

# SuiteCRM Analytics

## SuiteCRM Analytics Getting Started

Version: **1.2**

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# Overview

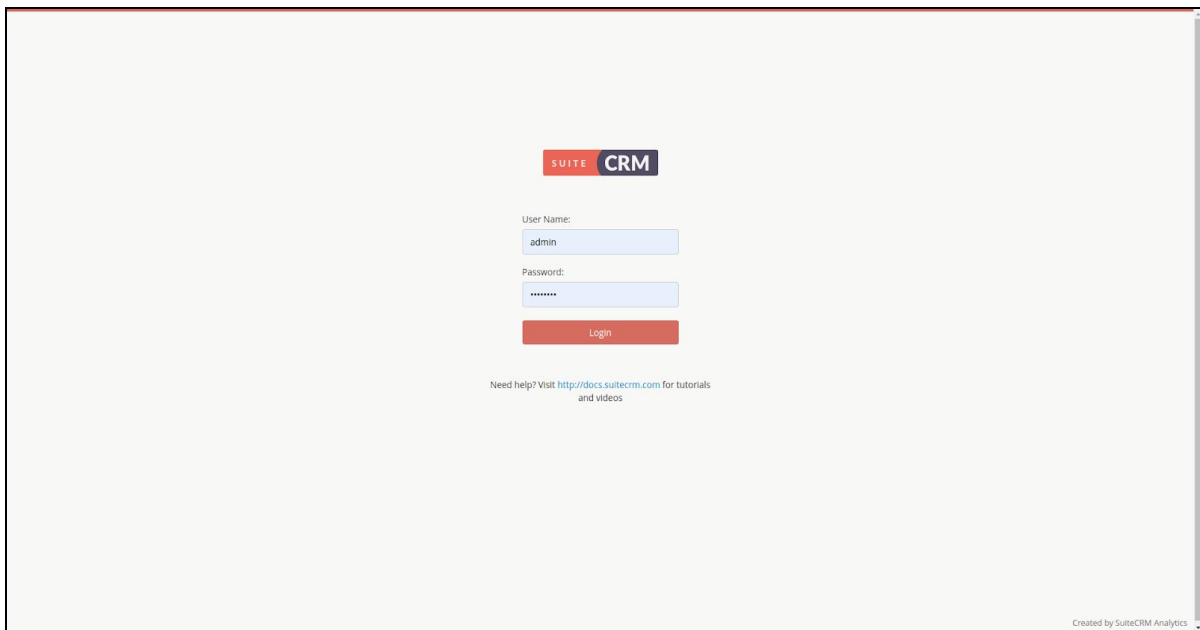
## SuiteCRM Analytics User Console

The SuiteCRM User Console allows end users to run reports and dashboards that have been packaged with the default installation or created by the solution developers using the SuiteCRM Analytics client tools

## Log In

Get started with SuiteCRM Analytics by following these steps to login:

1. Launch a Web browser and enter the URL of the SuiteCRM Analytics server. This will typically be **http://localhost :8080/suitecrmanalytics** if the server is running on your own machine
2. The page loads an introductory screen with a **Login** section.
3. Enter your user name and password and click **Login**.



The default login details for the admin user are below:

Username: **admin**

Password: **password**

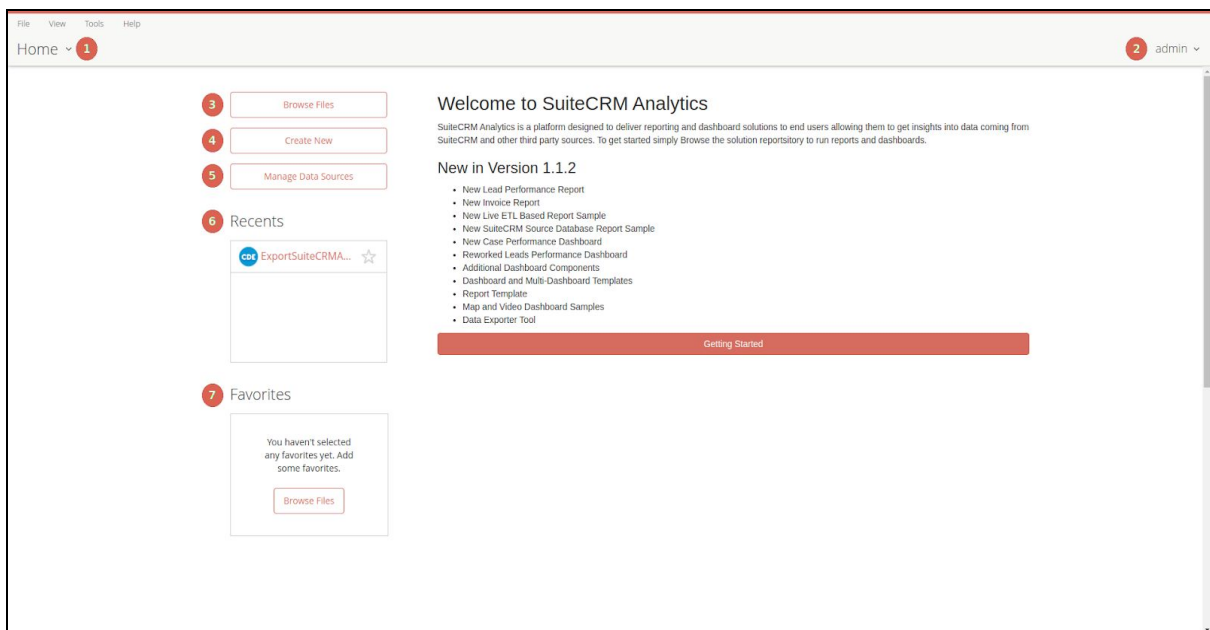
Once you have successfully logged in you will be welcomed by the default homepage of the SuiteCRM Analytics User Console

# About SuiteCRM Analytics Perspectives

The SuiteCRM Analytics User Console interface uses perspectives to extend your ability to work on different tasks at any given time. By default the User Console has the **Home**, **Browse**, **Opened**, **Schedules** and **Administration** perspectives.

## Home

The first thing you see after you log into the **SuiteCRM Analytics User Console** is the **Home** perspective, which serves as the portal for you to access tools and features. **Home** contains easy access buttons so that you can **Browse Files**, **Create New** dashboards, view **Documentation**, and quickly open recently viewed or favorite files.

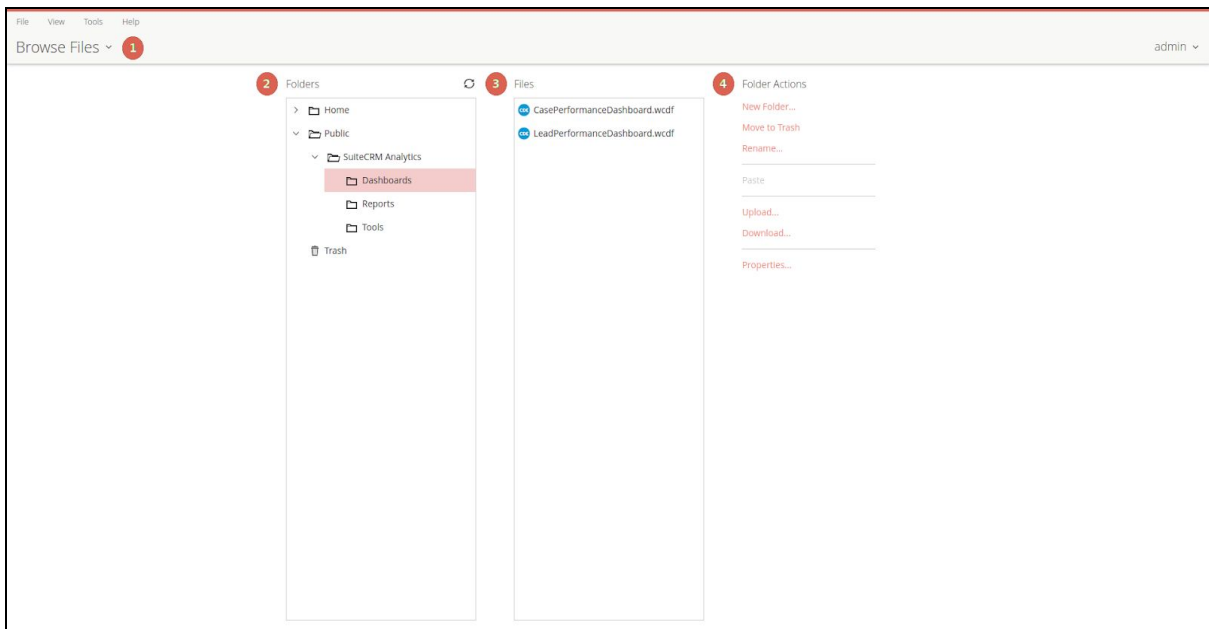


Item	Name	Function
1	Home Indicator	Indicates the current User Console perspective that you are using. The Home menu lets you flip easily from page to page, or return to your Home page.
2	Current User	Shows the name of the person currently logged in to the User Console. Clicking the arrow next to the name lets you log out of the User Console.
3	Browse Files	Brings you to the Browse Files window, where you can locate your files using the Browsing and Files panes, and manage them using the Actions pane.
4	Create New	Gives you the option to create a new Dashboard. If you have permissions to work with Data Sources, this button also gives you the option to

		create a new Data Source.
5	Manage Data Sources	Allows administrators to manage new or existing data sources.
6	Recents	Shows a list of your most recently opened files. Clicking on the star next to a recently opened file adds it to your Favorites list.
7	Favorites	Shows a list of your favorite files for quick access.

## Browse Files

The **Browse Files** perspective helps you keep your files and folders organized and makes them easier for you to find and work with.

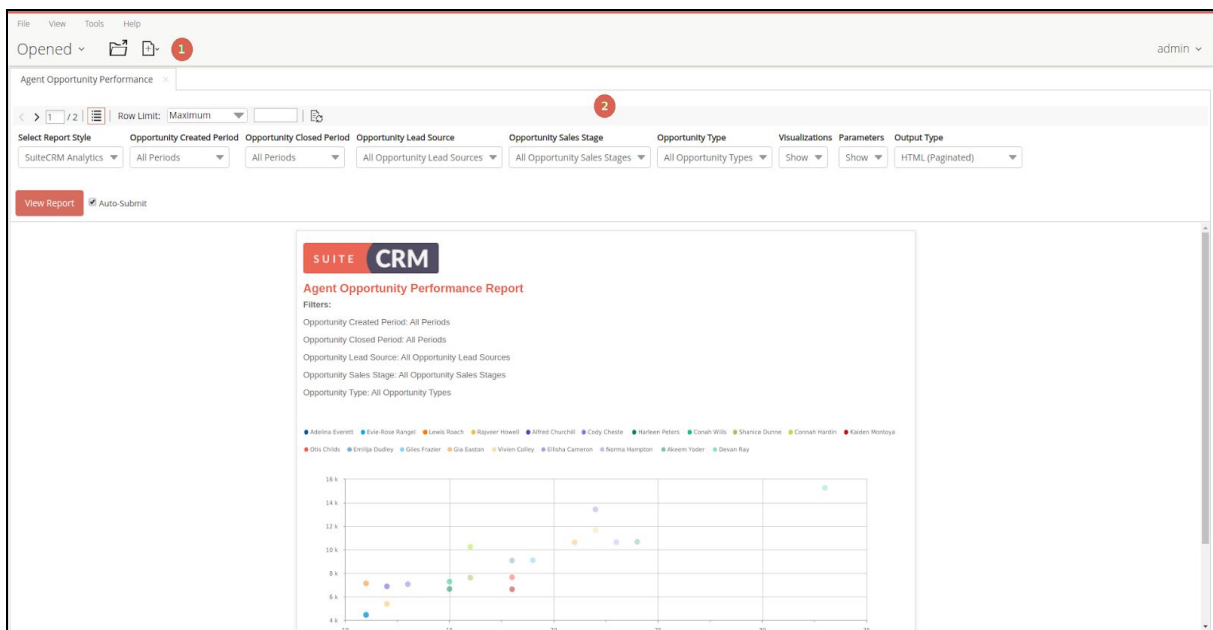


Item	Name	Function
1	Browse Files Indicator	Indicates the current User Console perspective that you are using. Browse Files shows you how to locate your files and folders and the different actions you can do with them.  Displays the Folders, Files, and Actions panes.
2	Folders	Shows a list of folders that you can browse through to locate your files. You can also use the Browsing pane to create new folders or delete old ones.  After you select something in the Browsing pane, the Actions pane populates with a list of things you can do with the folders.
3	Files	Generates and shows a list of all files contained in the folder that is selected in the Browsing pane.  After you select a file, the Actions pane populates with a list of things you

		can do with the file.
4	Actions	<p>The actions displayed depend upon the selection made in the Folders pane, as follows:</p> <ul style="list-style-type: none"> <li>• The Folder Actions pane gives you the ability to: <ul style="list-style-type: none"> <li>○ Create, delete, and rename folders</li> <li>○ Paste files in a folder</li> <li>○ Upload files</li> <li>○ Download folders</li> <li>○ View the Properties, Allow Scheduling, set to Hidden, and control the folder's permissions for Users and Roles (Manage Permissions, Delete, Write, and Read).</li> </ul> </li> <li>• The File Actions pane gives you the ability to: <ul style="list-style-type: none"> <li>○ Open files in the current window or in a new one</li> <li>○ Run files in the background</li> <li>○ Edit, delete, cut, copy, or paste files or folders</li> <li>○ Share files with others</li> <li>○ Schedule reports to run automatically</li> <li>○ Add files to your Favorites widget</li> <li>○ View the Properties of a file or folder.</li> </ul> </li> <li>• The Actions for Trash gives you the ability to: <ul style="list-style-type: none"> <li>○ Restore a file in Trash Contents</li> <li>○ Permanently delete a file.</li> </ul> </li> </ul>

## Opened

The **Opened** perspective uses plugins to provide access to different analytic capabilities. This perspective activates after you open a file from the **Browse Files** page. It provides a simple space to work with your files.



Item	Name	Function
1	Opened indicator	Indicates the current User Console perspective that you are using.

	Open...  New Dashboard, or Data Source	Opened displays the files that you access from the Browse Files pane.  Open... serves as a quick way to browse for more files to open without leaving the Opened page. These additional files open in new tabs across the Report Window. Quick start buttons to create a new Dashboard. You can also use this button to create a new Data Source, if you have permissions to work with data sources.
2	Report and Dashboard Window	Displays the file or report or dashboard that is currently opened, and lets you edit or work with the file.

## Schedules

All of your active scheduled reports appear in the list of schedules, which you can get to by clicking the **Home** drop-down menu, then the **Schedules** link, in the upper-left corner of the User Console page.

The list of schedules shows which reports are scheduled to run, the recurrence pattern for the schedule, when it was last run, when it is set to run again, and the current state of the schedule.

The screenshot displays the 'Schedules' management interface. At the top, there's a 'Manage Schedules' section with a toolbar. Below it is a table with the following data:

Schedule Name	Repeats	Source File	Output Location	Last Run	Next Run	Created By	Status
PentahoSystemVersionCheck	Every day at 7:34:43 AM	PentahoSystemVersionCheck	-	Sep 16, 2020 7:34:43 AM	Sep 17, 2020 7:34:43 AM	admin	Normal

Below the table is a 'Blockout Times' section. It states 'All schedules will be blocked out during the following times:' and contains a table with the following data:

Starts	Ends	Repeats	Repeats End By
Thu, Sep 17 12:00 AM	Thu, Sep 17 1:00 AM	Every day at 12:00:00 AM	Never

Item	Name	Function
1	Schedule Indicator	Indicates the current User Console perspective that you are using. <b>Schedules</b> displays a list of schedules that you create, a toolbar to work with your schedules, and a list of times that your schedules are blocked from running.
2	Schedule Name	Lists your schedules by the name you assign to them. Click the arrow next to <b>Schedule Name</b> to sort schedules alphabetically in ascending or descending order.



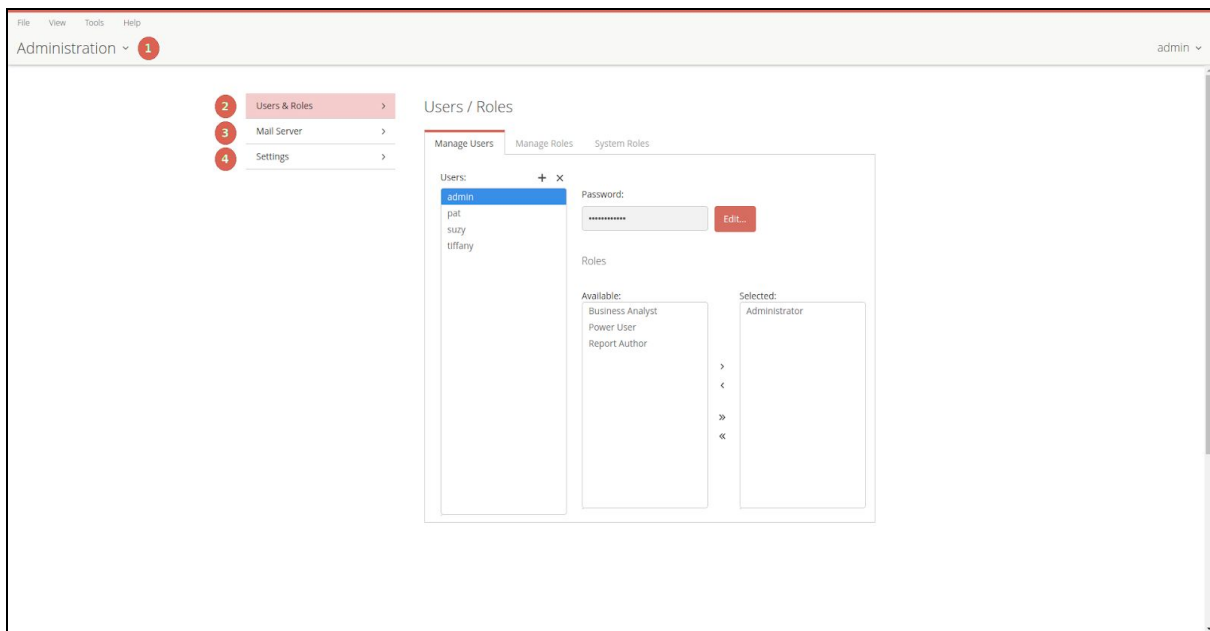
<b>3</b>	Repeats	Describes how often the schedule is set to run.
<b>4</b>	Source File	Displays the name of the file associated with the schedule.
<b>5</b>	Output Location	Shows the location where the scheduled report is saved.
<b>6</b>	Last Run	Shows the last time and date when the schedule was run.
<b>7</b>	Next Run	Shows the next time and date when the schedule will run again.
<b>8</b>	Created By	The user who created the schedule
<b>9</b>	Status	Indicates the current <b>Status</b> of the schedule. The state can be either Normal or Paused.
<b>10</b>	Blockout Times	Lists the times when all schedules are blocked from running.

## Schedule Reports

You can use the **Browse** perspective to schedule a report to run at regular intervals, on certain dates and times, and with different parameters.

## Administration

In the User Console, the **Administration** can be used by logged-on users assigned a role that has permissions to administer security can perform system configuration and maintenance tasks. If you see **Administration** in the left drop-down menu on the **Home** page, you can click it to reveal menu items specific to administration of the SuiteCRM Analytics Server. If you do not have administration privileges, Administration does not appear within the console.



Item	Name	Function
1	Administration	The Administration perspective enables you to set up users, configure the mail server and change authentication settings on the SuiteCRM Analytics Server.
2	Users & Roles	Manage the SuiteCRM Analytics users or roles for the SuiteCRM Analytics Server.
3	Mail Server	Set up the outgoing email server and the account used to send reports through email.
4	Settings	Manage settings for deleting older generated files, either manually or by creating a schedule for deletion.

## Running Reports

To run Reports you simply have to navigate to the **Public > SuiteCRM Analytics > Reports** folder and you will see the list of reports in the middle panel. Here you can double click the report you wish to run and it will open in a new tab. You also have report options on the right side panel to open the Report in a new browser window.

The report will execute immediately based on default filter values. You can now edit the report filters and properties. Each change to a report filter or property will cause the report to refresh. You can turn this functionality off by unchecking the **Auto Submit** checkbox and instead click **View Report** when you are happy with the filters selected.

The screenshot displays the SuiteCRM Analytics interface. At the top, there's a navigation bar with 'File', 'View', 'Tools', and 'Help'. Below it, a breadcrumb trail shows 'Opened > SuiteCRM Analytics > Reports'. The main area is divided into a filter section and a report display section.

**Filter Section:**

- Select Report Style:** SuiteCRM Analytics
- Select Report Grouping:** Campaign Name
- Lead Source:** All Lead Sources
- Lead Country:** All Lead Countries
- Lead State:** All Lead States
- Campaign Status:** All Campaign Status
- Campaign Type:** All Campaign Types
- Campaign:** All Campaigns
- Parameters:** Show
- Output Type:** HTML (Single Page)

Below the filters, there are buttons for 'View Report' and 'Auto-Submit' (checked).

**Report Display Section:**

The report is titled 'SuiteCRM Lead Performance Report'. It shows the following filters:

- Lead Source: All Lead Sources
- Lead Country: All Lead Countries
- Lead State: All Lead States
- Campaign: All Campaigns
- Campaign Status: All Campaign Status
- Campaign Type: All Campaign Types

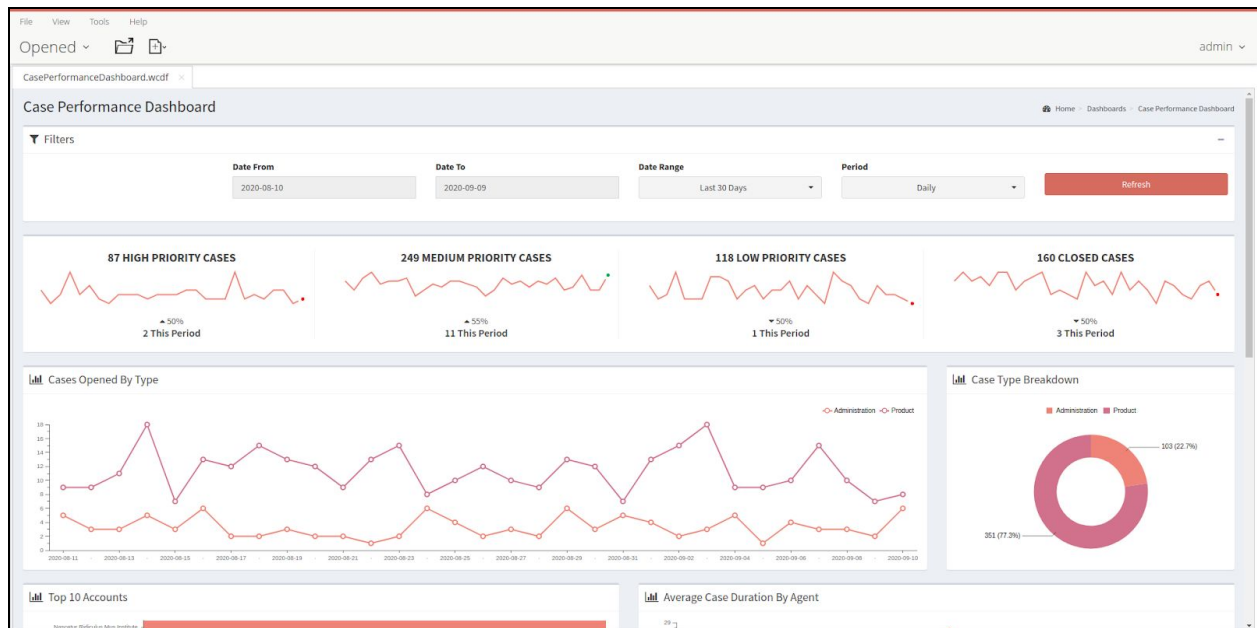
The report data is presented in a table with the following columns: Agent, New, Assigned, In Process, Converted, Recycled, Dead, and Total. The data is grouped by Agent.

Agent	New	Assigned	In Process	Converted	Recycled	Dead	Total
BOGOF	224 11.3%	215 10.9%	220 11.1%	884 44.0%	221 11.2%	217 11%	1,961 19.0%
Loyalty Promo	230 11.6%	215 10.8%	209 10.5%	884 44.0%	210 10.6%	231 11.7%	1,962 19.0%
Soda Popping	205 10.6%	212 11%	233 12%	852 44%	225 11.6%	209 10.6%	1,308 13.4%
Toilet Roll Towers	213 10.4%	207 10.1%	230 11.2%	900 43.9%	261 12.7%	240 11.7%	2,051 20.5%
Unlimited Pizzas	215 10.5%	235 11.5%	221 10.8%	937 45.7%	224 10.9%	218 10.6%	2,051 20.5%
<b>Total</b>	<b>1,090 18.9%</b>	<b>1,084 18.8%</b>	<b>1,113 11.3%</b>	<b>4,467 44.6%</b>	<b>1,141 11.4%</b>	<b>1,115 11.2%</b>	<b>10,000</b>

Report Run Date: 2020-09-10

## Running Dashboards

Running dashboards is done the same way as running a report. We simply navigate to the **Public > SuiteCRM Analytics > Dashboards** folder in the **Solution Browser** and **double click** any of the dashboards we wish to run. This will open up the dashboard in a new application tab where the user can select various data filters and click the **Refresh** button to execute the dashboard.



## Managing Users & Roles

This section provides an overview of the default assignments for users and roles, the permissions included, and the management of users and roles in the SuiteCRM Analytics User Console. You must login to the User Console as an administrator (or be assigned to a role that has Administer Security permission) to manage users and roles for SuiteCRM Analytics Security.

Here is how you can manage users:

- Add Users
- Change User Passwords
- Delete Users
- Assign Users to Roles

Here is how you can manage roles:

- Add Roles

- Assign Permissions to Roles
- Delete Roles
- Assign Roles to Users

You can control users and roles in the User Console with a point-and-click user interface. The **Users & Roles** page allows you to switch between user and role settings. You can add, delete, and edit users and roles from this page.

**Note:** Access to files or folders can also be refined using the **Browse Files** perspective in the **User Console**. Each file or folder can use the default permissions or permissions can be customized for specific users and roles.

## Sample Users, Default Roles, and Permissions

By viewing the sample user and default role examples you can get ideas about ways to define actual users and specific roles.

1. **Login** to the User Console. Click **Home > Administration**. The Administration perspective opens the **Users & Roles** page with the **Manage Users** tab selected.
2. Highlight a user in the users list to display which roles are available for that user, as well as which role is currently defined for that user.
3. Select the **Manage Roles** tab to display the **Operation Permissions** for the user's role, as defined by the checked boxes. These roles, added for your convenience, can be removed or altered based on your needs (**see Table 1**). Each default role and sample user comes with a standard set of permissions, which provides for a specific set of capabilities when using SuiteCRM Analytics tools and the SuiteCRM Analytics Server (**see Table 2**).
4. Select the **System Roles** tab to display the user's system role. System Roles are built-in roles used to control default behaviors and permissions in the User Console, handled implicitly or through system configuration, with automatic assignments. The default system role for all users is **Authenticated**. If you want to restrict permissions, the Authenticated role must be restricted or removed from the user.

**Table 1. Default SuiteCRM Analytics Security Settings**

Default Role	Sample User	Default Operation Permissions
Administrator	admin	<ul style="list-style-type: none"> <li>• Administer Security</li> <li>• Schedule Content</li> <li>• Read Content</li> <li>• Publish Content</li> <li>• Create Content</li> <li>• Execute</li> <li>• Manage Data Sources</li> </ul>
Business Analyst	pat	<ul style="list-style-type: none"> <li>• Publish Content</li> </ul>
Power User	suzy	<ul style="list-style-type: none"> <li>• Schedule Content</li> <li>• Read Content</li> <li>• Publish Content</li> <li>• Create Content</li> <li>• Execute</li> </ul>

Report Author	tiffany	<ul style="list-style-type: none"> <li>• Schedule Content</li> <li>• Publish Content</li> </ul>
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**Table 2. Operation Permissions Defined**

Operation Permission	Definition
Administer Security	<p>The default Administrator role automatically conveys all operation permissions to users assigned to that role, even if the check box next to it is cleared. These permissions include the Read and Create Content permissions, which are required for accessing the Administration perspective.</p> <ul style="list-style-type: none"> <li>• Gives access to the <b>Administration</b> perspective of the User Console.</li> <li>• Allows access to and the ability to manage all content in the <b>Browse</b> perspective.</li> <li>• Allows the ability to view and work with all user schedules in the <b>Schedules</b> perspective.</li> <li>• Gives the ability to create server block out times in the <b>Schedules</b> perspective.</li> </ul>
Schedule Content	<ul style="list-style-type: none"> <li>• Allows the user to schedule reports and content.</li> <li>• Gives the user the ability to view, edit, or delete their own schedules using the <b>Schedules</b> perspective.</li> </ul>
Read Content	<ul style="list-style-type: none"> <li>• Gives the user the ability to view content in the <b>Browse</b> perspective.</li> <li>• Gives the user the ability to view content through the <b>File &gt; Open</b> dialog box.</li> </ul>
Publish Content	<p>This permission includes tools such as Report Designer, Schema Workbench, and Metadata Editor.</p> <ul style="list-style-type: none"> <li>• Allows client tools to store reports or data models in the SuiteCRM Analytics Repository.</li> <li>• When held in conjunction with Write permission on the target folder, allows a user to upload supported content types.</li> </ul>
Create Content	<ul style="list-style-type: none"> <li>• Allows the user to create, import, delete, and save reports to the repository.</li> <li>• Gives the user the ability to see a list of data sources which are used to create reports or dashboards.</li> </ul>
Manage Data Sources	<ul style="list-style-type: none"> <li>• Allows the user to create, edit, or delete new data sources.</li> <li>• Gives the user the ability to see a list of data sources that are used to create reports or dashboards.</li> </ul>

## Add Users

1. With the Manage Users tab selected, click the plus (+) sign. The New User dialog box appears.
2. Enter a new **User Name** and **Password**, then **Confirm Password** and click **OK**. The new user account is active and displays in the Users list.

## Change User Passwords

1. With the **Manage Users** tab selected, click the user for whose password you want to edit. The user's information populates to the right of the **Users** field.
2. Click **Edit**. Enter the **New Password** and **Confirm Password** then click **OK**. The password is changed and the user is able to login with the new password.

Note: After you have logged into the User Console for the first time, it is a best practice to change the default administrator password.

## Delete Users

1. With the **Manage Users** tab selected, click the user or users in the **Users** list that you want to delete.
2. Click the **X** to delete the user or users. The **Delete** User confirmation dialog box appears.
3. Click **Yes, Delete** to delete the user(s) and refresh the user list. The selected user accounts are deleted and the users are no longer able to login to the SuiteCRM Analytics Server.

## Assign Users to Roles

1. With the **Manage Users** tab selected, click to highlight the user from the **Users** list that you want to associate with a role.
2. In the **Available** list, click to highlight the role that you want to associate with the selected user.
3. Click the right arrow (**>**) to move the role to the Selected list.
4. You can remove a role from the Selected list by highlighting that role and clicking on the left arrow (**<**). The role moves from the **Selected** to **Available** list, and the user no longer has the associated permissions. The user now has all of the permissions associated with the role in the Selected list.

## Add Roles

1. With the **Manage Roles** tab selected, click the plus (**+**) sign. The **New Role** dialog box appears.
2. Enter a new **Name** for the role, then click **OK**. The new role is created, and appears in the **Available** roles list. After adding a new role, you need to assign operation permissions to it, see **Assign Permissions to Roles**, below, for details.

## Assign Permissions to Roles

1. Make sure that the role is highlighted in the **Roles** list.
2. Click in the check boxes in the **Operation Permissions** list. The role has permissions assigned to it, and users associated with that role have those permissions.

## Delete Roles

1. With the **Manage Roles** tab selected, click the role or roles you want to delete.
2. Click the **X** to delete the role(s). The **Delete** Role confirmation dialog box appears.
3. Click **Yes** to delete the role(s) and refresh the role list. The selected role is deleted and is no longer available on the server. The users who were associated with that role are no longer associated with it. Other roles assigned to users are not affected. If users have only one role assigned to them and that role is deleted, then the users have no role assigned to them. The default role is **Authenticated** and all users have that role unless you remove it.

## Assign Roles to Users

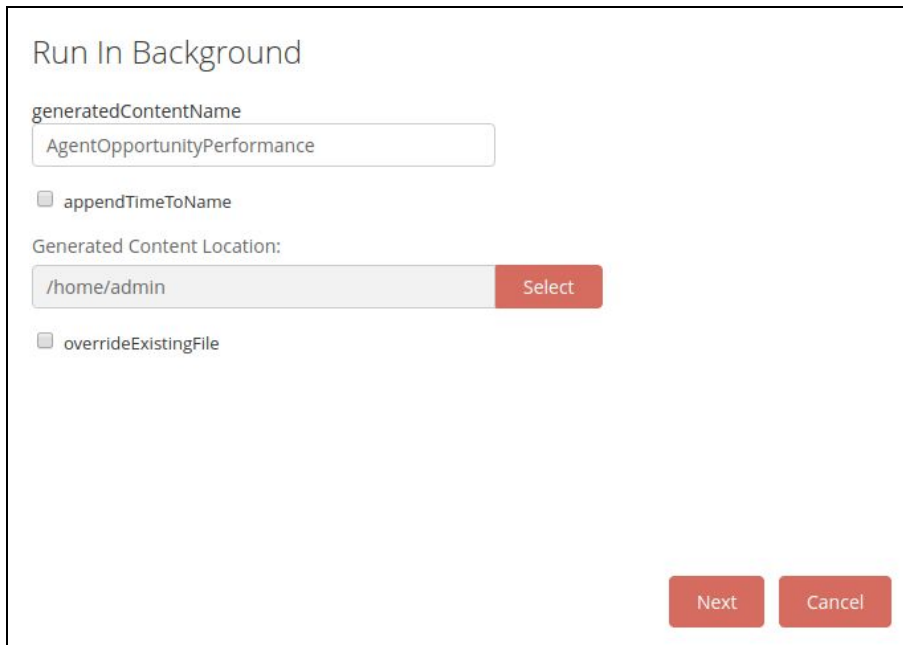
1. Make sure the **Manage Roles** tab is selected, then click the role in the **Roles** list that you want to associate with a user or users.
2. In the **Available** list, click the user or users that you want to associate with that role.
3. Click the right arrow (**>**) to move the users to the **Selected** list. You can click the double-right arrow (**>>**) to move all users from the **Available** list to the **Selected** list.
4. You can remove users from the **Selected** list by highlighting that user and clicking on the left arrow (**<**). The user moves from the **Selected** list to the **Available** list, and no longer has the permissions associated with that role. The users that appear in the Selected list are now tied to the highlighted role and have all of the permissions associated with that role.

## Run Files in Background

You can run reports in the background from the User Console.

Perform the following steps to run a report in the background:

1. Log on to the User Console, and then click the Browse Files button.
2. In the **Folders** pane, browse to the folder containing the file that you want to run.
3. In the **File** pane, click on the file that you want to run.
4. In the **File Actions** pane, click **Run in background**. The Run In Background dialog box displays.



The 'Run In Background' dialog box contains the following elements:

- A text field labeled 'generatedContentName' with the value 'AgentOpportunityPerformance'.
- A checkbox labeled 'appendTimeToName' which is currently unchecked.
- A label 'Generated Content Location:' followed by a text field containing '/home/admin' and a red 'Select' button.
- A checkbox labeled 'overrideExistingFile' which is currently unchecked.
- At the bottom right, there are two red buttons: 'Next' and 'Cancel'.

5. Enter your selections for the following fields.

Field	Description
-------	-------------

Generated Content Name	Specify a name for the generated content. If no name is entered in the Name field, the default is the report name.
Append Time To Name	Click this check box to append the value specified in the <b>Generated Content Name</b> with a timestamp. When selected, a menu displays with a list of timestamp format options. Use the <b>Preview</b> panel to view how the name will display on the generated file.
Generated Content Location	Specify a location for the generated content. Click <b>Select</b> to browse to a folder location to choose it.
Overwrite Existing File	Click this check box to overwrite any existing files that have the same name and timestamp as the one you are running and saving to the specified location.

- Click **Next**. If the selected report has run parameters, such as **Output Type**, you will be asked to specify them here.
- When you have completed your parameter selections, click **Finish**.

The system will deliver the content generated from the report to your specified location.

## Schedule Reports

You can use the Schedules page of the User Console to schedule a report to run at regular intervals, on certain dates and times, and with different parameters. You can also set a scheduled report to be emailed automatically, if your system administrator has configured the server for emailing reports. After you schedule a report, you can pause or delete a schedule, as well as edit the schedule to change the frequency of the report, parameters, or email settings.

The system administrator may set up times when you cannot run a scheduled report, for example, to perform system maintenance, or to minimize scheduling during peak times. If any blocked out times are set up, you can view these times so you can choose an alternate schedule.

### Schedule Report

You can run reports from the User Console using scheduling options to launch reports during off-peak hours or on a recurring basis.

- Log on to the User Console, and then click the **Browse Files** button.
- In the **Folders** pane, browse to the folder containing the file that you want to run.
- In the **File** pane, click on the file that you want to run.
- In the **File Actions** pane, click **Schedule**. The New Schedule dialog box displays.



### New Schedule

Recurrence:

Minutes ▼


Start Time


12 ▼ 00 ▼ AM ▼ British Summer Time (UTC+0100) ▼

Recurrence pattern

Every  minute(s)

Range of recurrence

Start: 9/17/20  ☒ No end date

☐ End by: 9/17/20 

[View Blockout Times](#)

[Back](#) [Next](#) [Cancel](#)

5. Enter your selections for the following fields

Field	Description
Schedule Name	Specify a name for the schedule, which will also be the name of the generated report content. If no name is entered in the <b>Schedule Name</b> field, the default is the name of the report file.
Append Time To Name	Click this check box to append the value specified in the <b>Generated Content Name</b> with a timestamp. When selected, a menu displays with a list of timestamp format options. Use the <b>Preview</b> panel to view how the name will display on the generated file.
Generated Content Location	Specify a location for the generated content. Click <b>Select</b> to browse to a folder location to choose it.
Overwrite Existing File	Click this check box to overwrite any existing files that have the same name and timestamp as the one you are running and saving to the specified location.

6. Click **Next**. The schedule fields display

## New Schedule

Recurrence:

Minutes ▼


Start Time


12 ▼ 00 ▼ AM ▼ British Summer Time (UTC+0100) ▼

Recurrence pattern

Every  minute(s)

Range of recurrence

Start: 9/17/20  ☒ No end date

☐ End by: 9/17/20 

[View Blockout Times](#)

[Back](#) [Next](#) [Cancel](#)

7. If selecting a recurrence, be sure to select start and end dates, as well as a recurrence pattern.

Field	Description
Recurrence	<p>Choose a time interval for the report from the Recurrence list. Options include:</p> <ul style="list-style-type: none"> <li>• Run Once: Runs the file one time.</li> <li>• Seconds: Runs the file repeatedly at the time interval (in seconds) specified in the Recurrence pattern.</li> <li>• Minutes: Runs the file repeatedly at the time interval (in minutes) specified in the Recurrence pattern.</li> <li>• Hours: Runs the file repeatedly at the time interval (in hours) specified in the Recurrence pattern.</li> <li>• Daily: Runs the file repeatedly either every weekday or at the time interval (in days) specified in the Recurrence pattern.</li> <li>• Weekly: Runs the file repeatedly on the day(s) specified in the Recurrence pattern.</li> <li>• Monthly: Runs the file repeatedly on the day of the month specified in the Recurrence pattern.</li> <li>• Yearly: Runs the file repeatedly on the date specified in the Recurrence pattern.</li> <li>• Cron: Runs the file according to the Quartz Cron Attributes in the Cron String field. If you want to enter a custom time interval, choose the 'Cron' option.</li> </ul> <p>If blockout times have been scheduled by your administrator, a View Blockout Times button appears on the bottom of the New Schedule window. Click View Blockout Times to view the list of blockout times.</p>
Recurrence Pattern	Depending your selected time interval in the Recurrence field, specify the

	recurrence pattern.
Range of Recurrence	Specify the start and end dates for running this report. The report will begin running according to the specified recurrence pattern on the start date specified and complete its run cycle on the end date specified in this section.
Start Date (Run Once)	If you select 'Run Once' for Recurrence, then specify the date to run the report.
Cron String (Cron)	If you select 'Cron' for Recurrence, then specify the Cron syntax. Consult the <b>Quartz Cron Attributes</b> reference to learn the Quartz Cron syntax.

**Important!** When you set up a **Cron** schedule you must remember that it will start at **12 noon server time** in the **Start Date** selected. This means if you create a new schedule at **9am** to run every 15 minutes, it will only start running at **12:00** on the Start Date selected. To make sure your cron schedule starts executing straight away its best to select the day prior to today's date. That will allow the cron job to be active right away.

8. Click **Next**. The selected report may run using several parameters which you may be asked to specify, such as output type.
9. If your SuiteCRM Analytics administrator has set up an email server, you may elect to email a copy of the report to selected users. For example, you may want users in the Finance department to receive the Excel output of the report via email every time the report is run on the recurring schedule.
  - a. Click **No** to skip emailing a copy of the report to users.
  - b. Click **Yes** to email a copy of the report to users. Fill in the fields that display with the users' details, and then click **OK**.
10. When you have completed your parameter selections, click **Finish**.

## Edit a Schedule

You can edit a schedule to change the frequency of the scheduled report, report parameters, and email settings.

1. Click the **Home** drop-down menu on the upper-left and click the link to the **Schedules**. The list of schedules appears in the Schedules page.
2. Click the schedule you want to edit in the list, then click **Edit** in the scheduling toolbar. The Edit Schedule window appears.
3. Type to rename the schedule in the **Schedule Name** field.
4. Choose a new time interval for the report from the **Recurrence** list.
5. Choose a new **Start Time** and **Recurrence Pattern**, as well as new **Start** and **End Dates** for the schedule. Click **Next**. If blockout times have been scheduled by your administrator, a **View Blockout Times** button appears on the bottom of the **New Schedule** window. A list of blockout times is viewable by clicking **View Blockout Times**.
6. Choose what type of file you would like the schedule to create from the **Parameters** field. Click **Next**. The email option will only appear if your system administrator has enabled email on the server.
  - a. If you do not want to email a copy of the report, choose **No**.

- b. If you want to email a copy of the report, choose **Yes**. Fill in or edit the fields that appear.
7. Click **OK**.

The schedule is edited and appears in the list in the Schedules window of the console.

## Delete a Schedule

After you have scheduled a report, you can easily delete the schedule without deleting the report.

1. Click the **Home** drop-down menu on the upper-left and click the link to **Schedules**. The list of schedules appears in the Schedules page.
2. Click the schedule that you want to delete in the list. The schedule is highlighted.
3. Click **Delete** in the upper right of the toolbar to delete the highlighted schedule. This deletes the schedule while leaving the report intact.

## Manage Schedules

As an administrator, you may create, run, delete, stop, edit, or resume schedules through the Schedules page. After a report is scheduled by any user, an admin may edit, pause, or delete that schedule, as well as change the frequency of the report, change parameters, or adjust email settings. To distribute reports using email, make sure you have configured the email server.

# Set Up Emails for Scheduled Reports

A convenient way to share reports is to specify an email server to be used by the SuiteCRM Analytics Server to send these reports to recipients. This feature works with the report scheduling feature to automate the process of emailing reports to your user community. Having an email server is not required to configure the SuiteCRM Analytics Server. If you want to get started quickly or do not have information about your email server, skip this for now. You can always come back to it later.

## About the Mail Server Page

You use the Administration page within the SuiteCRM Analytics User Console and access **Mail Server** to set up the e-mail server, as shown in the following example steps:

1. Log on to the Suitecrm Analytics Console, click Administration in the upper-right corner, then click **Mail** Server from the items on the left. The Mail Server page appears.

2. Enter your email server settings

Setting	Description
Hostname (SMTP)	Address of your SMTP email server for sending email.
Port	Port of your SMTP email server, usually 25. For Gmail, the value is 587.
Use Authentication	Enable to use authentication for email.
User Name	User ID to connect to the email server for sending email.
Password	Password used to connect to the email server.
Server Type	Transport for accessing the email server, usually SMTP. For Gmail, SMTP is required.
Email From Address	Name that appears in the From field in an email. If left blank, the default email name for this field is SuiteCRM Analytics Scheduler.
Email From Name	Address that appears in the From field in an email. If left blank, the default email address for this field is Pentaho Scheduler.
Use Start TLS	Enable if the email server requires a Start TLS connection.
Use SSL	Enable if the email server requires an SSL connection. This value must be enabled for Gmail.

3. Click **Test Email Configuration**, then click **Save**. A success message appears.

## Quartz Cron Attributes

The Quartz cron engine supports a seven-attribute time declaration with many possible values. The number format is the same for every expression, even if the values are different -- it must be listed as seconds, minutes, hours, day of month, month, day of week, then the year. A space separates each attribute.

These are the possible values for each attribute: 0 to 59 for seconds and minutes, 0 to 23 for hours, 1 to 31 for days, 1 to 12 for months, 1 to 7 for day of week, and a four-digit year. Alternatively, you can use three-letter values for the day of week (SUN, MON, TUE, WED, THU, FRI, SAT). However, three-letter values for the month (JAN, FEB, etc.) are not supported. For months, use numbers 1-12.

An asterisk (\*) indicates all values, so an asterisk in the minute field would mean that the report runs once every minute. You can specify a range of values with the - (dash) operator, and you can specify multiple individual values with a comma. If you need to excuse a value in the day of month and day of week field from a cron job, you can use the question mark (?) character to indicate that this value doesn't matter. If you need to split values, you can do so with the slash (/) character -- this operator literally means "every," so 0/15 would mean "Every 15." In the day of month field, you can use the # character to indicate a certain instance of a day of the month, for instance the second Friday of the month would be 6#2.

You can use a capital L in the day of month and day of week field to indicate "Last," as in the last day of the week or month. A capital W in the day of month attribute means "Weekday," which only encompasses Monday through Friday. The W character can only be specified when the day-of-month is a single day, not a range or list of days.

Most of these values can be combined to accommodate unusual cron schedules.

Attribute	Conditionals and Operators
Seconds	, - * /
Minutes	, - * /
Hours	, - * /
Day of Month	, - * ? / L W
Month	, - * /
Day of Week	, - * ? / L #
Year	, - * /

## Sample Cron Strings

Cron	Description
0 0/30 * * * ? *	Every 30 minutes every day of the year
0 15 10 ? * 6L *	10:15 AM on every last Friday of every month.
0 30 10 ? * TUE,WED,THU *	10:30AM every Tuesday, Wednesday and Thursday

You can generate Cron strings using this website - <http://www.cronmaker.com/>

## Startup Tabs

Startup tabs allows the admin to configure default reports and dashboards to open when a particular user or role or combination of the two log into the SuiteCRM Analytics server.

By default the **pat** user has been configured as a support role user. This user role is defaulted to open the Case Performance Dashboard and the Agent Case Performance Report upon login.

## Configure Users / Roles

To configure the Users / Roles Start Tabs you will have to edit some XML

1. Log in as an admin user
2. On the main menu select **Tools > Community Startup Tabs > Settings**

This will open up an XML editor. Simply make changes to this file and click save

### User-based rules

You can specify which tabs will be opened when a particular user logs in. For example: "When Joe logs in, you want that the Steel Wheels cube opened in one tab, and the Pentaho Homepage in a second tab."

### Role-based rules

You can specify which tabs will be opened when any user with a particular role logs in. For example: when the users with MANAGER role log in, you want a nightly report in one tab, a monthly sales report in a second tab and the company homepage in a third tab.

### Default rule

The default rule tells which tab will be open when a user that doesn't match any of the other rules logs in.

### Regular Expressions

When you create a role-based rule, you may provide the exact name of the role, but also a regular expression for the role.

For example: suppose that the managers have roles as MANAGER\_EUROPE, MANAGER\_ASIA, and so on. If you want all managers to share the same startup tabs, you can create a rule using a regular expression like MANAGER.+ that will match all those roles.

The same applies for the user-based rules.

### Rule Block

Each rule block defines a new rule, so there will be as many rule blocks as the rules you have.

```
<rule match="USER|ROLE|DEFAULT" pattern="false|true" value="...">
```

```
<rule match="USER" pattern="false" value="joe">
```

match tells which kind of rule you are defining: a user-based rule, a role-based rule or the default rule.

pattern tells if are providing a regular expression for a user or for a role.

value is a fixed name or a regular expression for the user/role.

### Tab Block

Each tab block declares a tab to be opened. Inside each rule block, you can specify as many tabs as you want.

## Sample Configuration

```
<?xml version="1.0" ?>
```

```
<cstConfig>
```

```
  <rule match="USER" pattern="false" value="admin">
```

```
    <tab title="Invoices" fullScreen="false" tooltip="Invoice Report"><![CDATA[api/repos/%3Apublic%3ASuiteCRM%20Analytics%3AReports%3AInvoice.prpt/viewer]]></tab>
```

```
  </rule>
```

```
  <rule match="ROLE" pattern="false" value="Support">
```

```
    <tab title="Case Performance Dashboard" fullScreen="false" tooltip="Case Performance Dashboard"><![CDATA[api/repos/%3Apublic%3ASuiteCRM%20Analytics%3ADashboards%3ACasePerformanceDashboard.wcdf/generatedContent]]></tab>
```

```
    <tab title="Agent Case Performance" fullScreen="false" tooltip="Agent Case Performance"><![CDATA[api/repos/%3Apublic%3ASuiteCRM%20Analytics%3AReports%3AAgentCasePerformance.prpt/viewer]]></tab>
```

```
  </rule>
```

```
  <rule match="DEFAULT">
```

```
    <tab title="Tab8">t8</tab>
```



```
<tab title="Tab9">t9</tab>
</rule>
</cstConfig>
```

**The config above would perform the following**

1. when admin logs in, the Invoices Report should be opened;
2. when a user with the role support logs in, the Case Performance Dashboard and Agent Case Performance Report should be opened;
3. Otherwise, when a user who doesn't match any of the previous conditions logs in, tabs 8 and 9 are opened (these are fictional tabs, in fact you should replace t8 and t9 with real URLs in order to test this sample).

## Data Cache

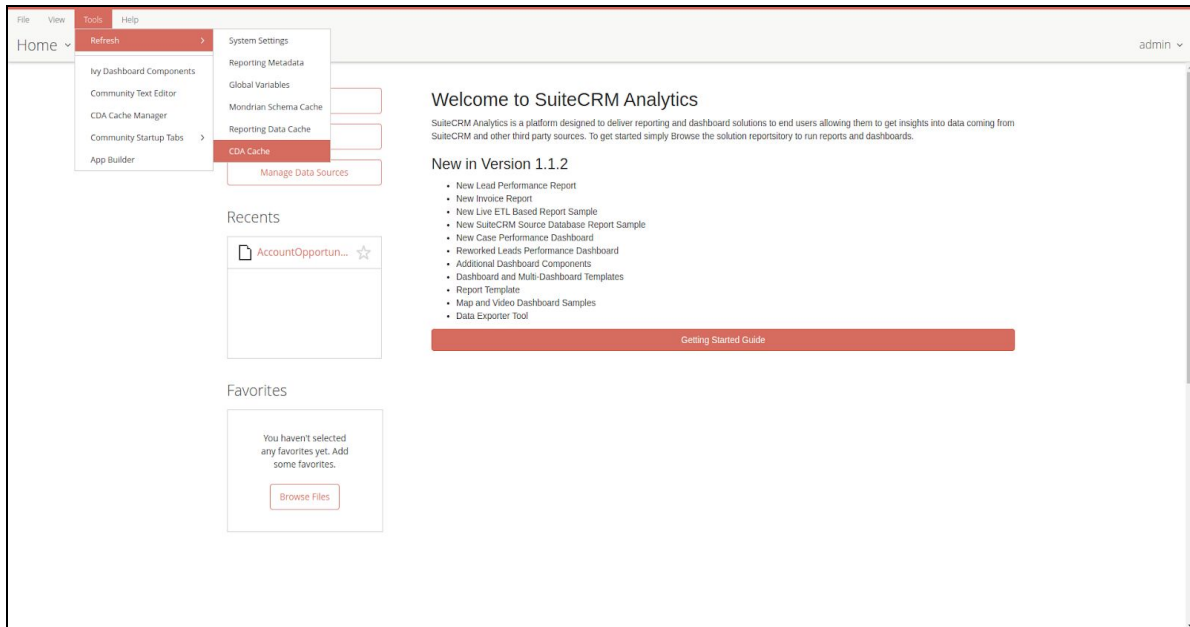
The SuiteCRM Analytics Server comes with **Data Caching** capabilities. When a report or dashboard is run, certain data will be cached for future executions. It's important to understand that when the Data Warehouse is updated you may also have to refresh the SuiteCRM Analytics Server Cache.

### Refresh CDA Cache

The **CDA Cache** serves the charts and dashboards supplied with SuiteCRM Analytics. This also includes any charts that are rendered in reports. To refresh this cache you can follow these steps

1. Log on to the Suitecrm Analytics Console
2. Click the **Tools** menu
3. Select **Refresh > CDA Cache**

This will open a new tab informing you when the **CDA** cache has been cleared.



## Refresh Reporting Data Cache

The **Reporting Data Cache** serves the data in reports but not the charts in reports. To refresh this cache you can follow these steps:

4. Log on to the Suitecrm Analytics Console
5. Click the **Tools** menu
6. Select **Refresh > Reporting Data Cache**

This will display a popup informing you when the **Reporting Data** cache has been cleared.

