add Device by Unique-ID	
		Device by Unique-ID			×	Device Search	
		Into Enter t Unique-ID: 18F0FF6	he Unique-ID o PC994BEAE6A196	05.6		Device Next	
				5	Save	Device Count = 1	

Device will be Seen on the Device List.

Tool Help				Exit
Welcome Customers Users Nodes Devices User Logs Device Logs	Below are the tasks you can accom	Device]	
ID Urigue:ID Site-ID Site-ID EAGINE SITE ID EAGINE SITE ID	Engine-SN 0	DKOADSOO COI	Customer(s) MPANYA RootNode(s) Add Device(s) Delete Device(s) Device Search Device Count = 1 Customer(s) ComPany A ComPany B ComPany	

If an invalid Unique ID number is entered, Device Not Found message will appear on the screen.



If device is already defined for another user account, "Device Belongs to Someone Else" error message will be displayed on the screen.

Tool Help Welcome Customers Users Nodes Devices User Logs Device Logs	Below are the tasks y	ou can accomplish	with this account	L	E
ID Unique-ID Site-ID Site-ID ENGINE SITE ID	Engine-SN	Parent O	Version DKOAD500	CUSTOMPANYA * RootNode(s) Rainbow Scada Demo * Add Device(s) Delete Device(s)	Rainbow Scada Demo COMPANY A COMPANY A Company Company Company Company Company Compan
Device Belongs to Someone Else	Device Br	Aarning From Server elongs to Someo met/devx_task/-102 welongs to someon	one Else	t Device by Unique-ID Device Search Device Next Device Count = 1	G Factory 1 G Factory 2 G Factory 3

Once the device is added, since it is not linked with any node, parent count will be zero.

Tool Help Welcome Customers Users Nodes Devices User Logs Device Logs	Below are the tasks you can accomplish wit	Parent Count	Exit
ID Unique-ID [site-ID 9006 [IBFOFFOFC994EEAEAA196056] ENGINE SITE ID	Engine-SN Parent Vor	COMPANYA RootNode(s) Rainbow Scada Demo Add Device(s) Delete Device(s) Add Device(s)	wy Grada Demo MPANY A Branch 1 Branch 2 MPANY B Cdty A Cdty A Cdty A Cdty B Cdty A Cdty B DMPANY C Fieldony 1 Fieldony 1 Fieldony 3

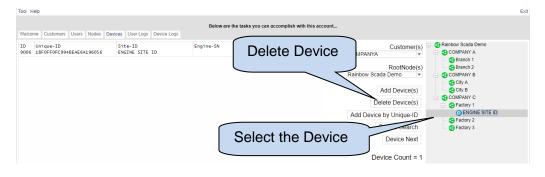
In order to link the device with a node; select the device, select the node and then click **Add Device(s)** tab.

Tool Help						Exit
Welcome Customers Users Nodes Der	vices User Logs Device Logs	Below are th	e tasks you can accomplis	h with this account		
ID Unique-ID 9006 1BFOFFOFC994BEAE6A196056	Site-ID ENGINE SITE ID	Engine-SN	Parent 0	Version DKOAD500	Customer(s) COMPANYA	Rainbow Scada Demo COMPANY A G Branch 1
			Add De	vice [RootNode(s) Rainbow Scada Demo *	G Branch 2 COMPANY B City A
Select the I	Device				Add Device(s) Delete Device(s)	G City B G COMPANY C G Factory 1
			ſ	Selec	Add Device by Linese1D Search t Node	G Factory 2
			l		ount = 1	

Device will be set under the selected node;

Tool Help						Exit
Welcome Customers Users Nodes D	Devices User Logs Device Logs		sks you can accomplis	h with this accour	1	
10 Unique-10 9006 IBFOFF0FC9948EAE6A196056	Site-ID ENGINE SITE ID	Engine-SX	Parent 1	Version DKOAD500	CUSTOMER(S) COMPANYA RootNode(S) Rainbow Scada Demo Add Device(S) Delete Device(S) Delete Device(S) Delete Device(S) Delete Device(S) COMPANYA COM	

To delete a device; select device and then click **Delete Device(s)**.



3. MONITORING ACCOUNT LOGIN

Click on the below link to access to Rainbow Scada:

http://rm.datakom.com.tr/

← → C ③ Güvenli değil rm.datakom.com.tr	* 🗵	G :
Rainbow Scada Login		
Username		
Password		
Login		
Manage		
This application requires one of these browsers: Feedba 23 v. Onrome 29 v. Salard 6 or E. 10 v		

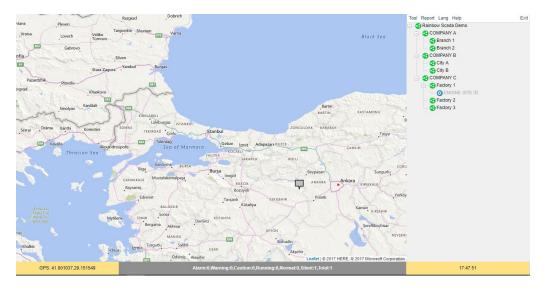


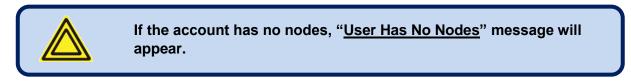
Rainbow Scada application requires Firefox 23+, Chrome 29+, Safari 6+ or IE 10+

Type user name and password and click Login.

🖉 Rainbow Scada 🛛 🗙		≜ – σ ×
← → C ③ Güvenli		☆ 🗷 🖧 🗄
Username	Rainbow Scada Login Password	d
	user	
	Login	
	Manage	
Login	This application regulars one of these browsers: Fredroz 294, Chrome 204, Safan 64 or 18:104	

Main screen of the monitoring page will be viewed.







3.1. OVERVIEW

Every device is represented by a colour box, both on the map and on the right hand tree structure.

Colors on the map are sorted so that the most important information overrides other information.

On the right hand side tree structure, a controller with a fault condition will turn all upper levels to this color.

The color coding is as follows:

RED: The controller has a high priority fault condition (shutdown or loaddump alarm)

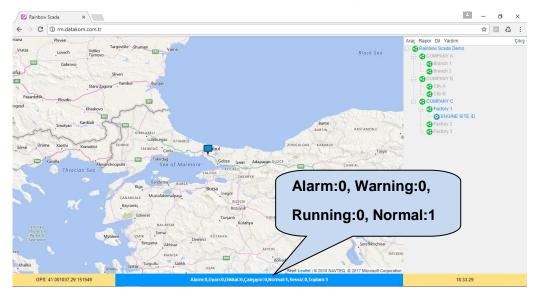
ORANGE: The controller has a low priority fault condition (a warning)

GREY: The controller has stopped communication with the Rainbow Scada program.

GREEN: The genset is running, there is no fault condition.

BLUE: The controller is at rest, genset is not running, there is no fault condition.

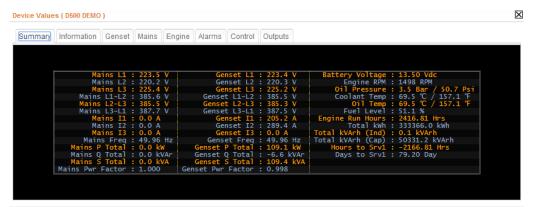
The detailed number of controllers are written under the map



As Engine Site ID controller is orange, indicating a warning condition, then factory 1, Company C, Rainbow Scada Demo become orange.



If a controller is clicked on the Map, the information screen will be opened.



3.2. MENU

Right-click on a device to view a menu for the list of possible actions related to that device.



3.2.1. Show Device Position

Click Show Device Position to align the device at the center of the map.



3.2.2. Show Device Values

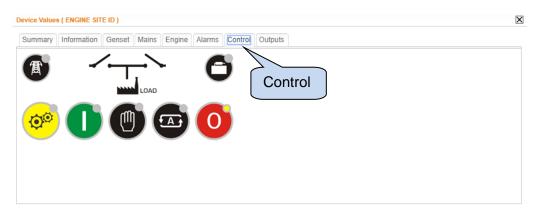
Select **Show Device Values** to view the summary screen. Most vital information will be viewed on this screen.

Device Value	s (D500 DEMO)						X
Summary	Information Genset	Mains	Engine Alarms	Control	Outputs	Summary	
	Mains L1				: 223.4 V	Batt , Voltage : 13.50 Vdc	
	Mains L2			enset L2		Engine RPM : 1498 RPM	
	Mains L3				: 225.2 V	Oil Pressure : 3.5 Bar / 50.7 Psi	
	Mains L1-L2				: 385.5 V	Coolant Temp : 69.5 °C / 157.1 °F	
	Mains L2-L3				: 385.3 V	0il Temp : 69.5 ℃ / 157.1 °F	
	Mains L3-L1				: 387.5 V	Fuel Level : 51.1 %	
	Mains I1				: 205.2 A	Engine Run Hours : 2416.81 Hrs	
	Mains I2				: 289.4 A	Total kWh : 333366.0 kWh	
	Mains I3			enset I3		Total kVArh (Ind) : 0.1 kVArh	
	Mains Freq				: 49.96 Hz	Total kVArh (Cap) : 50331.2 kVArh	
	Mains P Total				: 109.1 kW	Hours to Srv1 : -2166.81 Hrs	
	Mains Q Total				: -6.6 kVAr	Days to Srv1 : 79.20 Day	
	Mains S Total				: 109.4 kVA		
	Mains Pwr Factor	: 1.000	Genset Pw	r Factor	: 0.998		

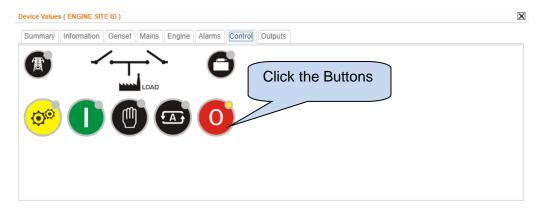
Alarm screen will display all existing alarms on the controller.



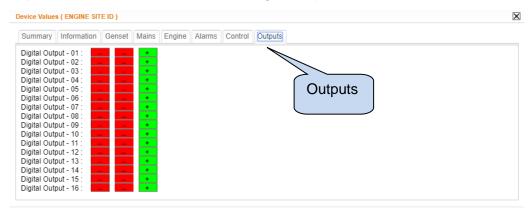
Click **Control** tab, Keypad screen will be viewed.



This Keypad is functional but not real-time like a physical KeyPad. Depending on the connection type and quality, feedback might lag.



Click **Outputs** tab to view remote controlled digital outputs screen.



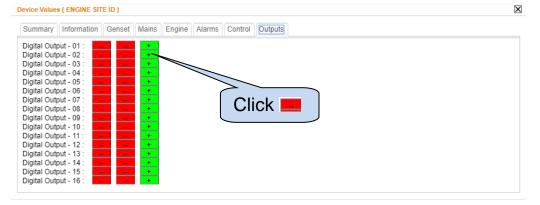
The D-500 genset controller offers 16 externally controllable digital output functions.

These output functions have no effect in the operation of the unit; however they can be redirected to any digital output, allowing remote control of functions or external devices.

The remote control of these outputs are enabled through Rainbow Scada remote control functions.

	Output status are kept in a non- by power failures.	-volatile memory and are not affected
Click 💶 button	o activate the remote output.	
Device Values (EN	INE SITE ID)	\boxtimes
Summary Infor	nation Genset Mains Engine Alarms Control Outputs	
Digital Output - 0 Digital Output - 1 Digital Output - 1	Current Status	

Click <u>button</u> to disable the remote output.



3.2.3. Show Device Analysis

Click Show Device Analysis to view analysis page.

art Date : 10.07.2017	v 00:00:00	¥ .	Color -	▼ Color -	▼ Color
		-	Color -	▼ Color -	▼ Color
ind Date : 12.07.2017	▼ 00:00:00	· ·	Color -	▼ Color -	Color

Device analysis function allow users to access stored data on server. It is possible to analyse past performance of your system.

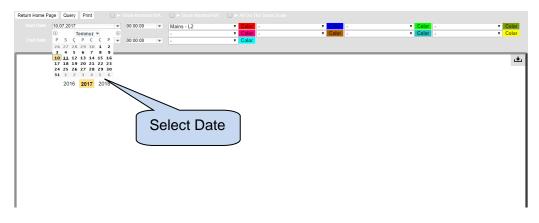
9 different data can be displayed on one screen by selecting from boxes.

Return Home Page Query Print					
Start Date : 10.07.2017	▼ 00:00:00 ▼	•	Color -	▼ Color -	▼ Color
		-	Color -	Color -	Color
End Date : 12.07.2017	· 00:00:00 ·	Genset - Mode	Color -	Color -	▼ Color
		Genset - State Genset - L1	_		
		Genset - L2			بە
1		Genset - L3			<u> </u>
1		Genset - L1-L2			
1		Genset - L2-L3			
1		Genset - L3-L1			
1		Genset - I1 Genset - I2			
1		Genset - 12 Genset - 13			
1		Genset - In			
1		Genset - Frequency			
1		Genset - Pwr Factor			
1		Genset - Tot Active Pwr			
1		Genset - Tot Reactive Pwr			
1		Genset - Tot Apparent Pwr Genset - Total kWh			
1		Genset - Total kVArh (Ind)	-		
1					
1					
1					

Color coding of the graphs can be edited.

Rainbow Scada - 2.5 × Veni Sekme	×	and the second line		
$\leftrightarrow \Rightarrow \mathbf{C}$ [] rm.datakom.com.tr/?lang=en				☆ =
Return Home Page Query Print Show Nomina	al KVA 🔹 🕨 Show Nominal KW 👘 🕨 All On The	Same Scale		
Start Date : 5/29/2014 M. 08/35/28 V End Date : 5/29/2014 V 08/53/28 V 08/53/28 V	lains - L1 Color - Color - Color - Color - Color -	 ▼ Color ▼ Color ■ Color - 	Color Color Color Color	
C	lick Color		Sele	ct Color

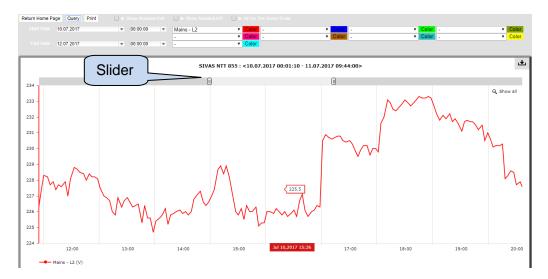
Select start date and end date.



Click **Query** button. The graph will be generated within selected dates.



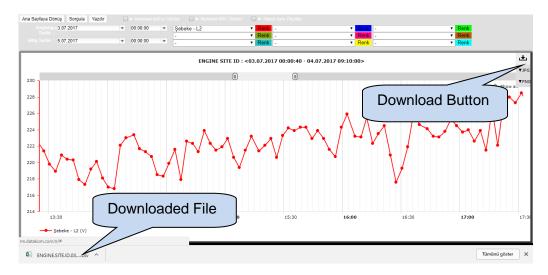
Use sliders to Zoom in and out.

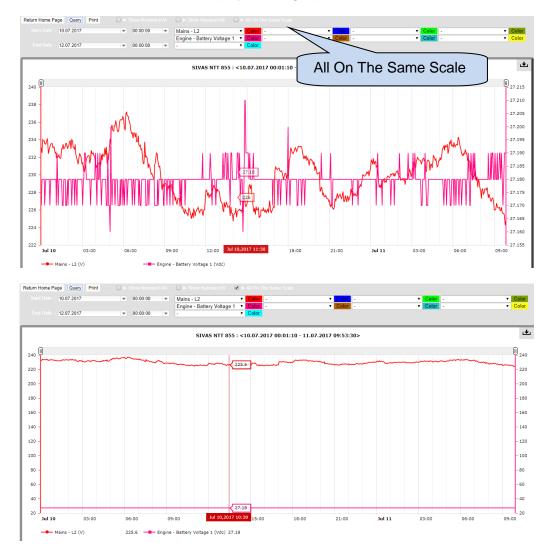




Click **Print** button to print the displayed graph.

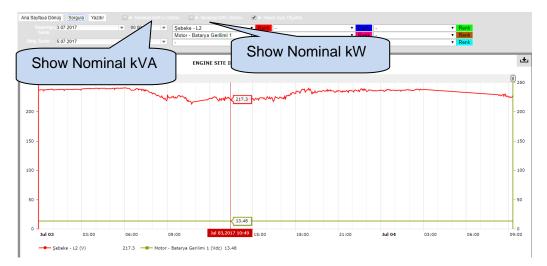
Click download to save the graph as .csv, jpg or png file.

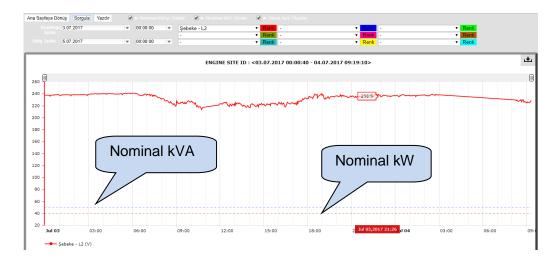




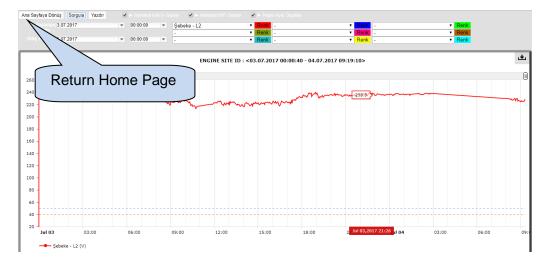
Select All On The Same Scale to display all the graphs on the same scale.

If Show Nominal kVA and show Nominal kW are selected, nominal kVA and kW values are displayed on the same graph.





Click Return Home Page for the main screen.



3.2.4. Show Device Options

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Select **Show Device Options** to view device options. List of available functions will be displayed.



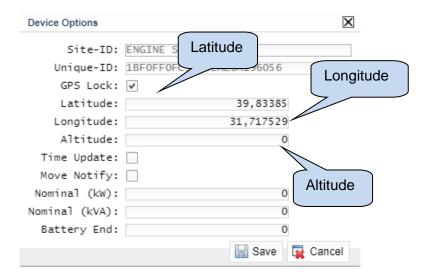
Site ID and Unique ID number will be displayed on this screen.

	Site ID	
Device Options		Unique ID
Site-ID:	ENGINE SITE ID	
Unique-ID:	1BF0FF0FC994BEAE6A196056	
GPS Lock:	✓	
Latitude:	39,83385	
Longitude:	31,717529	
Altitude:	0	
Time Update:		
Move Notify:		
Nominal (kW):	0	
Nominal (kVA):	0	
Battery End:	0	
	🕌 Save 🙀	Cancel

Device Options		٥
Site-ID:	GPS Lock	
Unique-ID:	1BF0F C994BEAE6A196056	
GPS Lock:	a contraction of the second se	
Latitude:	39,83385	
Longitude:	31,717529	
Altitude:	0	
Time Update:		
Move Notify:		
Nominal (kW):	0	
Nominal (kVA):	0	
Battery End:	0	
	🔡 Save [🙀 Cancel

If GPS Lock is selected, the device position will be locked.

It is possible to manually enter Latitude, Longitude and Altitude values.



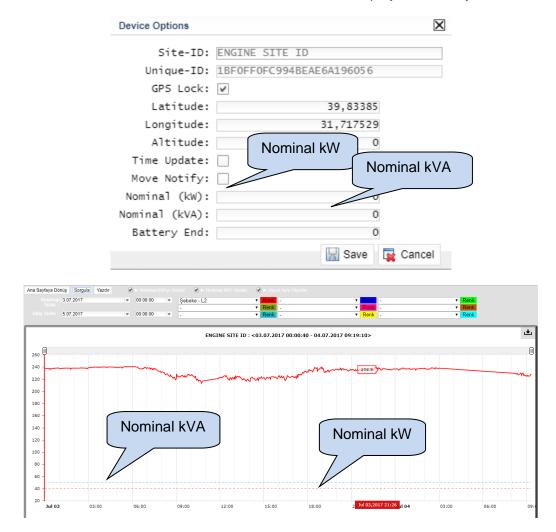
If Time Update is selected, the device data-time will be automatically synchronized to the server.

Device Options	×	(
Site-ID:	ENGINE SITE ID]
Unique-ID:	1BF0FF0FC994BEAE6A196056	
GPS Lock:	v	
Latitude:	3385	
Longitude:	Time Update 529	
Altitude:	0	
Time Update:		
Move Notify:		
Nominal (kW):	0	
Nominal (kVA):	0	
Battery End:	0	
	🔚 Save 🙀 Cancel	

If Move Notify is selected, the system will send e-mails to defined e-mail addresses if the device geo-position is changed. This is useful for mobile devices.

Device Options	×
	ENGINE SITE ID 1BF0FF0FC994BEAE6A196056
GPS Lock:	
Latitude:	39,83385
Longitude:	31 717529
Altitude:	Move Notify o
Time Update:	
Move Notify:	
Nominal (kW):	0
Nominal (kVA):	0
Battery End:	0
	🔚 Save 🙀 Cancel

If Nominal kW and kVA are entered, these values can be displayed on analysis screen.

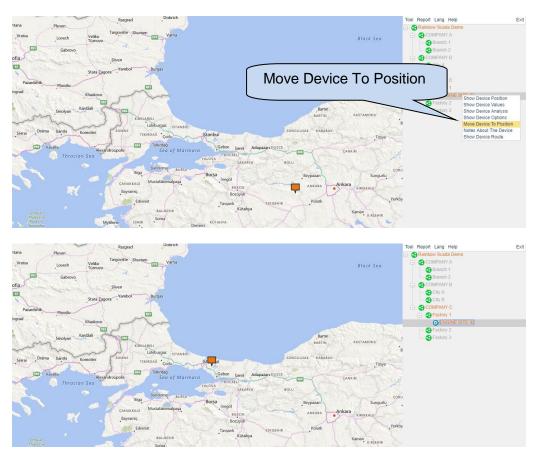


Click **Save** button to save the changes.

Device Options		X	
Site-ID:	ENGINE SITE ID		
Unique-ID:	1BF0FF0FC994BEAE6A196056		
GPS Lock:	v		
Latitude:	39,83385		
Longitude:	31,717529		
Altitude:	0		
Time Update:			
Move Notify:			
Nominal (kW):	0		
Nominal (kVA):	Save 0		
Battery End:	0		
	Save	🙀 Cancel	

3.2.5. Move Device To Position

Click **Move Device To Position** to relocate the icon of this controller to the position of the Last Mouse Click.



If GPS Lock is selected, Position Locked message will be displayed on the screen.



4. TOOLS

4.1. Tool

4.1.1 Change Password

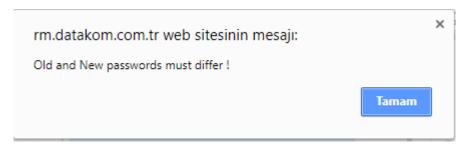
It is possible to change password of the remote monitoring account. Click **Tool**, and click **Change Password**.



Enter current password, new password and then click Change.

c Current Password		New F	Password
Current Password:		7/	
New Password:	•••••	F	
New Password (again):	• • • • • • • • • •		
		🚽 Change	

If the same password is entered, warning message will be viewed.



4.1.2 Search by Engine Serial Number

It is also possible to find the device once Unique ID is known. Click **Tool**, and click **Search by Engine SN**.



New window will appear asking the serial number to search. Please type the serial number of the unit.



Once the entered serial number is matched with the unit, it will be highlighted on remote monitoring account.



4.1.3 Device Statistics

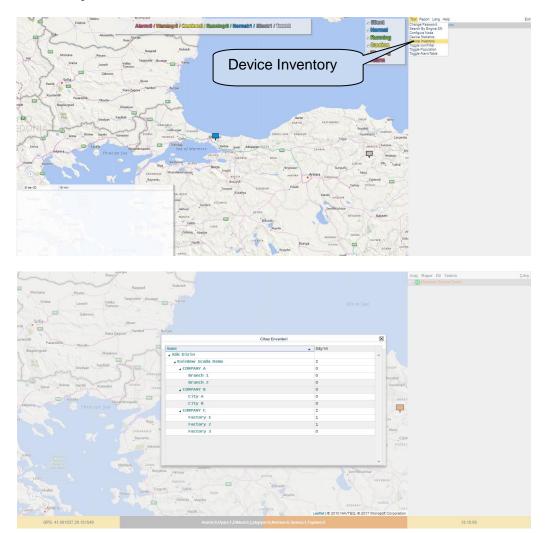
Device Statistics tab under the **Tool** menu displays statuses of all devices graphically. Click **Tool**, and click **Device Statistics** tab.





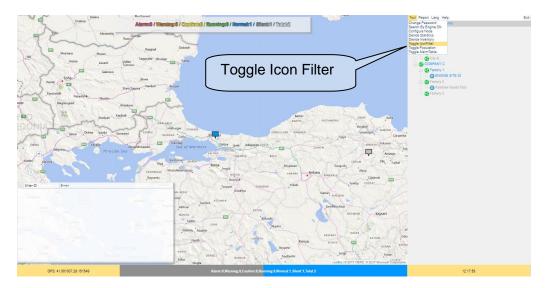
4.1.4 Device Inventory

Device Inventory tab under the **Tool** menu displays the number of devices linked with each node in detail. Click a node to display devices connected to it. After that, click **Tool**, and click **Device Inventory** tab.

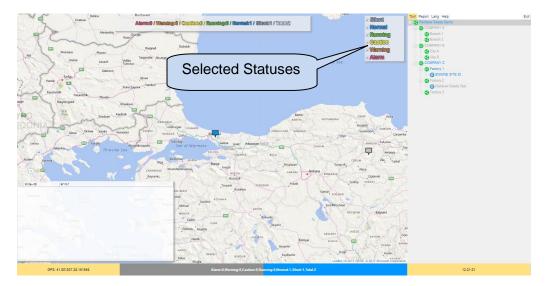


4.1.5 Toggle Icon Filter

Devices on remote monitoring system can be filtered with respect to their status providing ease of use. Filtered statuses are; alarm, warning, caution, silent, running, and normal. Filtering can be performed by clicking **toggle icon filter** under **tool** menu.

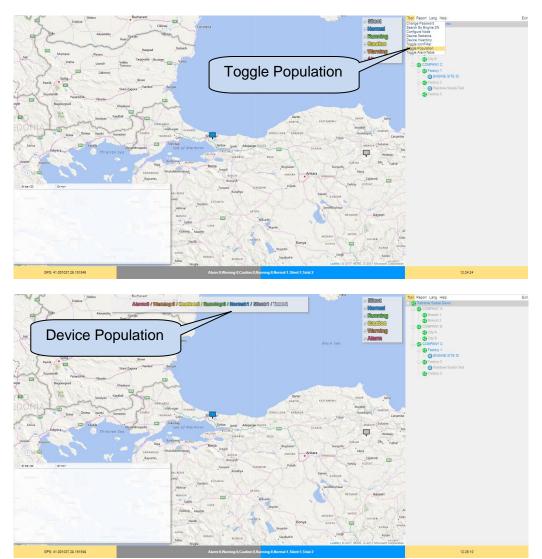


New window will appear allowing users to filter statuses of the devices. You can select statuses that you would like to filter. Only devices with selected statuses will be displayed on remote monitoring system.



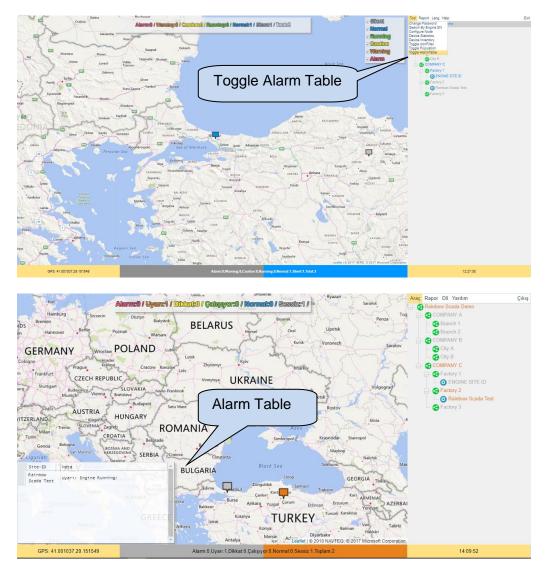
4.1.6 Toggle Population

Toggle Population tab under **tool** menu will create a new window on the remote monitoring system, which displays device population indicating their statuses.



4.1.7 Toggle Alarm Table

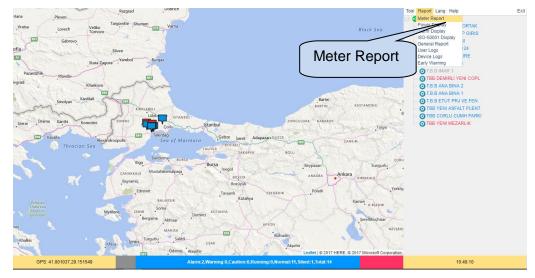
Toggle Alarm Table tab under the **tool** menu will create a new window on the remote monitoring system, which has a list of alarms and warnings of all devices.



4.2. Report

4.2.1. Meter Report

If account has metering devices, click Meter Report to view measurements on one screen.



Inductive/capacitive percentages and kWh measurement are displayed on this screen.

teturn Home Page			Mete	r Report				
Today Last 7 Days Last 31 Da	this Month			%Ind				Save to File
Site Info	Serial NO	Status	Start Date	/01110	% Ind.	% Cap.	kWh	
T.B.B IMAR 2 VE ORTAK	1234567890	NORMAL	Mon Jul 10 2017	j	0.4	1.8	2710.0	
TBB SAHIL OZG P GIRIS	1234567890	NORMAL	Mon Jul 10 2017		0.1	0.1	10790.0	~
T.B.B BILGI ISLEM	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11	0.1	0.7	20690.0	
DATAKOM/DFC0124	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	0.2	0.0	11570.0	>>-
T.B.B ULASIM DAIRE	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	1.1	4.0	17490.0	(
T.B.B ANA BINA 3	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	1.4	0.0	15400.0	l kWł
T.B.B IMAR 1	1234567890	WARNING	Mon Jul 10 2017	Tue Jul 11 2017	N/A	N/A	N/A	
TBB DEMIRLI YENI COPL	1234567890	PENALTY	Mon Jul 10 2017		1.0	202.0	990.0	
T.B.B ANA BINA 2	1234567890	NORMAL	Mon Jul 10 2017	%Can	1.1	0.6	8300.0	
T.B.B ANA BINA 1	1234567890	NORMAL	Mon Jul 10 2017	, ooup (1.4	0.3	8690.0	
T.B.B ETUT PRJ VE FEN	1234567890	NORMAL	Mon Jul 10 2017	~		1.6	11220.0	
TBB YENI ASFALT PLENT	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	3.8	1.7	3460.0	
TBB CORLU CUMH PARKI	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	0.4	7.1	8180.0	
TBB YENI MEZARLIK	1234567890	PENALTY	Mon Jul 10 2017	Tue Jul 11 2017	55.8	1.9	520.0	

It will be easier to check reactive consumption by considering status column.

Today Last 7 Days Last 31 Da	ys This Month							
								Save to File
Site Info	Serial NO	Status	Statu	IC te	% Ind.	% Cap.	kWh	
T.B.B IMAR 2 VE ORTAK	1234567890	NORMAL	Mon Statt	1 11 2017	0.4	1.8	2710.0	
TBB SAHIL OZG P GIRIS	1234567890	NORMAL	Mon	1 11 2017	0.1	0.1	10790.0	
T.B.B BILGI ISLEM	1234567890	NORMAL	Mon >	ul 11 2017	0.1	0.7	20690.0	
DATAKOM/DFC0124	1234567890	NORMAL	Mon 2 2017	Tue Jul 11 2017	0.2	0.0	11570.0	
T.B.B ULASIM DAIRE	1234567890	NORMAL	M 01 10 2017	Tue Jul 11 2017	1.1	4.0	17490.0	
T.B.B ANA BINA 3	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	1.4	0.0	15400.0	
T.B.B IMAR 1	1234567890	WARNING	Mon Jul 10 2017	Tue Jul 11 2017	N/A	N/A	N/A	
TBB DEMIRLI YENI COPL	1234567890	PENALTY	Mon Jul 10 2017	Tue Jul 11 2017	1.0	202.0	990.0	
T.B.B ANA BINA 2	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	1.1	0.6	8300.0	
T.B.B ANA BINA 1	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	1.4	0.3	8690.0	
T.B.B ETUT PRJ VE FEN	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	0.4	1.6	11220.0	
TBB YENI ASFALT PLENT	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	3.8	1.7	3460.0	
TBB CORLU CUMH PARKI	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	0.4	7.1	8180.0	
TBB YENI MEZARLIK	1234567890	PENALTY	Mon Jul 10 2017	Tue Jul 11 2017	55.8	1.9	520.0	

Click time interval selections to scan reactive consumption within intervals.

Today Last 7 Days Last 31 Da	Time In	torval						
								Save to File
Site Info	Serial NU	Status	Start Date	End Date	% Ind.	% Cap.	kWh	
T.B.B IMAR 2 VE ORTAK	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	0.4	1.8	2710.0	
TBB SAHIL OZG P GIRIS	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	0.1	0.1	10790.0	
T.B.B BILGI ISLEM	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	0.1	0.7	20690.0	
DATAKOM/DFC0124	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	0.2	0.0	11570.0	
T.B.B ULASIM DAIRE	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	1.1	4.0	17490.0	
T.B.B ANA BINA 3	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	1.4	0.0	15400.0	
T.B.B IMAR 1	1234567890	WARNING	Mon Jul 10 2017	Tue Jul 11 2017	N/A	N/A	N/A	
TBB DEMIRLI YENI COPL	1234567890	PENALTY	Mon Jul 10 2017	Tue Jul 11 2017	1.0	202.0	990.0	
T.B.B ANA BINA 2	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	1.1	0.6	8300.0	
T.B.B ANA BINA 1	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	1.4	0.3	8690.0	
T.B.B ETUT PRJ VE FEN	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	0.4	1.6	11220.0	
TBB YENI ASFALT PLENT	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	3.8	1.7	3460.0	
TBB CORLU CUMH PARKI	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	0.4	7.1	8180.0	
TBB YENI MEZARLIK	1234567890	PENALTY	Mon Jul 10 2017	Tue Jul 11 2017	55.8	1.9	520.0	

Click **Save To File** to save the report in .csv format.

Home Page	This Month		Meter		ave to	File	Save to
ite Info	Serial NO	Status	Start Date	End Date	15 Ind.	is cap.	kwh
AFRA	1234567890	WARNING	Tue Jun 03 2014	Wed Jun 04 2014	N/A	N/A	N/A
aradeniz erk60031136	60031136	NORMAL	Tue Jun 03 2014	Wed Jun 04 2014	3.0	7.1	35610.0
INOP/KEFEVI MAH.	1234567890	NORMAL	Tue Jun 03 2014	Wed Jun 04 2014	3.9	2.6	6890.0
INOP NATO YOLU BBLOK	1234567890	NORMAL	Tue Jun 03 2014	Wed Jun 04 2014	1.9	7.7	2070.0
INOP NATO YOLU ABLOK	N/A	NORMAL	Tue Jun 03 2014	Wed Jun 04 2014	4.4	7.4	2700.0
OKAT MERKEZ B BLOK	N/A	PENALTY	Tue Jun 03 2014	Wed Jun 04 2014	21.5	19.5	7070.0
arsamba yurt	N/A	WARNING	Tue Jun 03 2014	Wed Jun 04 2014	N/A	N/A	N/A
ILE BAHCELIEVLER MAH	N/A	WARNING	Tue Jun 03 2014	Wed Jun 04 2014	N/A	N/A	N/A
OKAT YURT A/B/C/D	1234567890	PENALTY	Tue Jun 03 2014	Wed Jun 04 2014	27.8	8.6	40460.0
OKAT MERKEZ A BLOK	N/A	WARNING	Tue Jun 03 2014	Wed Jun 04 2014	12.2	7.1	5240.0
MASYA YURT MUD.	70102234	WARNING	Tue Jun 03 2014	Wed Jun 04 2014	N/A	N/A	N/A
00 EVLER KIZ YURDU	1234567890	WARNING	Tue Jun 03 2014	Wed Jun 04 2014	11.0	1.7	6300.0
SMANIYE/E BLOK	N/A	NORMAL	Tue Jun 03 2014	Wed Jun 04 2014	2.4	0.5	6340.0
MASYA YESILIRMAK/A	50049278	WARNING	Tue Jun 03 2014	Wed Jun 04 2014	N/A	N/A	N/A
ESILIRMAK B BLOK	1234567890	WARNING	Tue Jun 03 2014	Wed Jun 04 2014	N/A	N/A	N/A
ERZIFON KIZ A BLOK	1234567890	WARNING	Tue Jun 03 2014	Wed Jun 04 2014	N/A	N/A	N/A
BNI KEMAL	1234567890	WARNING	Tue Jun 03 2014	Wed Jun 04 2014	N/A	N/A	N/A
URHAL	1234567890	WARNING	Tue Jun 03 2014	Wed Jun 04 2014	6.3	8.9	2690.0
arsamba sungurlu mh	N/A	WARNING	Tue Jun 03 2014	Wed Jun 04 2014	N/A	N/A	N/A
KM-409 (0)	N/A	WARNING	Tue Jun 03 2014	Wed Jun 04 2014	N/A	N/A	0.0
Down	lload						

Click Return Home Page for the main screen.

Today ovs Last 31 Da	ays This Month		Meter	Report				
\rightarrow \sim		_						Save to File
Site		Status	Start Date	End Date	% Ind.	% Cap.	kWh	
💀 Return I	Home Page	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	0.4	1.8	2710.0	
твв	lenne i age	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	0.1	0.1	10790.0	
т. в.		NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	0.1	0.7	20690.0	
DATAKOM/DECOLO	1234507030	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	0.2	0.0	11570.0	
T.B.B ULASIM DAIRE	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	1.1	4.0	17490.0	
T.B.B ANA BINA 3	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	1.4	0.0	15400.0	
T.B.B IMAR 1	1234567890	WARNING	Mon Jul 10 2017	Tue Jul 11 2017	N/A	N/A	N/A	
TBB DEMIRLI YENI COPL	1234567890	PENALTY	Mon Jul 10 2017	Tue Jul 11 2017	1.0	202.0	990.0	
T.B.B ANA BINA 2	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	1.1	0.6	8300.0	
T.B.B ANA BINA 1	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	1.4	0.3	8690.0	
T.B.B ETUT PRJ VE FEN	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	0.4	1.6	11220.0	
TBB YENI ASFALT PLENT	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	3.8	1.7	3460.0	
TBB CORLU CUMH PARKI	1234567890	NORMAL	Mon Jul 10 2017	Tue Jul 11 2017	0.4	7.1	8180.0	
TBB YENI MEZARLIK	1234567890	PENALTY	Mon Jul 10 2017	Tue Jul 11 2017	55.8	1.9	520.0	

4.2.2. Power Display

Power Display screen reports voltage, current and power measurements in detail related with each node. Therefore, if more than one device is connected to a node, total power consumptuion can be monitored easily.



Nodes can be expanded or collapsed by clicking **View Menu** by **Expand All**, and **Collapse All** options.

ame	Power - P Total (kW)	Power - Q Total (kVAr)	Power - S T	otal (kVA)
RootNode		255.8	-4.6	264.5
Tekirdag Belediyesi		255.8	-4.6	264.5
T.B.B IMAR 2 VE ORTAK		3.6	0.0	3.9
TBB SAHIL OZG P GIRIS		8.4	0.0	9.3
T.B.B BILGI ISLEM		40.0	0.1	40.3
DATAKOM/DFC0124		20.5	0.1	20.6
T.B.B ULASIM DAIRE		51.6	-1.3	51.9
T.B.B ANA BINA 3		40.1	0.0	40.8
T.B.B IMAR 1		3.5	-0.0	3.7
TBB DEMIRLI YENI COPL		0.3	-3.9	4.0
T.B.B ANA BINA 2		18.4	0.3	19.1
T.B.B ANA BINA 1		22.1	0.0	22.7
T.B.B ETUT PRJ VE FEN		33.3	0.0	33.6
TBB YENI ASFALT PLENT		13.0	0.0	13.0
TBB CORLU CUMH PARKI		0.3	0.0	1.1
TBB YENI MEZARLIK		0.4	0.3	0.6

Power display screen is also configurable. Click **Tool** and then click **Configure View**. Values displayed on the **Power Display Screen** can be configured one by one.

nfigure View	 Power - P Total (kW) 	P	ower - Q Total (kVAr)	Power - S Total (kVA)
RootNode	_	237.7	-4.1	247.
Tekirdag Belediyez		237.7	-4.1	247.
T.B.B IMAR 2 VE Confid	gure View	3.4	0.0	3.
TBB SAHIL OZG P	5	8.3	0.0	9.
T.B.B BILGI ISLET		39.4	0.0	39.
DATAKOM/DFC0124		20.5	0.1	20.
T.B.B ULASIM DAIRE		46.1	-1.5	46.
T.B.B ANA BINA 3		43.1	0.0	43.
T.B.B IMAR 1		3.5	-0.0	3
TBB DEMIRLI YENI COPL		0.2	-4.0	4
T.B.B ANA BINA 2		19.0	0.6	19
T.B.B ANA BINA 1		17.2	0.4	17
T.B.B ETUT PRJ VE FEN		30.7	0.0	30
TBB YENI ASFALT PLENT		4.9	0.0	5
TBB CORLU CUMH PARKI		0.3	0.0	1
TBB YENI MEZARLIK		1.0	0.3	1

View Configuration screen will be seen below. You can configure column values on this screen.

View Configuration		X
Column Value -	1: Power - P Total (kW)	Ŧ
Column Value -	2: Power - Q Total (kVAr)	Ŧ
Column Value -	3: Power - 5 Total (kVA)	Ŧ
Column Value -	4: -	Ŧ
Column Value -	5: -	-
Column Value -	6: Genset - V1 (V)	
Column Value -	Genset - V2 (V)	
Column Value -	Genset - V3 (V)	
	Gensel-OT(V)	
Column Value -		- 11
	Genset - U3 (V)	-
	Genset - I1 (A) Genset - I2 (A)	
	Genset - 13 (A)	
	Power - P Total (kW)	
	Power - Q Total (kVAr)	
	Power - S Total (kVA)	
	Power - P1 (kW)	
	Power - P2 (kW)	
	Power - P3 (kW)	
	Power - Q1 (kVAr)	
	Power - Q2 (kVAr)	
	Power - Q3 (kVAr)	
	Power - S1 (kVA)	
	Power - S2 (kVA)	Ψ.

Click **Save** button to save the configuration.

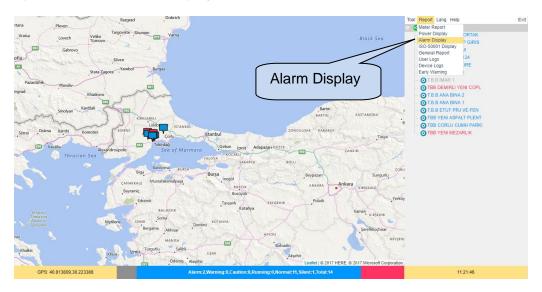
Click **Go Back** for the main screen.

lame	Power - P Total (kW)	Power - Q Total (kVAr)	Power -	S Total (kVA)	1
RootNode		247.9	-0.7		257.0
Tekirdag Belediyesi		247.9	-0.7		257.0
T.B.B IMAR 2 VE ORTAK		6.5	0.0	Go Back	6.7
TBB SAHIL OZG P GIRIS		10.1	0.0	OU Dack	10.
T.B.B BILGI ISLEM		40.7	0.1		41.0
DATAKOM/DFC0124		20.5	0.1		20.
T.B.B ULASIM DAIRE		45.3	-0.3		45.
T.B.B ANA BINA 3		43.7	0.0		44.
T.B.B IMAR 1		3.5	-0.0		3.
TBB DEMIRLI YENI COPL		0.3	-4.1		4.
T.B.B ANA BINA 2		23.6	1.8		24.
T.B.B ANA BINA 1		21.9	1.5		22.
T.B.B ETUT PRJ VE FEN		25.7	0.0		26.
TBB YENI ASFALT PLENT		4.6	0.0		5.
TBB CORLU CUMH PARKI		0.3	0.0		1.
TBB YENI MEZARLIK		1.2	0.3		1.

4.2.3. Alarm Display

Alarm display screen reports all existing alarms and warnings on one screen.

Click Report and click Alarm Display.



Alarm display screen will be displayed ;

ol Help					Go Bad
Time	Site-ID		version		
2014-06- 09т05:55:58z	TASKOPRU TEPE	1FF0FF0B6498D4AFEC2F67 50	DK05D50 0	ShutDown: Low Battery Voltage; Warning: Low Battery Voltage	
2014-06- 09T05:47:40Z	DATCAMESUD1YEKNDO SYOL	01B00009291CD4AF2F2C61 50	DK05D50 0	warning: Service 1 Request	
2014-06- 09T05:44:03Z	TURKCELL_CALTEPE	0FD0FF0F02A1D0AF78B61C 50	DK05D50 0	Warning: Service 1 Request	
2014-06- 09т05:44:03z	BITLIS/DIDEBAN/TR T	50	· ·	warning: Kabin kapsi acik	
2014-06- 09T05:44:03Z	KARAHALKA-KOYU	01A000056498D4AF76F866 50	DK05D50 0	warning: Service 1 Request	
2014-06- 09T05:44:03Z	KARGIPINAR-YENI	145001056498D4AF4AF966 50	DK05D50 0	Warning: Service 1 Request	
2014-06- 09T05:44:03Z	EREGLI/OREN	50	·	warning: Service 1 Request	
2014-06- 09т05:44:03z	HATAY SAMANDAG YOLU	1D10010A291CD4AF173361 50	DK05D50 0	warning: Fail To Stop	
2014-06- 09T05:44:03Z	KARAKOC	093000056498D4AF72FA66 50	DK05D50 0	Warning: Service 1 Request	
2014-06- 09T05:44:03Z	ORMANLI/HALASLI	0FF00003291CD4AFA80661 50	DK05D50 0	Warning: Service 1 Request	
2014-06- 09T05:44:03Z	KAYMAKLI/GOZTEPE	003000026498D4AF74E766 50	DK05D50 0	warning: Service 1 Request	

Alarm list can be sorted by Time, Alarm level & Time.

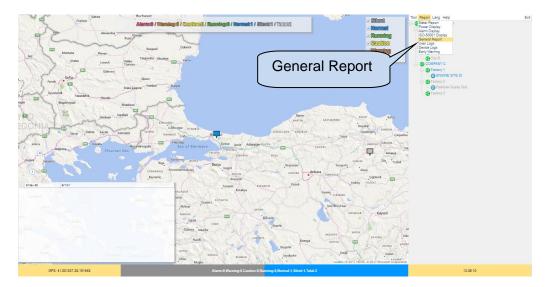
-⇒ C	rm.datakom.com.tr/?la	ang=en			☆ =
Help					Go Bac
t By Time	Site-ID	Unique-ID	Version		
t By Error & Ti		1FF0FF0B6498D4AFEC2F 50	0	ShutDown: Low Battery Voltage; Warning: Low Battery Voltage	
2014 09T03	40Z DATCAME	01B00009291CD4AF2F2C	61 DK05D50	Warning: Service 1 Request	
2014-0 09т05:4	Sort	by Time		Warning: Service 1 Request	
2014-06- 09T05:44:				Warning: Kabin kapsi acik	
2014-06- 09т0		01 4000055 40804 AF76F8	66 DK05D50 0	Warning: Service 1 Request	
2014 09T	Sort by Ala	arm & 👘	66 DK05D50 0	Warning: Service 1 Request	
2014	Time	13D	61 DK05D50 0	Warning: Service 1 Request	
2014 09T0	Time	J ³³	61 DK05D50 0	Warning: Fail To Stop	
		095000030498D4AF72FA			

	n.datakom.com.tr/?lan	9-00		2
Help	Site-ID		Version	
1me 014-06-	Site-ID	Unique-ID		
014-06- 9T05:55:58Z	TASKOPRU TEPE	1FF0FF0B6498D4AFEC2F67 50	0	ShutDown: Low Battery Voltage; Warning: Low Battery Voltage
014-06- 9T05:47:40Z	AMESUD I YEKNDO	50	0	Warning: Service 1 Request Go Back
014-06- 9T05:44:03Z		OFFOCTOFOZALDOAF78B61C	0	waiting. Service I Request
014-06- 9T05:44:03Z	Alarm		×	Warning: Kabin kapsi acik
014-06- 9T05:44:03Z			~	Warning: Service 1 Request
014-06- 9T05:44:03z	KARGIPINAR-YENI	145001056498D4AF4AF966 50	DK05D50 0	Warning: Service 1 Request
014-06- 9T05:44:03z	ER	01CD4AF543D61	0	waiting. Service I Request
014-06- 9T05:44:03Z	🐘 Warn		DK05D50 0	Warning: Fail To Stop
014-06- 9T05:44:03Z	ка	98D4AF72FA66	DK05D50 0	Warning: Service 1 Request
014-06- 9T05:44:03Z	ORM HALASLI	0FF00003291CD4AFA80661 50	DK05D50 0	Warning: Service 1 Request
014-06- 9T05:44:03Z	KAYMAKLI/GOZTEPE	003000026498D4AF74E766 50	0	waiting. Service I Request
014-06- 9T05:44:03Z	BINGOL/YEDISU	0E031515BD014D531E74F0 4D		
014-06-	CAMLARCA KOYU	0960EE056498D4AEA4EC66	DK05D50	Warning: Fail To Stop, Reverse Power

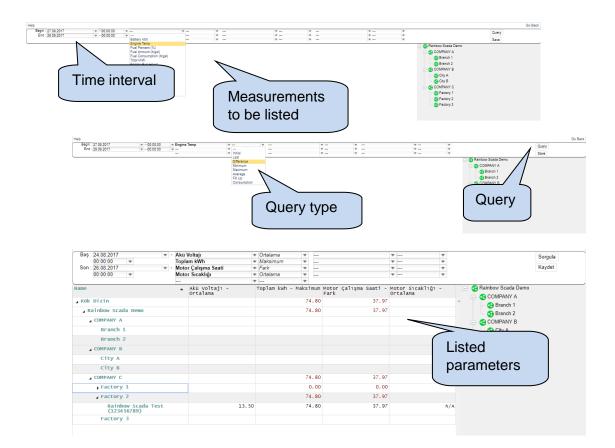
Shutdown alarms will be red, warnings will be yellow. Click **Go Back** to the main screen.

4.2.4. General Report

General Report tab under the **Report** menu will create a list of measured parameters between specified dates.

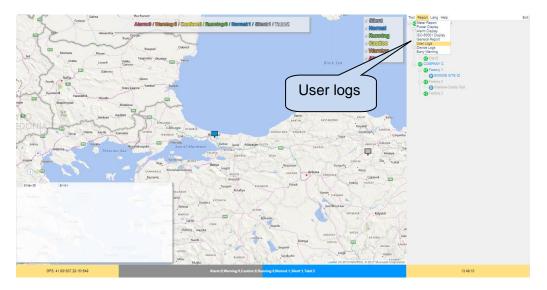


A new window will appear asking users to configure the time interval as well as measurements to be listed.



4.2.5 User Logs

User Logs tab under the Report menu will create a list of user logs with date and time stamps.



In order to list user logs, time interval, customer and user must be specified.



4.2.6 Device Logs

Rainbow Scada logs status changes of each device connected to remote monitoring system. **Device Logs** tab under **Report** menu will create a list of status changes of remotely monitored devices.



In order to list device logs, time interval, customer and devices must be specified.

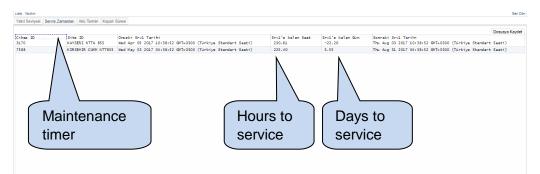
arih je Nov 06 2016 07:43: GMT+0300 (Türkiye Standart Saati)	C1haz 647699	CIN TEKNE	Hata M"S":(" Fail To Start "),"L":(),"W":())	1
He Nov 08 2016 09:501 DIT+0300 (TUrkiye Standart Saati)	647699	PL TEKNE	[" Fail To Start "],"L":[],"W":[])	
We Nov 06 2016 001500 (TU-0300 (TUrkiye Standart Saati)	647699	F TEKNE	VI PATT TO SCAPE 3. C TU, W TU?	//
Nov 10 2016 00:00 T+0300 (TUrkiye Standart Saati)	647699	TEKNE	("5")] To Start "3,"L":[],"W":[])	
Nov 10 2016 04:2 +0300 (Türkiye Standart Saati)	647699	EKNE	("S")(" Start "),"L")(,"W")())	//
Nov 10 2016 08: 0300 (Türkiye Standart Saati)	647699	EKNE	(151)(1 FA (art 1), 11)(10)(10)	//
Nov 10 2016 12 0500 (Türkiye Standart Saati)	647699	INE	CST1C FAIL T2.10.10.101	//
nu Nov 10 2016 12 nu Nov 10 2016 14 300 (Türkiye Standart Saati)	647699	ONE DNE	1. 5. 10. PATH 1. 0. 10. W 10.17	1 2
nu Nov 10 2016 14	647699	NE		
1 Nov 1			Refre	ab
	i c	Sustamor	Devices Refre	esn
	<u> </u>	Customer		
	01		enen)
interval	<u> </u>			
	647699	FLORA TEXNE	("S":[" Fail To Start "]."L":[]."W":[])	
T NOV 1	647699	FLORA TEKNE	<pre>{"S":["Fail To Start "],"L":[],"W":[" Low Sattery Voltage "]}</pre>	
at Nov 12 2016 00:54:27 GMT+0300 (Türkiye Standart Saati)	647699	FLORA TEKNE	<pre>{ S i[Fail To Start], L i[], W i[Low Sattery Voltage]} ("S":[" Fail To Start "],"L":[],"W":[])</pre>	
at Nov 12 2016 00:54:27 GH+0300 (IUrkiye Standart Saati) At Nov 12 2016 00:55:31 GHT+0300 (Türkiye Standart Saati)	647699	FLORA TEXNE	(Site Fail to Start 1), L (L), W (L) ("S":[" Fail To Start "], "L":[], "W":[])	
		FLORA TEKNE		
at Nov 12 2016 02:18:07 GWT+0300 (Türkiye Standart Saati)	647699	FLORA TEKNE	{"S":[" Fail To Start "],"L":[],"W":[" Low Battery Voltage "]}	
at Nov 12 2016 03:14:19 GWT+0300 (Türkiye Standart Saati)	647699	FLORA TEKNE		
at Nov 12 2016 03:16:26 GWT+0300 (Türkiye Standart Saati)	647699		{"S":[" Fail To Start "],"L":[],"W":[]}	
at Nov 12 2016 03:20:36 GWT+0300 (Türkiye Standart Saati)	647699	FLORA TEKNE		
at Nov 12 2016 03:44:46 GWT+0300 (Türkiye Standart Saati)	647699	FLORA TEKNE	("S":[],"L":[],"W":[" Low Sattery Voltage "]}	
at Nov 12 2016 05:08:02 GWT+0300 (Türkiye Standart Saati)	647699	FLORA TEKNE		
at Nov 12 2016 05:11:13 GMT+0300 (Türkiye Standart Saati)	647699	FLORA TEKNE	("5":[],"L":[],"w":[" Low Battery Voltage "])	
at Nov 12 2016 06:12:06 GWT+0300 (Türkiye Standart Saati)	647699	FLORA TEKNE		
at Nov 12 2016 06:40:50 GNT+0300 (Türkiye Standart Saati)	647699	FLORA TEKNE	{"S":[],"L":[],"W":[" Low Battery Voltage "]}	
at Nov 12 2016 09:40:22 GHT+0300 (Türkiye Standart Saati)	647699	FLORA TEKNE		
at Nov 12 2016 16:56:05 GNT+0300 (Türkiye Standart Saati)	647699	FLORA TEKNE	{"S":[],"L":[],"W":[" Low Battery Voltage "]}	
at Nov 12 2016 18:20:57 GHT+0300 (Türkiye Standart Saati)	647699	FLORA TEKNE		
on Nov 14 2016 07:59:14 GWT+0300 (Türkiye Standart Saati)	647699	FLORA TEKNE	<pre>{"S":E" fail To Start "3."L":E3."W":E3}</pre>	

4.2.7 Early Warning

Early Warning tab under **Report** menu allows user to filter remotely monitored devices with respect to measured parameters such as battery life, fuel level, maintenance time. Screenshot below shows devices that have less than 50% fuel left.



Similarly, it is also possible to create a list with respect to maintenance timer.



4.3. Language Selection

Rainbow Scada supports multiple languages including Turkish, English, Spanish, French and Chineese.

<complex-block>

 Auguard
 Click Language and change language of Rainbow Scada if necessary.

It is required to log-out and log-in again the remote monitoring account in order to reflect the language change. Click **yes** for automatic log out from the account.



5. CONFIG SCADA

5.1. Overview

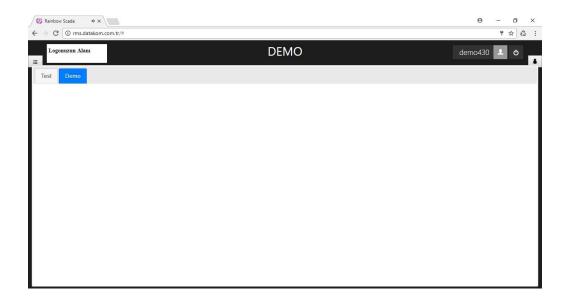
Config Scada is a feature supported by Rainbow Scada that allows users to design their unique and customized remote monitoring screens. Config Scada provides flexibility to the user allowing to build custom remote monitoring screens with many different devices.

5.2. Config Scada Login

In order to enable **Config Scada** feature, choose required node, click **Tool** and click **Configure Scada**.



Configure Scada will be initialized on monitoring mode. Therefore, only monitoring will be enabled on the screen below. If there are no remote monitoring screen configured before, an empty screen will be opened as shown below;



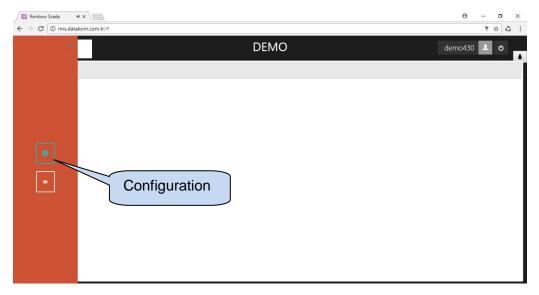
5.3. Config Mode

5.3.1 Config Mode Enable

Click button on the left hand side of the screen to form up (or change) remote monitoring screen.

	DEMO	demo430 💄 ዕ
Test Demo- Configuration		

A new window will be displayed at the left hand side of te screen. Click without button.

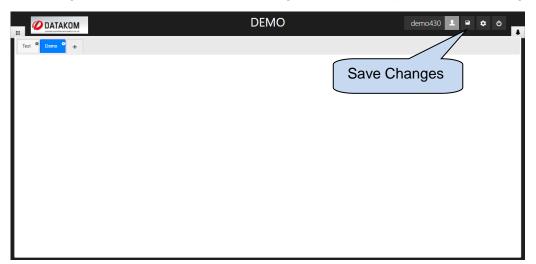


Below screen will be displayed once configuration mode is enabled.

Logonuzun Alanı iii	Rainbow Scada Demo	user 👤 🖻 🌣 🔿 🌲
Tab1 • +		

5.3.2 Save Changes

After each change made on the remote monitoring screen, it is required to save changes.



5.3.3 Logo Upload

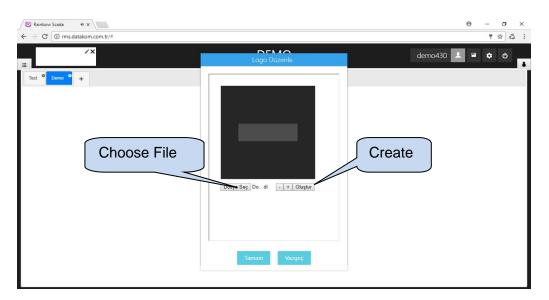
It is possible to upload a logo for the remote monitoring screen. You should click to the logo zone, which is placed at the top left corner of the screen.

Logonuzun Alanı		Rainbow Scada Demo	user 💄	• •	٩	*
Tab1 +	Click					

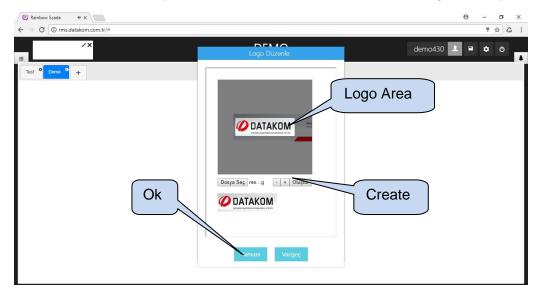
Tools will be displayed on the right hand side of the logo section.

		DEMO	demo430 👤	• •	٩	ŧ
Test O Demo O +	Logo Tools					
)				

Click 🗵 button to remove existing logo if there is any. Click 🖍 button to upload a new logo.



Click **Choose File** button to select logo image, which should be jpg or png format. Image that is selected will be placed on the screen to be adjusted. Image can be adjusted by drag and drop and zoomed in and out by + and - butons. Click **Create** once logo is ready to use.



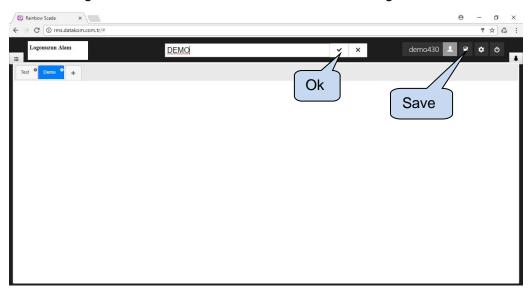
Click Ok, and logo will be set on the top left corner of the screen as shown on figure below;

	DEMO	demo430 👤 🖷 💠 😋
Test ^O Demo ^O +	lew Logo	Save

5.3.4 Create Header

The header of the remote monitoring screen will be automatically adjusted to the new entered text. In order to change the header, click on the current header, make necessary changes, and click \checkmark button.

Any unsaved changes will be lost, click **save** button to save changes.



5.3.5 Change Background Colour

Click button to change background colour.

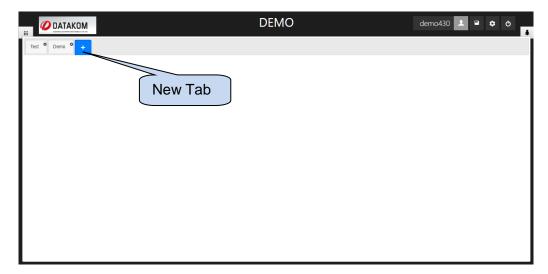
	DEMO	demo430 💄 🖻 🏂 👌
Test ODemo O +		
		Configuration

A new window will appear at the top of the screen. Select the required colour and click any location on the screen.

Background colour change will be applied immediately.

	DEMO	demo430 上 😐 💠 🖒
Test O Derno O +		

5.3.6 Add New Tab



Click + button to add a new tab to the remote monitoring screen.

Type the name of the new tab on the new window appeared on the screen. After that, click **OK** button.

	DEMO	demo430 👤 🖻 🌣 🖒 🌲
Test 🌳 Demo 🌳 🕂		
	Add new tab. Enter new tab name. ! OK OK CANCEL	New Tab Name

New tab will appear on the screen as shown below.

	DEMO	demo430	•	¢ ()	ŧ
Test Demo New Tab New Tab					

5.3.7 Rename Tab

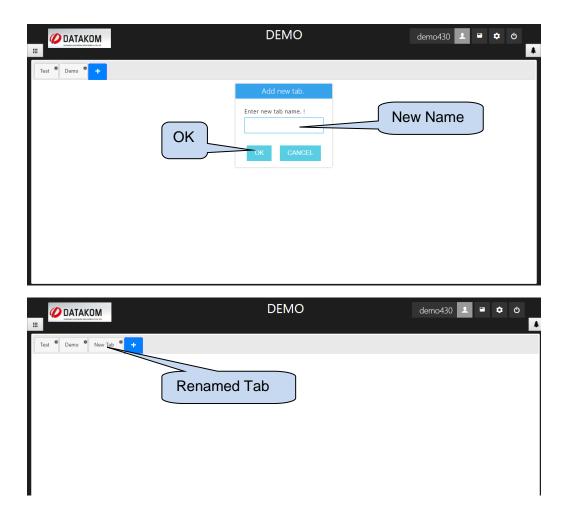
Click to rename a tab.

		DEMO	demo430 👤	\$ 0	*
Test [©] Demo [©]					
	Configuration				

New menu will appear under the tab. Click Sutton.

	DEMO	demo430 👤 🖷 🌣 🖒 🛔
Test • Demo • +	_	
Configuration		
1		

Type the name of the tab, and click **OK**.



5.3.8 Remove Tab



Click the button to remove the tab.

DEMO	demo430 💄	٥	٥	ŧ
Configuration				*

New menu will appear under the tab. Click 🔟 button.

	DEMO	demo430 🔽 🖻 💠 🕹
Test O Demo O +		
Delete		

Click **delete** on the new window.

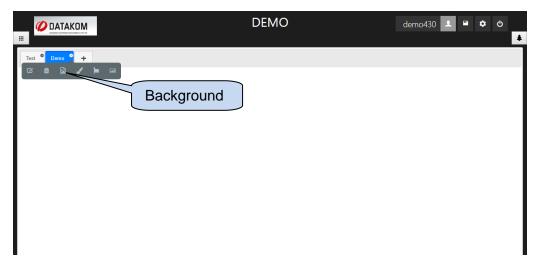
	DEMO	demo430 👤 🖻 🗢 🖒 🗍
Test Demo New Tab +	Delete this item ! Do you want to delete this item ? DELETE CANCEL	Delete

5.3.9 Add Background Image

Click to add background image to a tab.

	DEMO	demo430 上 📟 💠 🔿 🛔
Tett O Deno	Configuration	

New menu will appear under the tab. Click button.



New window will appear allowing users to add background image. Click **Choose File** in order to add background image.



Choose a jpg or png file to be a background image, and click **open** button.

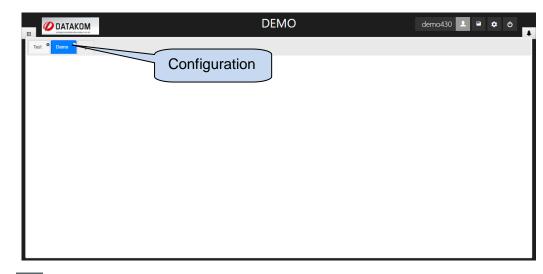
	Edit Image
Duzenle V Yeni klasor Spss dersi2 USER MANUAL Bubligisyar Bubligisyar Bubligisyar Docya adt Stude2 Docya adt Stude3 Docya adt Stud	Background Dosya Seç Dosdi + Create

Click **Ok** button once the background image is selected.

	Edit Image
	OK OK OK OK CANCEL
III ODATAKOM	DEMO demo430 💵 🖷 💠 👌
SEBEKE Background	G KVA

5.3.10 Add Icon

Click to add icon.

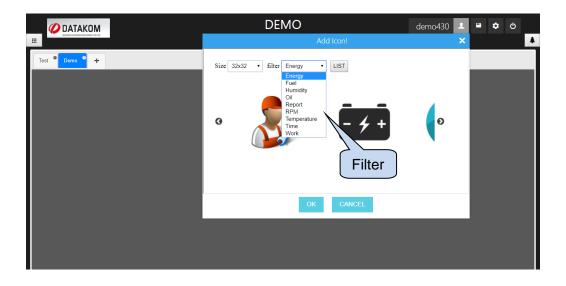


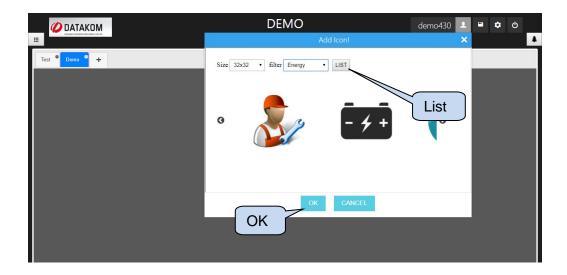
Click button on the new menu displayed under the name of the tab.

	DEMO	demo430 🔔 🖷 💠 👌
Test • Demo • +	dd Icon	

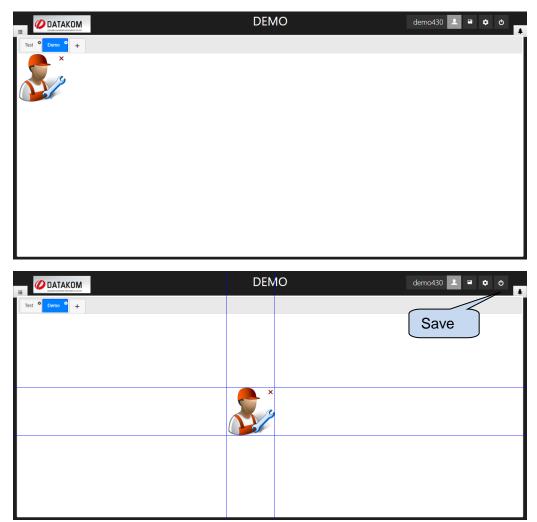
A new window will appear allowing users to add icons. Different icons can be selected by using filters, dimensions of those icons can also be changed by size tab. Select size, and click **list** to list available icons.







Once **OK** button is clicked, selected icon will be placed on the top left corner of the screen. You can drag-drop the icon to change position on the remote monitoring screen. Grids will help users to place the icon.

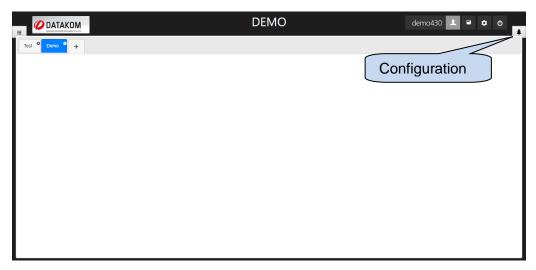


5.3.11 Measurement Values

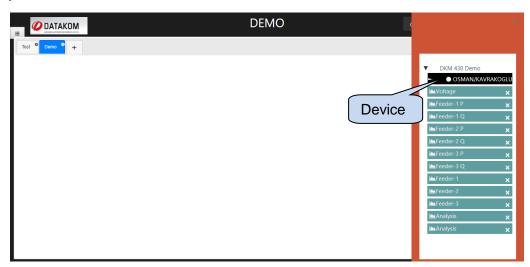
5.3.11.1 Add Measurement Values

Any measured values belong to the devices on remote monitoring account can be displayed on any position on the remote monitoring screen. Colour, size and position of measured values can be configured by the user.

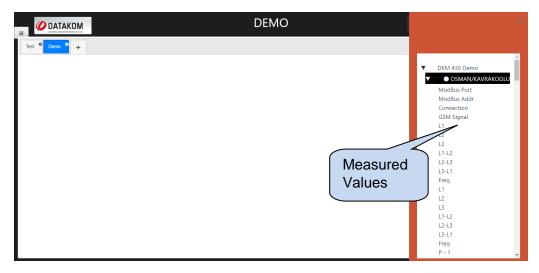
Click 🔺 button on the top right corner to add measurement value.



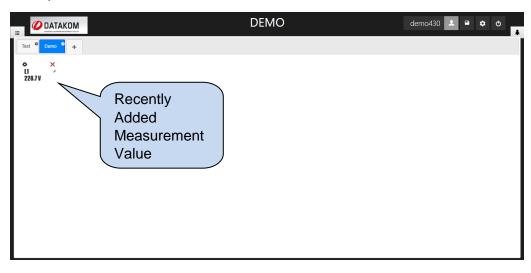
New tab will appear on the right hand side of the screen that has remote monitoring devices and objects.



Click on one of the devices to display the list of available measurement values on the screen. Measurement values list will change automatically depending on the device.



You can drag and drop parameters from the list on the right hand side to the remote monitoring screen. It is also possible to change the position of the measurement values by drag and drop.

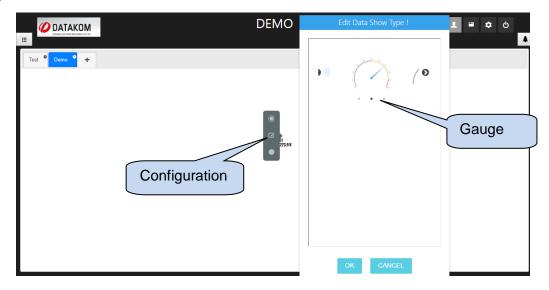


5.3.11.2 Create Gauge

Click to create a gauge, which is related with a measurement value. New menu will be displayed next to the measurement value as shown below;

	DEMO	demo430 💄	• •	¢	ŧ
Test [©] Demo [©] +					
	Configuration				

In order to create a gauge related to a measured parameter, click button and choose a gauge on new window.



Once the gauge is selected, parameters related with gauge will be listed as shown below;

	Veri Görünüm Tipi Düzenleme !	demo430 보 🗎 🌣 ዕ
Test Demo +	Max Value : 1000 Min Value : 0 Interval : 10 Show Name : 0 Show Number : 0 Start Red: % 0 Start Green: % 0 End Yellow: %80 End Red: % 90	

Max Value: Maximum value of the gauge.

Min Value: Minimum value of the gauge.

Interval: Increment between two consecutive values on the gauge.

Show Name: Displays name of the measured value.

Show Number: Display numbers.

Show Value Type: Display type of the measured value.

Start Red: Starting value of the red indicator.

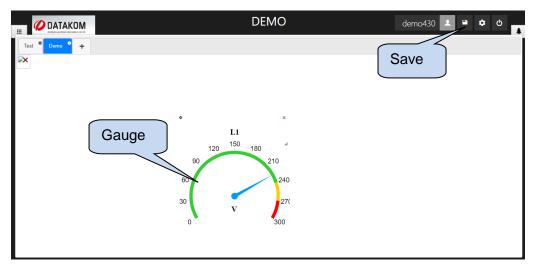
Start Yellow: Starting value of the yellow indicator.

Start Green: Starting value of the green indicator.

End Yellow: Ending value of the yellow indicator.

End Red: Ending value of the red indicator.

Click **Ok**, and created gauge will be displayed on remote monitoring screen. Click **save** button to save changes.



5.3.11.3 Display Settings of Measurement Values

Click to button to edit display of the measurement value. New tab will appear next to the measurement value as shown below;

		DEMO	demo430 👤 🖷	•	٢	*
Test Demo +						
	 ● × ■ 227.7 ¥ 					

Click button to change display settings. New window will appear, and editable parameters will be displayed as shown below;

	DEMO	demo430 上 🗎 🌣 ඵ
	Edit Property	Å
Test • Dama • +	Text Color	Size • B I U r : nd Color : OK
	ОК	SEL .

Alignment: Measurement value can be positioned vertically or horizontally.

Switch Mode: Digital outputs can be selected normally open or normally closed.

Font: Font of the measurement value.

Size: Size of the measurement value.

Text Colour: Colour of the measurement value.

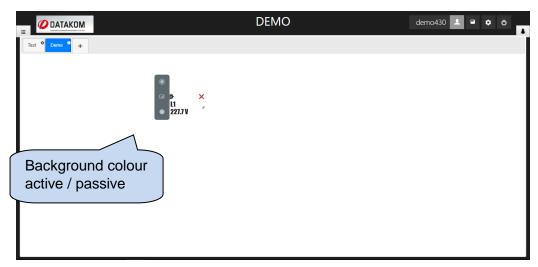
Background Colour: Background colour can be adjusted.

Name: Name of the measurement value.

Click **OK** after necessary changes has been done. Changes will be applied immediately. Click **save** to save changes.

		DEMO	demo430	1	٠	ტ •
Test • Demo • +						
	° L1 227.1V	×				
		<i>A</i>				

State of the background colour can be active/passive by button.



5.3.12 Add Object

Objects can be defined as structures that allow users to display measured parameters uniquely on remote monitoring screen. There are many object types to provide flexibility to the user. Those are;

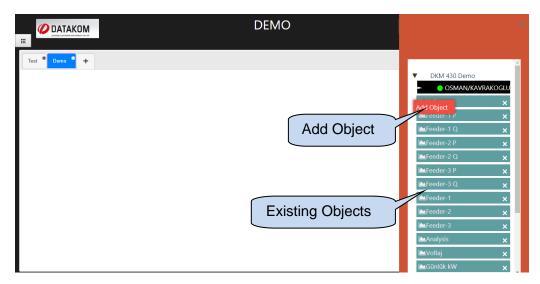
- Energy Interruption
- Daily kW
- Arithmetic
- Consumption
- Multiple Value Chart
- Table

User can design a remote monitoring screen by using combination of the objects.

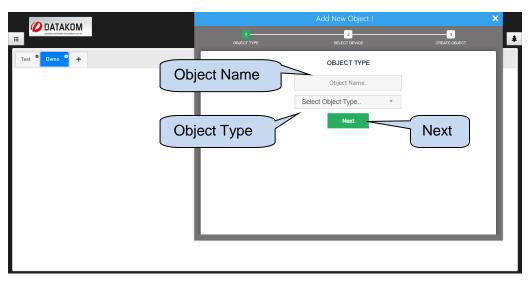
Click *button to add object in configuration mode.*

	DEMO	demo430 🔽 🖻 💠 👌
Test • Demo • +		Configuration

A new window will appear at the right hand side of the screen. You can see objects, which are created before and ready to use. Right click on the new window and select add object.



A new window will appear to create objects. Specify object name and object type and click **next**.



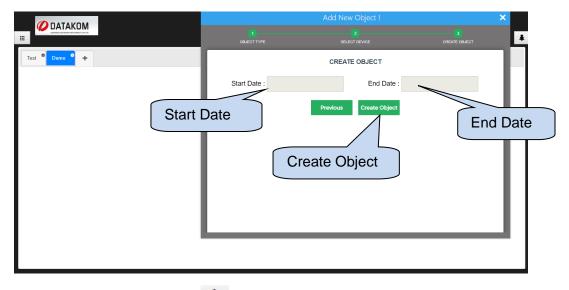
Next step is to choose measurement values to form an object. Since measurement values are different for each device, available measurement values to form an object will be different for each device. Choose the device and click **search** button. Available measurement values will be listed at the left hand side of the window.

ODATAKOM		Add New Ob	oject !	×
	0. DECT T		ICE CRI	EATE OBJECT
Test [©] Domo [©] +	Choose the Device	SELECT DI OSMAN/KAVRAKOGLU	EVICE QSearch Object Items	Search
	Moo	dBus Addr onnection SM Signal L1 L2 L3		
		You can add and delete device properties to object Previous	elements using the drag and drop method	

Drag required values listed on the "Device Property" column to the object items one by one, and click **next** for next step.

<i>🖉</i> ратаком		Add New Object !	×
		2 3 SELECT DEVICE CREATE (
Test P Demo P +	Selected Values by the User GSM Signal L1-L2 L2-L3 L3-L1 Vu can add and delete devi	SELECT DEVICE SELECT DEVICE COSearch Dipicet Items L1 L2 L3 Next Previous Next	

Some object types require start date and end date. (Detailed information will be provided on the Object Types section) If the object requires a time interval, adjust start and end dates and click **create object**. Item added successfully notification will be displayed at the top right corner of the screen.



You can view all objects by clicking 🜲 button.

	DEMO	×
Test • Demo • +		
		► DKM 430 Demo
		🕍 Voltage 🗙 🗙
		Feeder-1 P 🗙
		Feeder-1 Q 🗙
		Feeder-2 P 🗙
		Feeder-2 Q X
		I≜Feeder-3 P × I≜Feeder-3 Q ×
		I≜Feeder-3 Q × I≜Feeder-1 ×
		Ereeder-2 ×
	Now Object	Feeder-3 ×
	New Object	🖿 Analysis 🗙 🗙
		🕍 Analysis 🗙 🗙
		■Voltaj ×

5.3.13 Object Handling

You can view all objects on the right hand side of the screen by clicking 🚺 button.

	DEMO	c ×
Test 🌳 Derno 🕈 🕂		
		DKM 430 Demo
	All Objects	▲Voltage × ★ Feeder-1 P ×
		Treeder-1 Q X
		I≜Feeder-2 P × I≜Feeder-2 Q ×
		Feeder-3 P ×
		I≜Feeder-3 Q × I≜Feeder-1 ×
		Feeder-2 ×
		I≜Feeder-3 × I≜Analysis ×
		Analysis ×
		🖿 Voltaj 🛛 🗙

At first, objects will be placed at the top left corner of the remote monitoring screen. You can drag and drop them to the specific position on the screen.

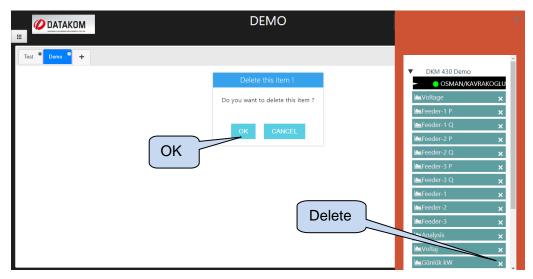
	DEMO	demo430 👤	¢ 0
Test 🏾 Demo 🇢 🕂			
Voltaj X			
L2 231.2 V L3 229.2 V			

Once the object is placed on the screen, values will be updated automatically.

		DEMO	demo430 👤 🖿	¢ ()
Test 🏾 Demo 🗢 🛨				
	 Voltaj × L1 226.8 V 			
	L2 232.7 V L3 228.2 V			

5.3.14 Remove Object

Click button on the right hand side to remove an object. Click **ok** on the warning message.



5.3.15 Object Types

5.3.15.1 Energy Interruption Object

Energy interruption object performs comparison between a user configurable limit and a measurement value. Comparison methods include "greater", "less", "equal", and "not equal" operations.

Once device is specified and object type is selected as energy interruption, values must be placed from device property column to the object items column one by one. During this process, comparison conditions must be also configured.

	Add New Object !	×
	1 2 3 SELECT DEVICE ORDATE OBJECT	*
Test Demo +	Greater	
	Less e Prote errupt Condition	d Value
	Create errupt Condition	

User will get a notification once condition between measured value and compared value is met. Moreover, multiple measurement values can be compared in the same object; and those comparisons can be combined with "AND" or "OR" logical operations.

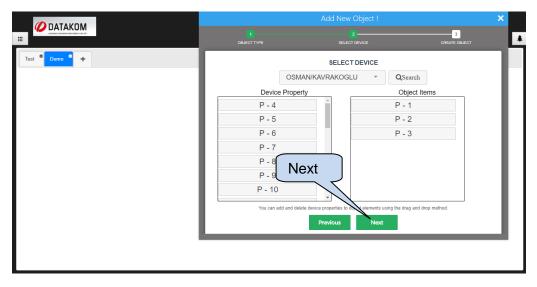
		Add New Object !	×
			3 CREATE OBJECT
Test • Demo • +		CREATE OBJECT	
Logic Op		state of condition All condition will came true)	×
		ny one condition will came true)	
	(OK OK CANCEL	

You can view all objects on the right hand side of the screen.

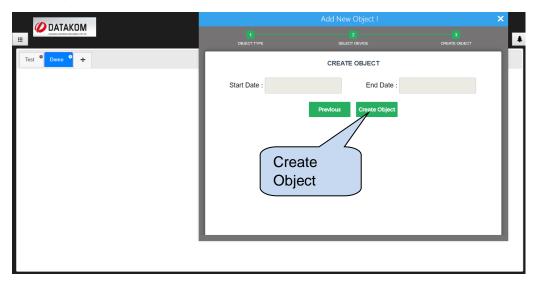
	DEMO		
Test • Demo • +			
▶×		OSMAN/KAV	RAKOGLU
		Woltage	×
		Feeder-1 P	×
		Feeder-1 Q	×
		Feeder-2 P	×
		Feeder-2 Q	×
		Feeder-3 P	×
		Feeder-3 Q	×
		Feeder-1	×
	New Object	Feeder-2	×
		Feeder-3	×
	7	Analysis	×
		Analysis	×
		l≌Voltaj	×
		M Kesinti	×

5.3.15.2 Daily kW

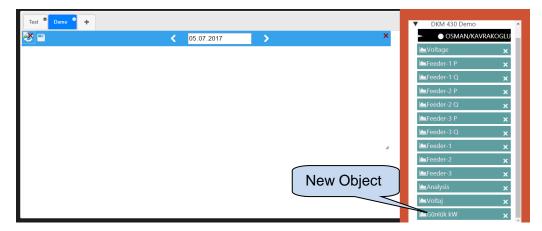
Daily kW object provides a graph of electricity consumption for specified dates. Once device is specified and object type is selected as daily kWh, values must be placed from device property column to the object items column one by one.



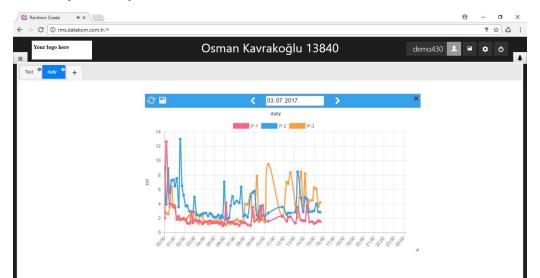
Click create object button.



You can view all objects on the right hand side of the screen.



Sample for Daily kWh object can be seen below;



5.3.15.3 Arithmetic Object

The arithmetic object allows users to perform arithmetic operations between measured parameters. Moreover, arithmetic operations can be performed between two or more objects which are of arithmetic type.

Once a device is specified and object type is selected as arithmetic, values must be placed from device property column to the object items column one by one. Arithmetic operation between values must be selected after each item placed to the object items column.

		Add New Object !	×	
			CREATE OBJECT	*
Test ⁹ Demo ⁹ +	Summation	SELECT DEVICE VRAKOGLU ~ QSearch Object Iten Select Operation * - 1	15	
S	Subtraction	+ · · ·		
Ν	Iultiplication	CANCEL		
	Division	properties to object elements using the drag and drop	method	
		Previous Next		

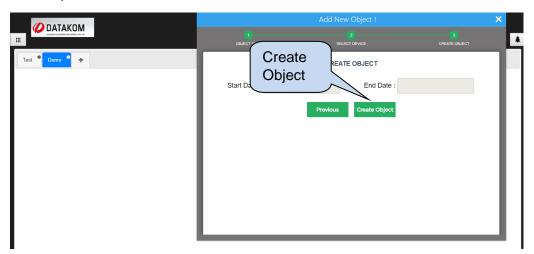
Click next once arithmetic operation is completed.



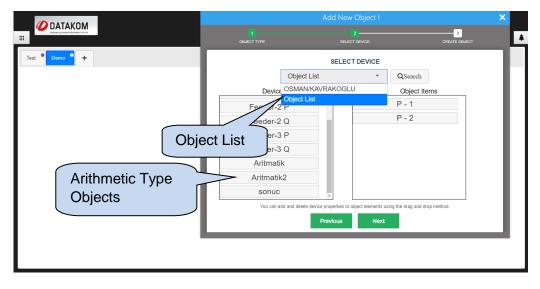
Unit of measurement must be specified on following screen;

		Add New Object !	×
			3 CREATE OBJECT
Test Demo +		CREATE OBJECT	
	Start Date :	End Date :	
	Unit	Select Unit	
		A V	
		KW KVA KVAr	
		kWh kVArh	
		kVArl kVArC Hz	
		Vdc °C ∼C	
		~C ~G %	
		hour times	

Click create object button.



It is also possible to perform arithmetic operation between two objects that are arithmetic type. Instead of choosing the device during object creation, **Object List** must be choosen. Once object list is selected, click search button to list all available objects.

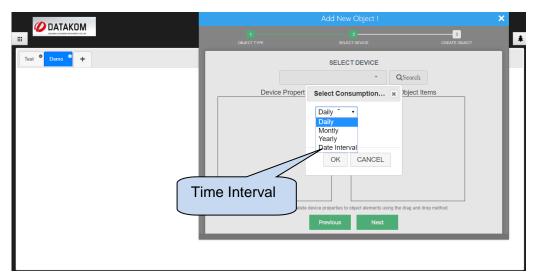


New object can be created by arithmetic operation of two objects. Two objects are added together to represent an object named "result", which holds the sum of two arithmetic type objects;

💋 DATAKOM			DEMO	demo430 🔔	•	٠	ወ	
Graneser coartenade advectables (25. 85								\$
Test 🏾 Demo 🄷 🕂								
	* Aritmatik × 14.69 kW × A Aritmatik2 × 26.96 kW ×	☆ Result × 41.65 kW						

5.3.15.4 Consumption Object

Consumption object calculates active and reactive power consumption per day, per week or per month. First of all, it is required to specify time interval for active and reactive power calculation.



After that, reactive or active power must be selected.

Ø DATAKOM		Add New Object !	×
			CREATE OBJECT
Test * Demo * +		SELECT DEVICE	
		- QSearch	
	Device Propert	Select Consumption *)bject Iter	ns
		Daily •	
		Active •	
		CANCEL	
Ac	tive/Reactive		
Po	ower		
	You can add and delete	device properties to object elements using the drag and drop	p method.
		Previous Next	

List of available measurement should be created on the **device property** column, and required measurements must be transferred to the **object items** column.

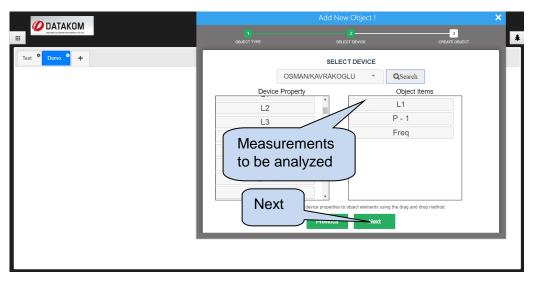
	Add New Object !					
				3 CREATE OBJECT		
Test * Demo +		SELECT D	EVICE			
		OSMAN/KAVRAKOGLU	- QSearch			
	Device	Property	Object Item	s		
	E - 2	<u>^</u>	E - 1			
	E - 3					
	E - 4					
	E - 5					
	E - 6					
	E - 7					
	E - 8					
	You can a	nethod.				
	Previous Next					
l '						

Once **consumption object** is created and placed on the remote monitoring screen, it displays consumption for given time interval.

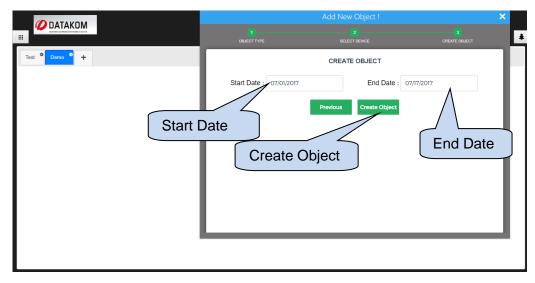
💋 DATAKOM		DEMO	demo430	.	٥	¢	
							ŧ
Test * Demo * +							
*0 ×							
07/17/2017							
Consumption 148.93 kWh							
	Consumption						
	Object						

5.3.15.5 Multiple Value Chart Object

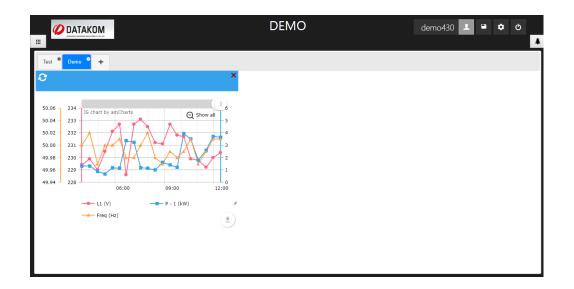
Multiple value chart object allows users to create graphs that consist of different types of measurements. Once object name is typed, and object type is selected as multiple value chart, values must be placed from device property column to the object items column one by one.



Start date and end date of the analysis must also be specified. After that, click **create object** button.



Once multiple value chart object is placed on the remote monitoring screen, it will display a graph of specified measurement values.



5.3.15.6 Table Object

Table object creates table with selected measurement values. Once object name is typed, and object type is selected as table, column number must be specified. After that, values must be placed from device property column to the object items column one by one.

	Add New Object !	×
	CRUECT TYPE SELECT DEVICE CREATE C	
Test [©] Demo [©] +	SELECT DEVICE	
	OK CANCEL	
	You can add and delete device properties to object elements using the drag and drop method. Previous Next	

Column number that values must place on the table should also be specified when it is transferred from **device property column** to **object items column**.

() DATAKOM	Add New Object !				
			3 CREATE OBJECT	*	
Test Demo +	05	SELECT DEVICE			
	Device Pr ModBus Por ModBus Add Connection		Items		
	GSM Signal L2 L3	OK CANCEL			
	L1-L2 You can add and	delete device properties to object elements using the drag and Previous Next	drop method.		

As it can be seen below, table object will create a table by using measurement values.

		D	emo		demo430 💄	۵	¢	ŧ
Test Como +								
	۰.	Т	able	×				
	Ll	231.3 V	L1-L2	404 V				
	L2	233.9 V	L2-L3	406 V				
	L3	230.5 V	L3-L1	399 V				

5.3.16 Config Mode Disable

Click button to disable config mode.

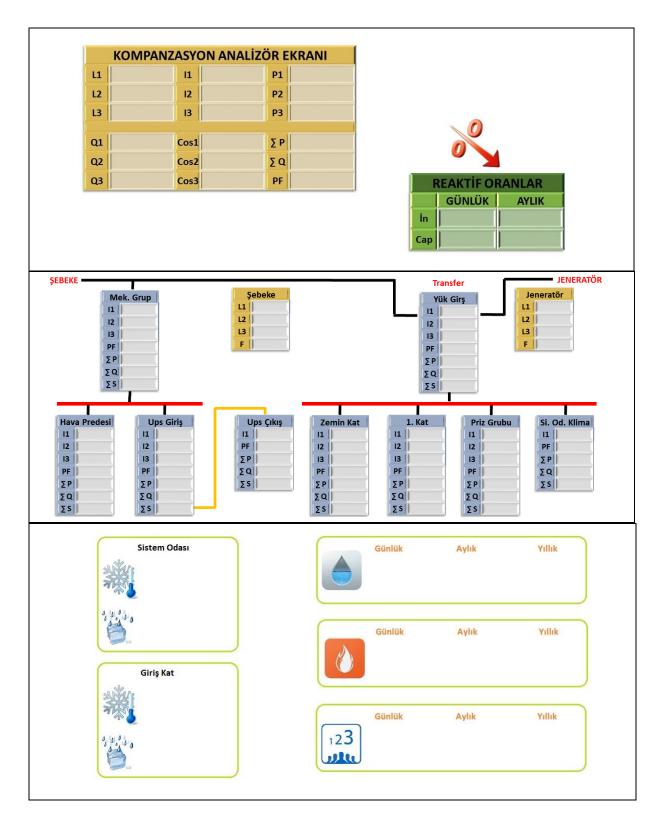
	DEMO	demo430 👤 🗎	٥	\$
Test e +				
Configuration				

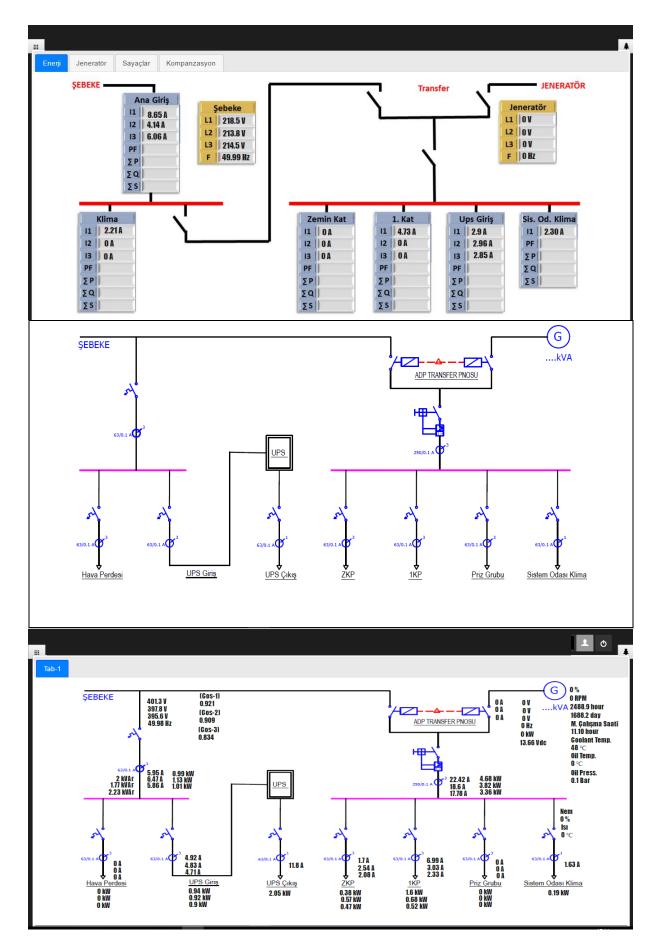
A new window will appear at the left hand side of the screen. Click button to switch to the monitoring mode from config mode. Therefore, you will not be able make any changes without enabling config mode again.

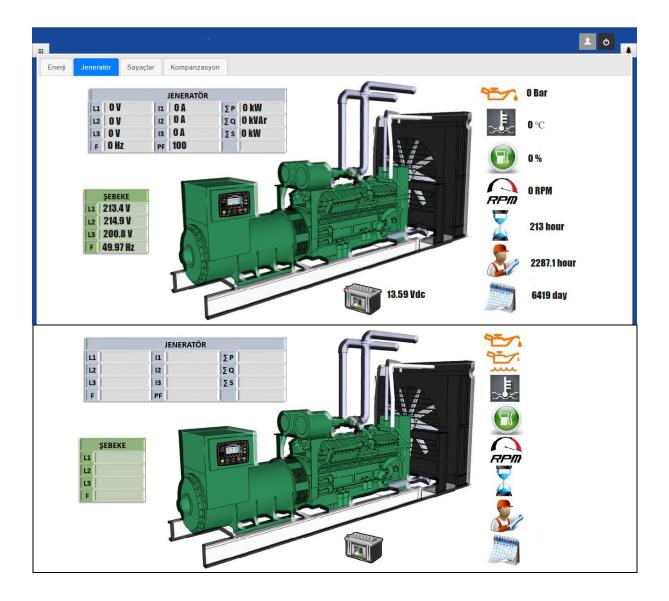
🖉 Rainbow Scada	×	Θ	-	o ×
\leftrightarrow \rightarrow C (i) rms.data	kom.com.tr/#		루 ☆	G :
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5.3.17 Sample Projects

Few screenshots of the projects that are created with Rainbow Scada are listed for demonstration purposes.







nerji Jeneratör	Sayaçla	ar Kompanza	asyon	Yönetim						
	H	OMPANZ	ASYC	ON ANAL	İZÖR	EKRANI				
	L1	220.5 V	11	5.30 A	P1	1.03 kW				
	L2	219.8 V	12	8 A	P2	1.74 kW				
	L3	216.3 V	13	11.20 A	P3	2.41 kW				
	Q1	-0.38 kVAr	Cos1	-0.93	ΣP	5.18 kW		0		
	Q2	0.19 kVAr	-	0.994		-0.02 kVAr		~		
	Q3	0.17 kVAr		0.997	PF					
									1	L O
nerji Jeneratör	Sayaçl	ar Kompanza	asyon						1	Ċ
*	s	ar Kompanza istem Odası 14.95 °C	asyon				Günlük	Aylık	Yillik	Ċ
nerji Jeneratör	s	istem Odası	asyon				Günlük	Aylık		Ċ
A CONTRACTOR	s	istem Odası 14.95 °C	asyon						Yillik	L O