



# Professional performance reports

Extract intelligence from your archived building data and make informed operational decisions with Reliable Controls® RC-Reporter®. This fully customizable, server-based application allows you to analyse the trend and runtime data from any BACnet Internet-connected building, and generate professional performance reports, quickly and accurately.



Better by design



[www.reliablecontrols.com/RCR](http://www.reliablecontrols.com/RCR)

## Tech Specs

### Recommended Server Requirements

- Intel Xeon E3 3.10 GHz or better
- x64 system architecture
- 16 GB RAM
- Hardware RAID in a redundant performance configuration with 10K RPM SAS drives or better
- 10 GB hard disk space free, or higher, appropriate for archiving needs
- CD-ROM drive or internet connection for software installation
- Network Interface Card (NIC) for ethernet communications
- Windows Server 2012 R2 or Windows Server 2008 R2
- RC-Archive® 3.0 or higher (purchased separately)
- Dedicated USB 2.0 Port for RC-Key licensing (soft license optional)
- Maximum Configuration: 25 simultaneous users per server

### Report Components

- **Date Range** – plots data against time with full flexibility of the sample period
- **Contribution** – compares values for a configurable period, either as a pie chart or as a bar chart
- **Correlation** – identifies how one point influences others using a scatter diagram
- **Profile** – compares data from different time periods to identify patterns and anomalies
- **Raw Data** – displays a table of raw timestamps and values for a selected log over a configurable date range
- **Number Editor** – provides an interactive control for adjusting a number value in a report (eg. change the price of energy and see the resulting monthly cost impact)
- **Text** – opens a formatted text box to be entered using a WYSIWYG text editor. Adjust color, size, alignment, style of font and embed links to other reports or any other web page
- **Image** – allows a GIF, JPG, or PNG image to be uploaded into the report (eg. company logo). Images are scaled to fit, preserving aspect ratio, and centered within the component boundaries

## Features

### Flexible Report Generation

- Build reports quickly by simply dragging and dropping Report Components onto the report grid
- Select data and ranges from multiple RC-Archive databases or import data from MS-Excel spreadsheets
- Run simple and complex queries to refine data used in any Report Component
- Apply standard math functions, transforms, and operators to data
- Saved reports are stored securely on RC-Reporter server
- Reports can be easily exported to, and imported from other RC-Reporter installations
- Report viewing supported by both desktop browsers and mobile devices, including Safari on iOS and Android, Chrome, and Firefox on Android 2.3+

### Sample Reports

- Customize the sample reports that ship with RC-Reporter to quickly create your new professional-looking reports

### Efficient User Administration

- Add, disable, and re-enable user accounts individually
- Support for Microsoft Authentication / Active Directory integration
- Users can reset their own passwords without admin intervention

- Share reports with any number of authorized users by broadcasting report links or exported pdf to user-defined email recipient lists
- Designate shared reports to be read-only or configurable, by individual users

### Powerful Data Source and Point Management

- Quickly identify, locate, and connect to any number of RC-Archive instances
- Automatically displays all available databases for access
- Flexible point browsing user-interface includes filtering by name and mnemonic
- Categories allow points to be organized and tagged easily and efficiently

### License and Updates Subscription

- Licensing is limited by the number of unique, active points used in reports
- 12 month updates subscription included with initial license purchase
- Software continues to function regardless of subscription state
- No penalty to renew expired updates subscriptions
- Free trial version allows up to 5 unique points to be used for evaluation purposes

## Ordering

### RC-R3-100

- License allowing 100 unique points to be used in active reports
- Comes with RC-Key (USB Software Key)

### RC-R3-100A

- Adds 100 points to existing license (must have previously purchased RC-R3-100)
- Upon purchase of the 24th unit of RC-R3-100A, the license is tagged as a site license, equivalent to RC-R3-2500

### RC-R3-2500

- Site license allowing unrestricted number of unique points to be used in active reports
- Comes with RC-Key (USB Software Key)

### RC-R3-S100

- License allowing 100 unique points to be used in active reports
- Comes with soft license (no USB Software Key required)

### RC-R3-S100A

- Adds 100 points to existing soft license (must have previously purchased RC-R3-S100)
- Upon purchase of the 24th unit of RC-R3-S100A, the license is tagged as a site license, equivalent to RCR3-S2500

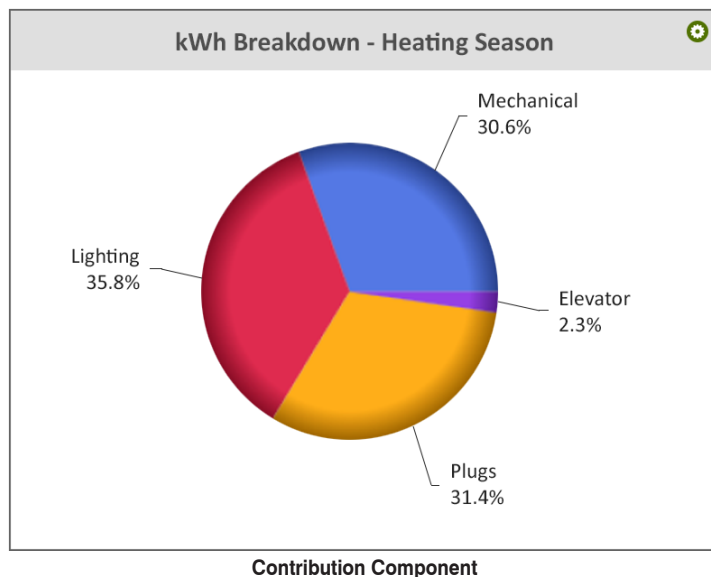
### RC-R3-S2500

- Site license allowing unrestricted number of unique points to be used in active reports
- Comes with soft license (no USB Software Key required)

### RC-R3-S

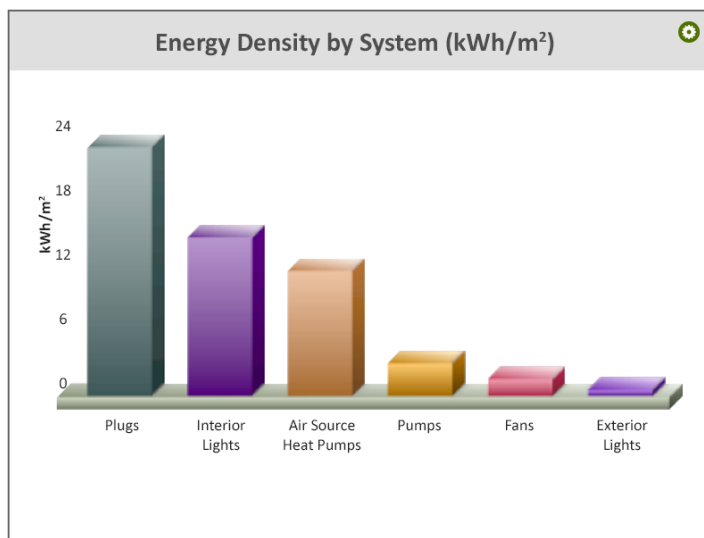
- Subscription for 12 months of Online Software Updates

## SCREEN CAPTURES



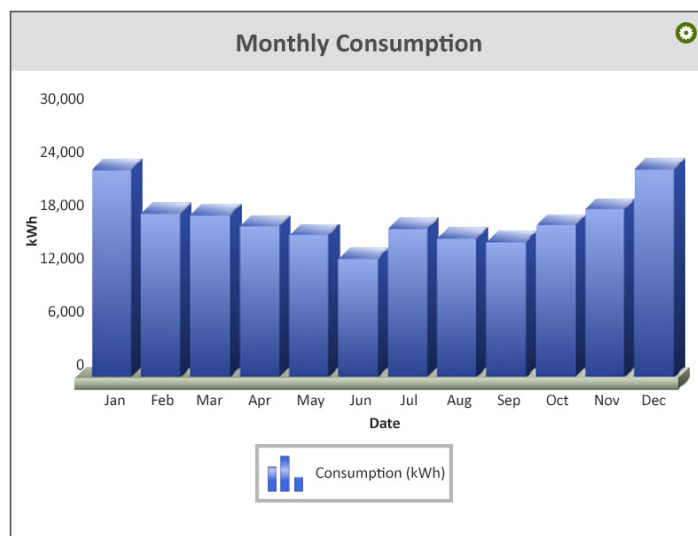
Dealer Information:

## SCREEN CAPTURES



Contribution Component

Date Range and Contribution components allow you to easily produce bar, pie, and line charts of building performance data, and perform calculations through powerful SQL queries to display aggregates, exceptions, normalizations and much more.



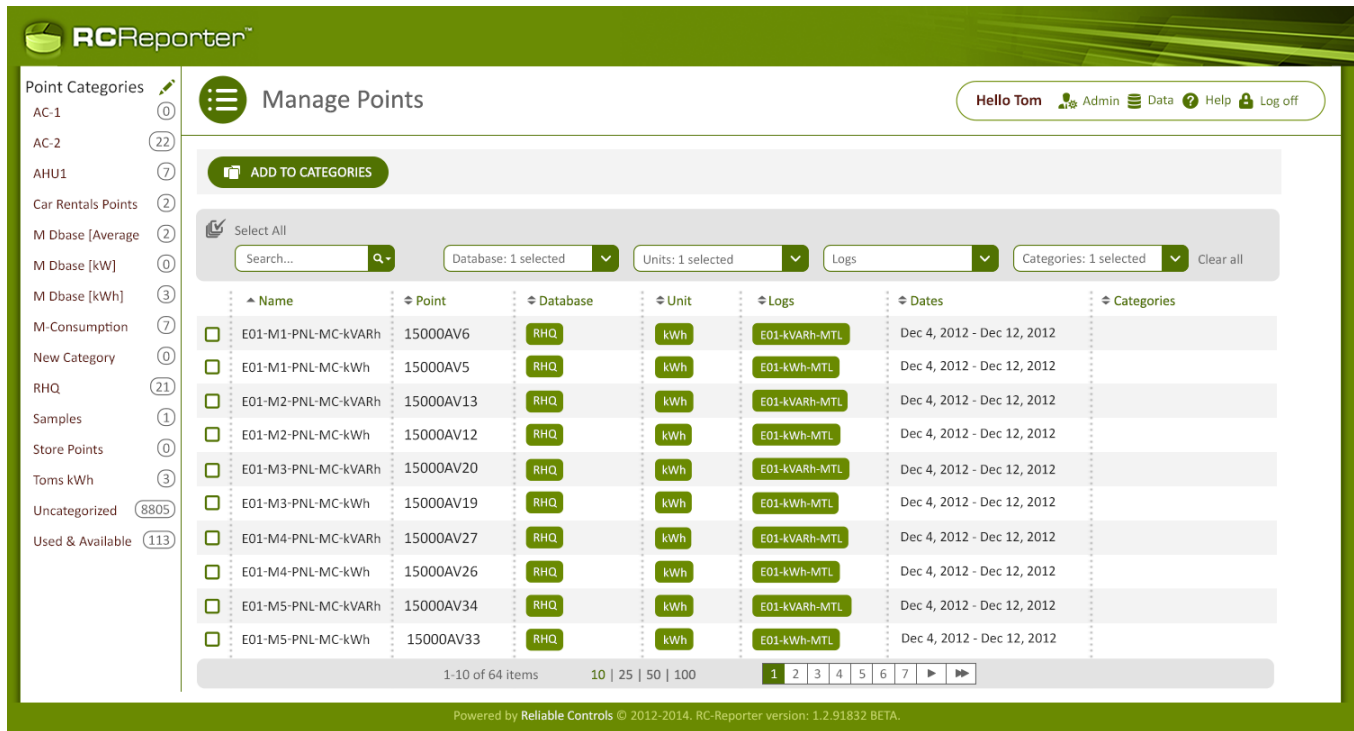
Date Range Component

Functions	Value	Data Series	Math	Conditional
Max("FANS_External")		BOILERS_External		
		COOLING TOWERS_External		
		FANS_External		
		HDD_External		
		HEAT PUMPS_External		
		HOT WATER_External		
		LIGHTING_External		
		PUMPS_External		

Powerful query capability

Functions	Value	Math	Conditional
Abs	Average	+	Where
Exp	Delta	-	AND
Int	Max	*	OR
Log10	Min	/	NOT
Log10-1	Sum	^	=
Ln	Value		<>
Sqrt			>
Hours			>=
Cycles			<
			<=
			DOW

## SCREEN CAPTURES



**RCReporter™** Manage Points

Hello Tom Admin Data Help Log off

ADD TO CATEGORIES

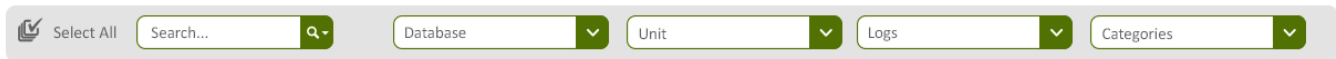
Select All Search... Database: 1 selected Units: 1 selected Logs Categories: 1 selected Clear all

Name	Point	Database	Unit	Logs	Dates	Categories
<input type="checkbox"/> E01-M1-PNL-MC-kVARh	15000AV6	RHQ	kWh	E01-kVARh-MTL	Dec 4, 2012 - Dec 12, 2012	
<input type="checkbox"/> E01-M1-PNL-MC-kWh	15000AV5	RHQ	kWh	E01-kWh-MTL	Dec 4, 2012 - Dec 12, 2012	
<input type="checkbox"/> E01-M2-PNL-MC-kVARh	15000AV13	RHQ	kWh	E01-kVARh-MTL	Dec 4, 2012 - Dec 12, 2012	
<input type="checkbox"/> E01-M2-PNL-MC-kWh	15000AV12	RHQ	kWh	E01-kWh-MTL	Dec 4, 2012 - Dec 12, 2012	
<input type="checkbox"/> E01-M3-PNL-MC-kVARh	15000AV20	RHQ	kWh	E01-kVARh-MTL	Dec 4, 2012 - Dec 12, 2012	
<input type="checkbox"/> E01-M3-PNL-MC-kWh	15000AV19	RHQ	kWh	E01-kWh-MTL	Dec 4, 2012 - Dec 12, 2012	
<input type="checkbox"/> E01-M4-PNL-MC-kVARh	15000AV27	RHQ	kWh	E01-kVARh-MTL	Dec 4, 2012 - Dec 12, 2012	
<input type="checkbox"/> E01-M4-PNL-MC-kWh	15000AV26	RHQ	kWh	E01-kWh-MTL	Dec 4, 2012 - Dec 12, 2012	
<input type="checkbox"/> E01-M5-PNL-MC-kVARh	15000AV34	RHQ	kWh	E01-kVARh-MTL	Dec 4, 2012 - Dec 12, 2012	
<input type="checkbox"/> E01-M5-PNL-MC-kWh	15000AV33	RHQ	kWh	E01-kWh-MTL	Dec 4, 2012 - Dec 12, 2012	

1-10 of 64 items 10 | 25 | 50 | 100 1 2 3 4 5 6 7

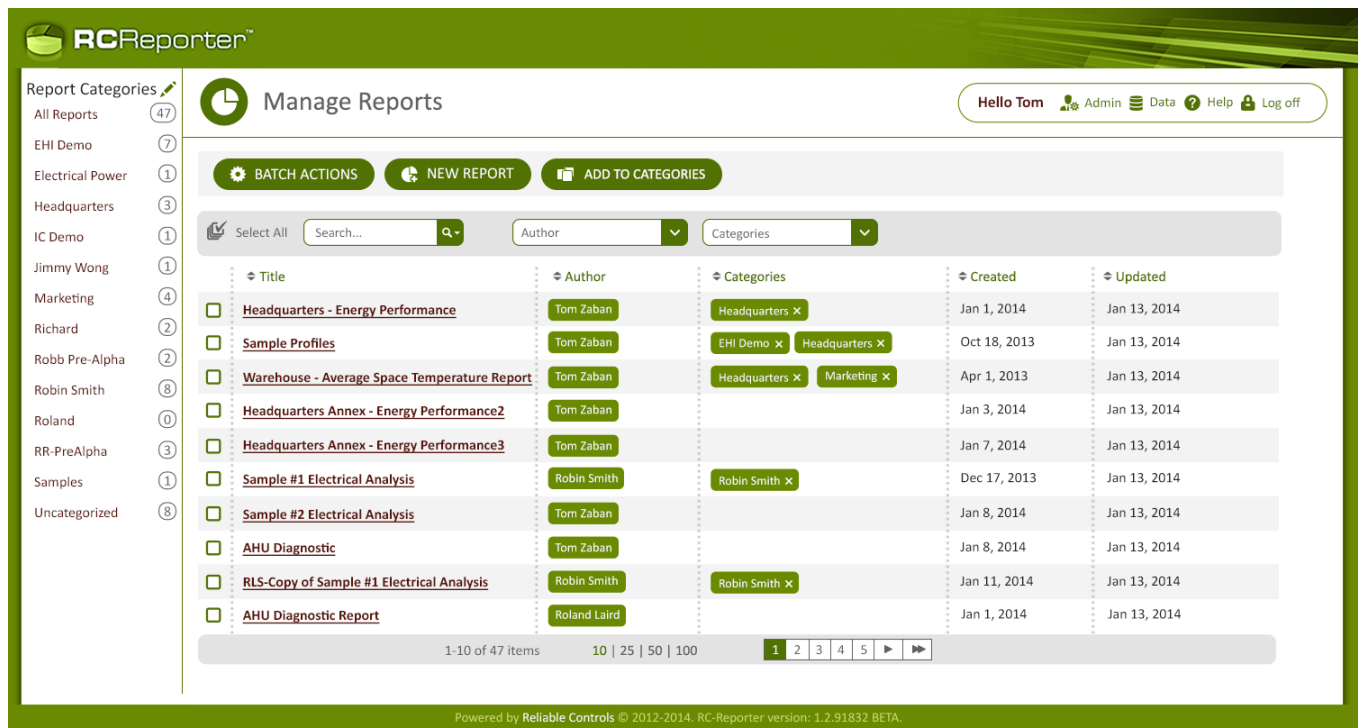
Powered by Reliable Controls © 2012-2014. RC-Reporter version: 1.2.91832 BETA.

Manage Points menu showing existing points available for use in any component



Select All Search... Database Unit Logs Categories

Powerful and intuitive filtering provides effective point retrieval and tagging



**RCReporter™** Manage Reports

Hello Tom Admin Data Help Log off

BATCH ACTIONS NEW REPORT ADD TO CATEGORIES

Select All Search... Author Categories

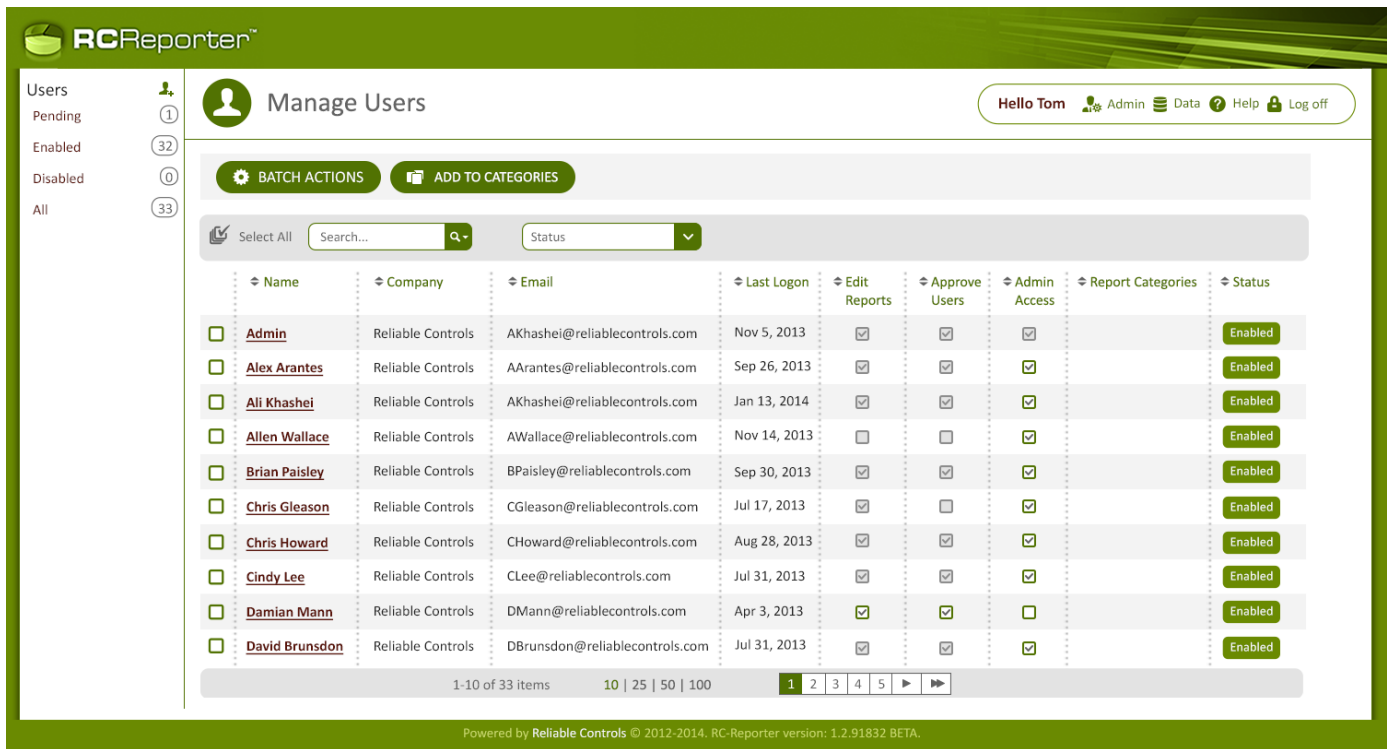
Title	Author	Categories	Created	Updated
<input type="checkbox"/> Headquarters - Energy Performance	Tom Zaban	Headquarters X	Jan 1, 2014	Jan 13, 2014
<input type="checkbox"/> Sample Profiles	Tom Zaban	EHI Demo X Headquarters X	Oct 18, 2013	Jan 13, 2014
<input type="checkbox"/> Warehouse - Average Space Temperature Report	Tom Zaban	Headquarters X Marketing X	Apr 1, 2013	Jan 13, 2014
<input type="checkbox"/> Headquarters Annex - Energy Performance2	Tom Zaban		Jan 3, 2014	Jan 13, 2014
<input type="checkbox"/> Headquarters Annex - Energy Performance3	Tom Zaban		Jan 7, 2014	Jan 13, 2014
<input type="checkbox"/> Sample #1 Electrical Analysis	Robin Smith	Robin Smith X	Dec 17, 2013	Jan 13, 2014
<input type="checkbox"/> Sample #2 Electrical Analysis	Tom Zaban		Jan 8, 2014	Jan 13, 2014
<input type="checkbox"/> AHU Diagnostic	Tom Zaban		Jan 8, 2014	Jan 13, 2014
<input type="checkbox"/> RLS-Copy of Sample #1 Electrical Analysis	Robin Smith	Robin Smith X	Jan 11, 2014	Jan 13, 2014
<input type="checkbox"/> AHU Diagnostic Report	Roland Laird		Jan 1, 2014	Jan 13, 2014

1-10 of 47 items 10 | 25 | 50 | 100 1 2 3 4 5

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Manage Reports menu showing Report Title, Author, Categories and Created and Updated Dates

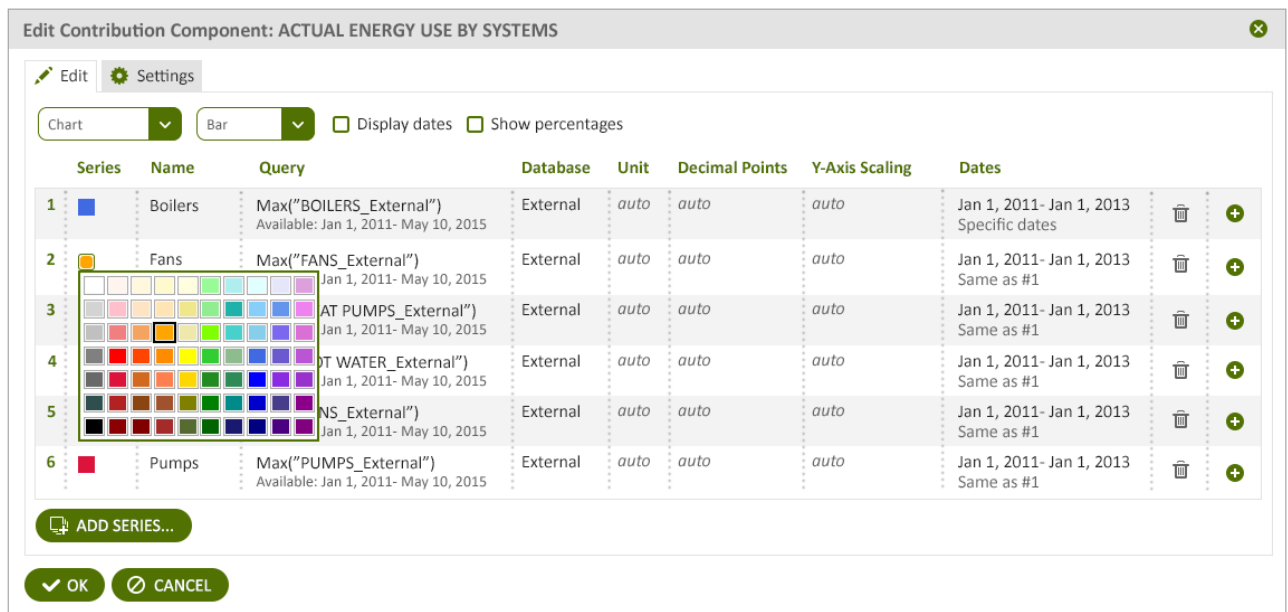
## SCREEN CAPTURES



The screenshot shows the 'Manage Users' interface in RCReporter. On the left, a sidebar lists user status filters: Users (1), Pending (32), Enabled (0), Disabled (33), and All. The main area has a 'Manage Users' header with a user icon and a 'Hello Tom' greeting. Below the header are buttons for 'BATCH ACTIONS' and 'ADD TO CATEGORIES'. A search bar and a 'Status' dropdown are present. The main table lists users with columns for Name, Company, Email, Last Logon, Edit Reports, Approve Users, Admin Access, Report Categories, and Status. The table contains 10 rows of user data, all with 'Enabled' status. At the bottom, there is a pagination bar showing '1-10 of 33 items' and a table of page numbers (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33).

Name	Company	Email	Last Logon	Edit Reports	Approve Users	Admin Access	Report Categories	Status
Admin	Reliable Controls	AKhashei@reliablecontrols.com	Nov 5, 2013	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Enabled
Alex Arantes	Reliable Controls	AArantes@reliablecontrols.com	Sep 26, 2013	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Enabled
Ali Khashei	Reliable Controls	AKhashei@reliablecontrols.com	Jan 13, 2014	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Enabled
Allen Wallace	Reliable Controls	AWallace@reliablecontrols.com	Nov 14, 2013	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Enabled
Brian Paisley	Reliable Controls	BPaisley@reliablecontrols.com	Sep 30, 2013	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Enabled
Chris Gleason	Reliable Controls	CGleason@reliablecontrols.com	Jul 17, 2013	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Enabled
Chris Howard	Reliable Controls	CHoward@reliablecontrols.com	Aug 28, 2013	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Enabled
Cindy Lee	Reliable Controls	CLee@reliablecontrols.com	Jul 31, 2013	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Enabled
Damian Mann	Reliable Controls	DMann@reliablecontrols.com	Apr 3, 2013	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		Enabled
David Brunson	Reliable Controls	DBrunson@reliablecontrols.com	Jul 31, 2013	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Enabled

Manage Users menu showing Name, Company, Email, Last logon, and Access Details

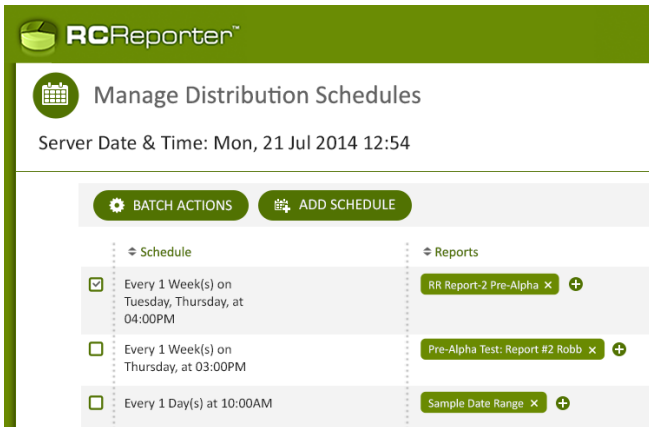


The screenshot shows the 'Edit Contribution Component: ACTUAL ENERGY USE BY SYSTEMS' dialog box. It has tabs for 'Edit' and 'Settings'. Below the tabs are options for 'Chart' (Bar), 'Display dates', and 'Show percentages'. The main area is a table with columns: Series, Name, Query, Database, Unit, Decimal Points, Y-Axis Scaling, and Dates. The table contains 6 rows of data for different energy systems. A color selection palette is visible over the table. At the bottom, there are buttons for 'ADD SERIES...', 'OK', and 'CANCEL'.

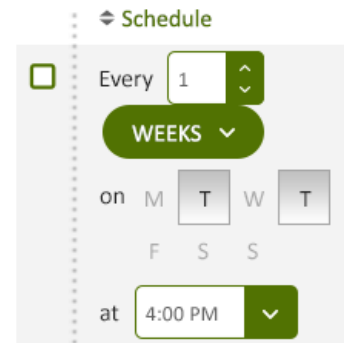
Series	Name	Query	Database	Unit	Decimal Points	Y-Axis Scaling	Dates
1	Boilers	Max("BOILERS_External") Available: Jan 1, 2011- May 10, 2015	External	auto	auto	auto	Jan 1, 2011- Jan 1, 2013 Specific dates
2	Fans	Max("FANS_External") Jan 1, 2011- May 10, 2015	External	auto	auto	auto	Jan 1, 2011- Jan 1, 2013 Same as #1
3	AT PUMPS_External")	Jan 1, 2011- May 10, 2015	External	auto	auto	auto	Jan 1, 2011- Jan 1, 2013 Same as #1
4	OT WATER_External")	Jan 1, 2011- May 10, 2015	External	auto	auto	auto	Jan 1, 2011- Jan 1, 2013 Same as #1
5	NS_External")	Jan 1, 2011- May 10, 2015	External	auto	auto	auto	Jan 1, 2011- Jan 1, 2013 Same as #1
6	Pumps	Max("PUMPS_External") Available: Jan 1, 2011- May 10, 2015	External	auto	auto	auto	Jan 1, 2011- Jan 1, 2013 Same as #1

Feature Rich Component Editing

## SCREEN CAPTURES



**Manage Distribution Schedules**



Distribution Schedules allow users to email reports to any recipient list at any time or day, and customize the accompanying message.

