

# Intel<sup>®</sup> Retail Client Manager

Training Manual

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*June 2013*



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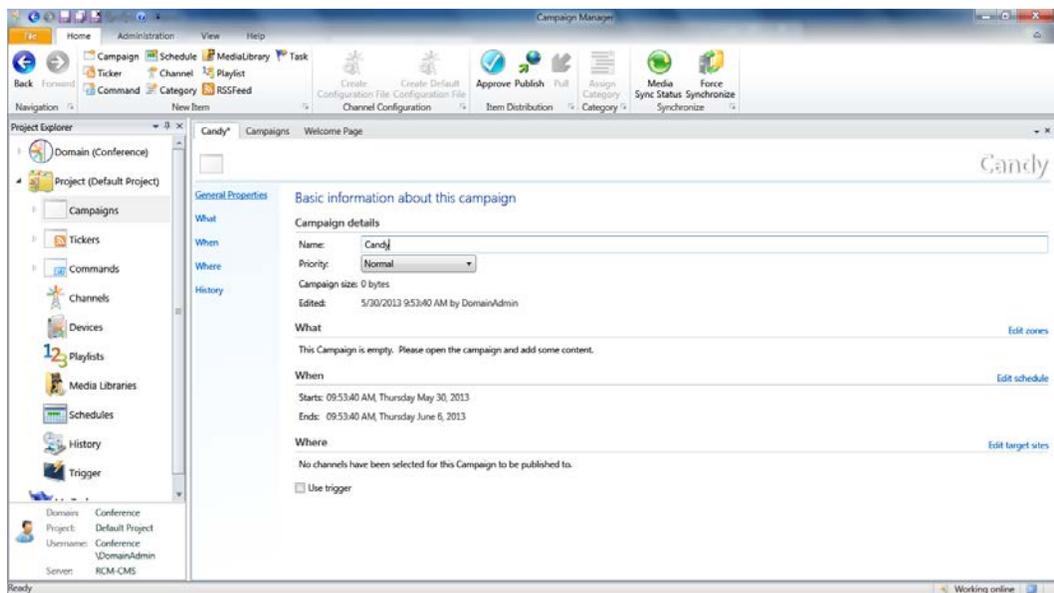
# 1 Introduction

Intel® Retail Client Manager (Intel® RCM) is a comprehensive digital signage solution, scalable to handle the most demanding needs of customers deploying multiple digital signage campaigns to complex networks of displays around the globe. But at its core, the idea of Intel RCM is simple: deliver an idea or message to a screen. To introduce you to Intel RCM we will show you how to perform this most basic task – take a message in the form of a picture and make that seen on-screen.

For this introduction we are going directly to the heart of the system, the campaign. In Intel RCM a “Campaign” is what we call a digital display presentation. A campaign can be as simple as a single image to very complex, with combinations of rich media such as images, videos, RSS feeds, and more. For our first example of a campaign, we will create a very simple campaign to demonstrate the basic structure of the Intel RCM tool. Later on we will explore in depth how to set up all of the elements for a successful digital signage deployment.

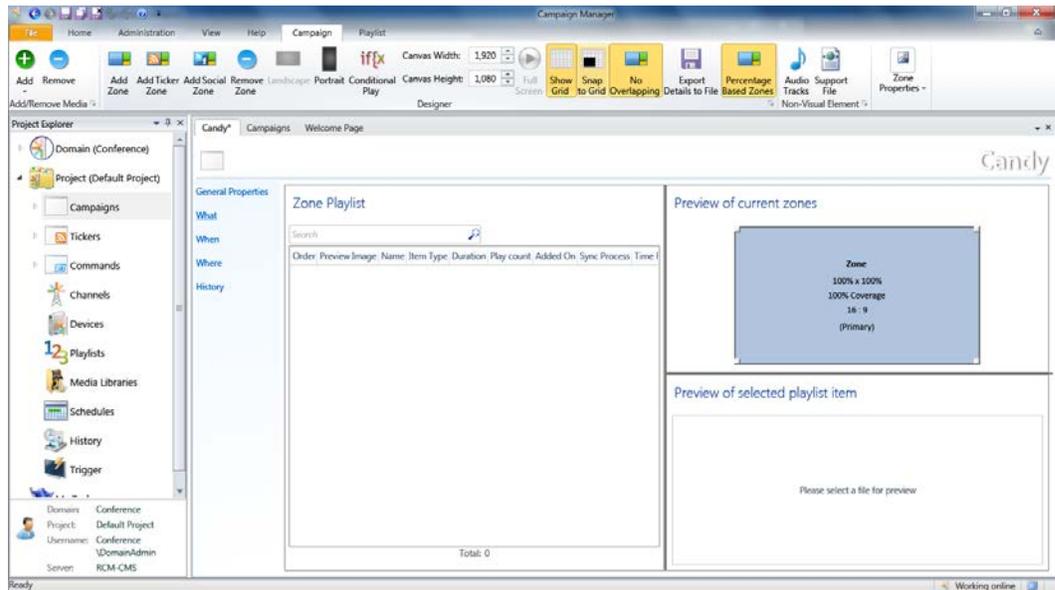
## 1.1 Simple Campaign

1. In Campaign Manager, go to the Campaigns tab, right-click and select **New Campaign**. Next, we need to name the campaign. It is useful to name the campaign something that is reflective of the content. We are going to name this campaign “Candy”.



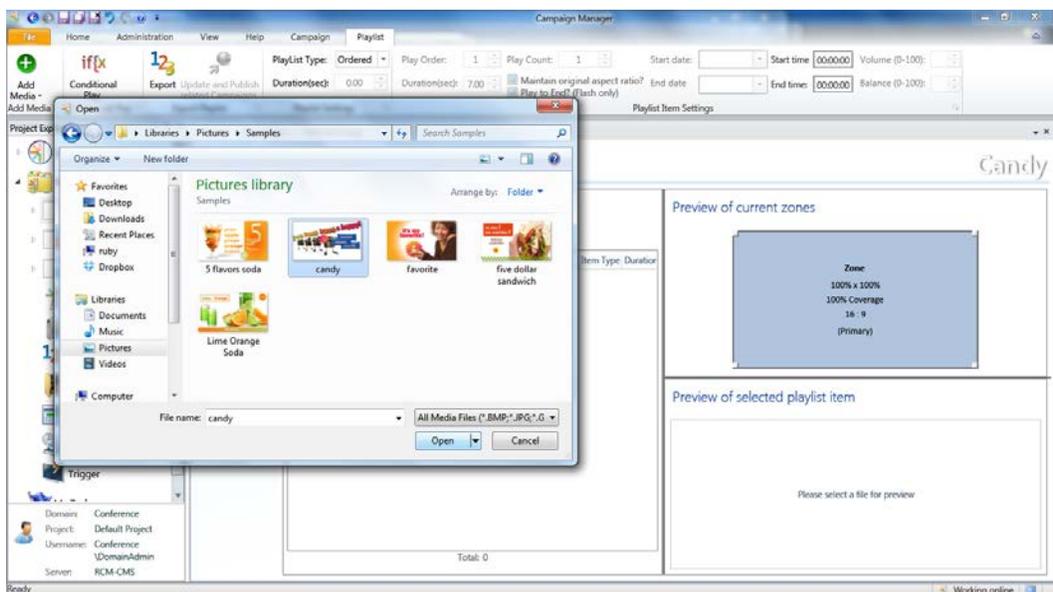
2. We will now add our media content, or What will be displayed. Under the General Properties column, click **What**.

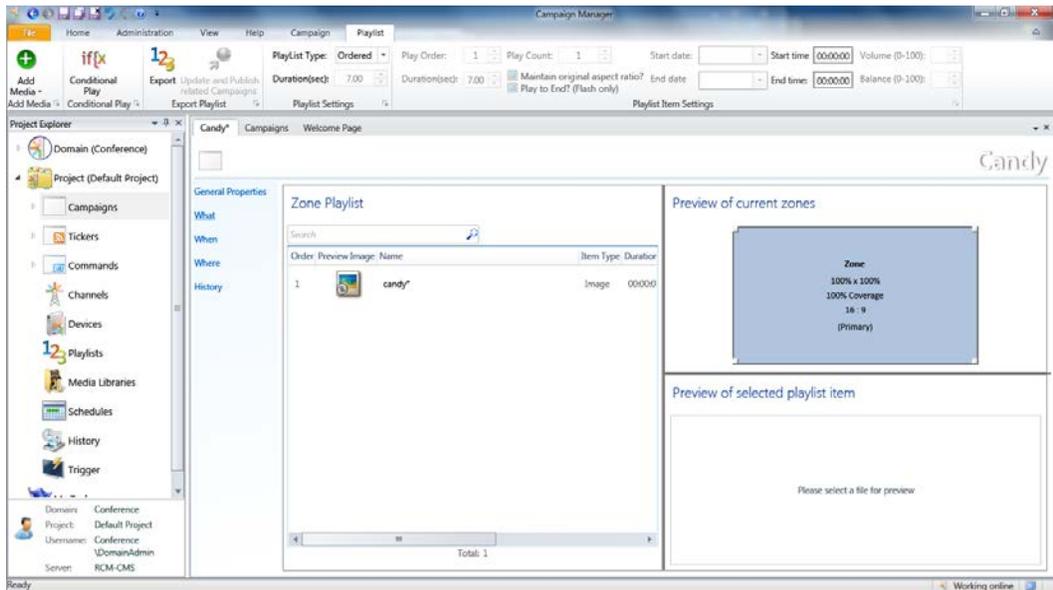
Notice the Preview of the zone on the right. This campaign will be full screen. Later we will explore multiple zones.



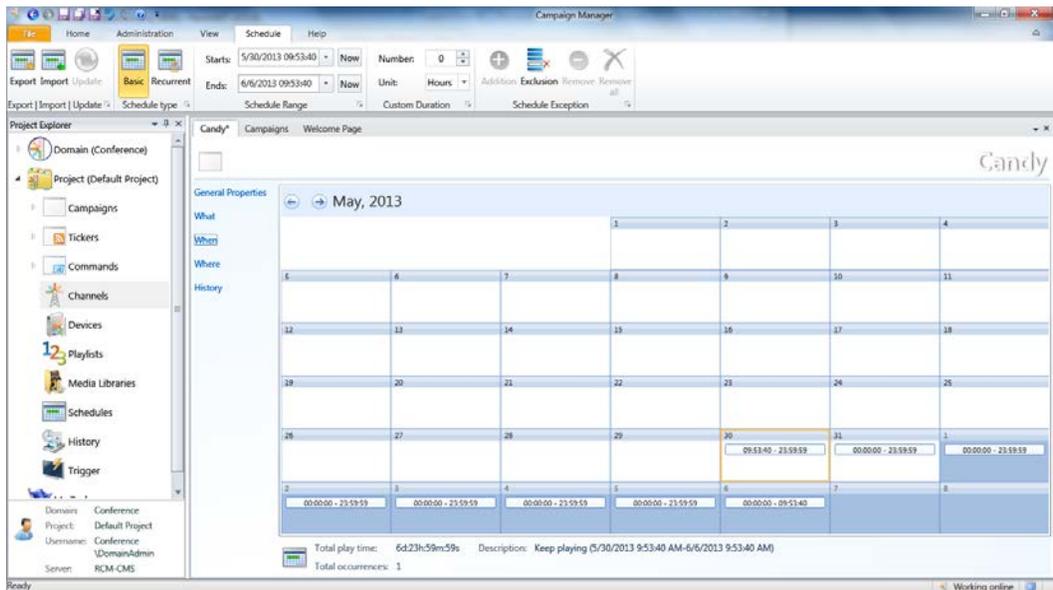
Next, we will add our image to the campaign. Campaigns can use images, video, Flash, and HTML5. Multiple items can be used in a single campaign. Again, we will explore more complex campaigns later, as this campaign will consist of a single image file. Media files can be managed on Intel RCM or brought in from a local drive. We will add a jpeg file from the local drive.

3. To add a file, click **Add** on the ribbon and then select "file". Select the desired image file from the local drive.

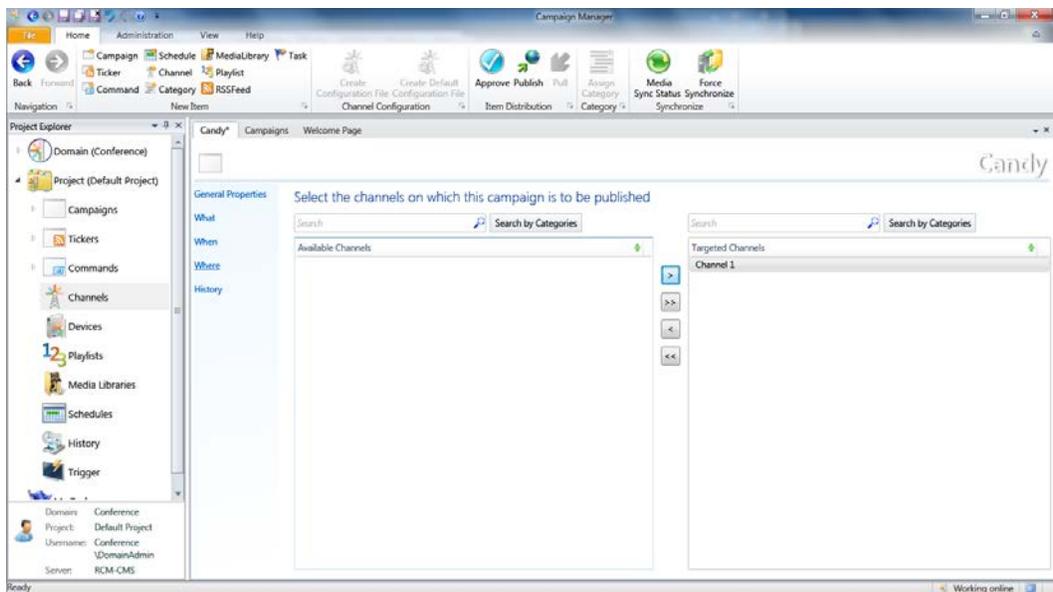
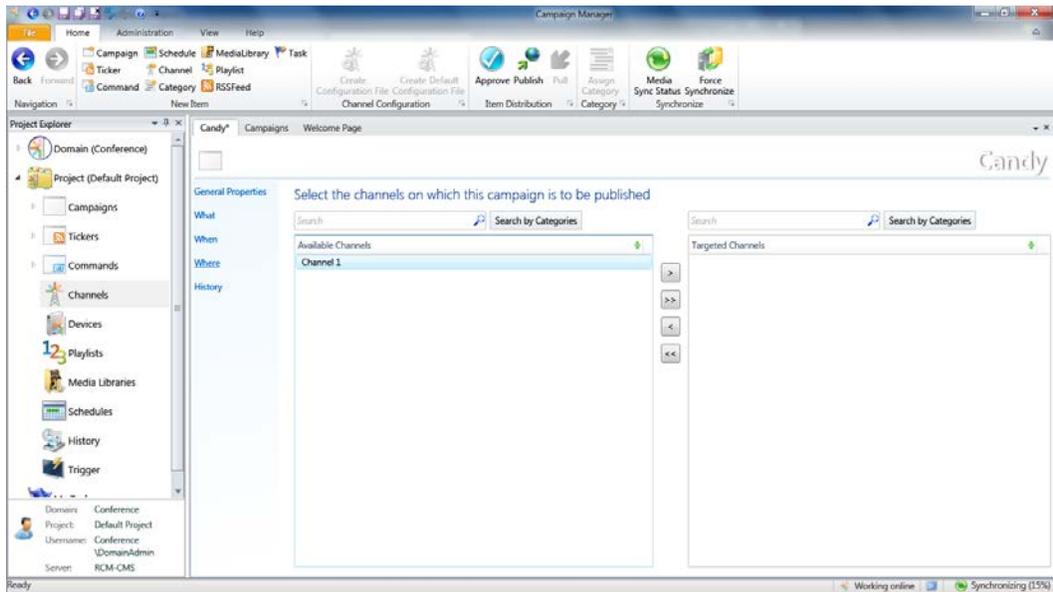




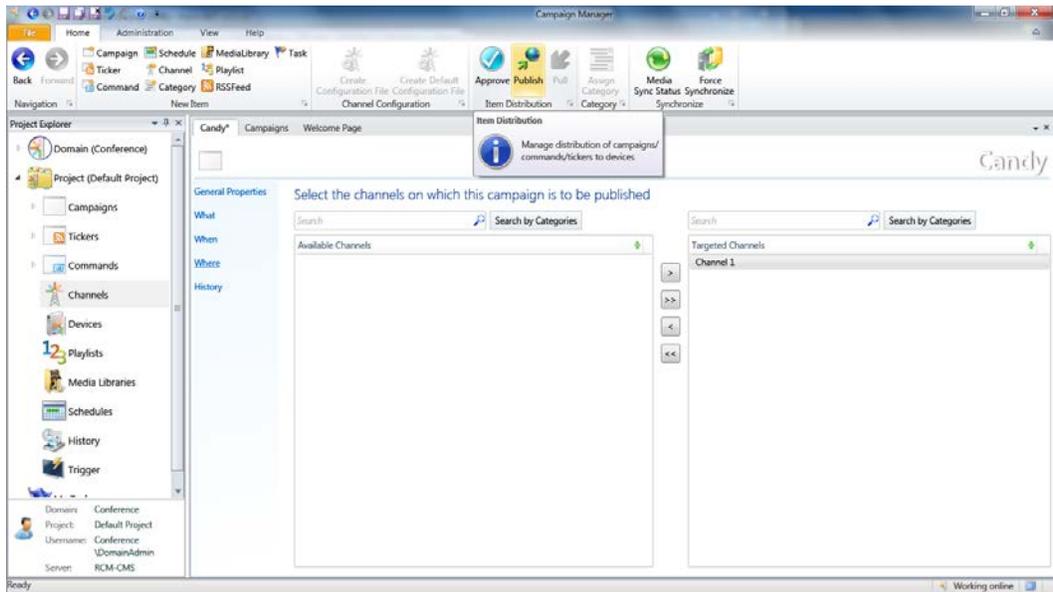
- To schedule when the image will play, click **When**. By default, the play time is for one week. We will not change anything now, but we will discuss scheduling in detail later on.



- To select where our campaign will be displayed, click **Where**. For now, select **Channel 1**. We will explore channels for more choices later.



6. To publish the campaign, click **Publish** on the ribbon. Be sure to click **Yes** or **OK** through the confirmation and saving changes messages. In a few moments our simple campaign will be seen on the player display screen.



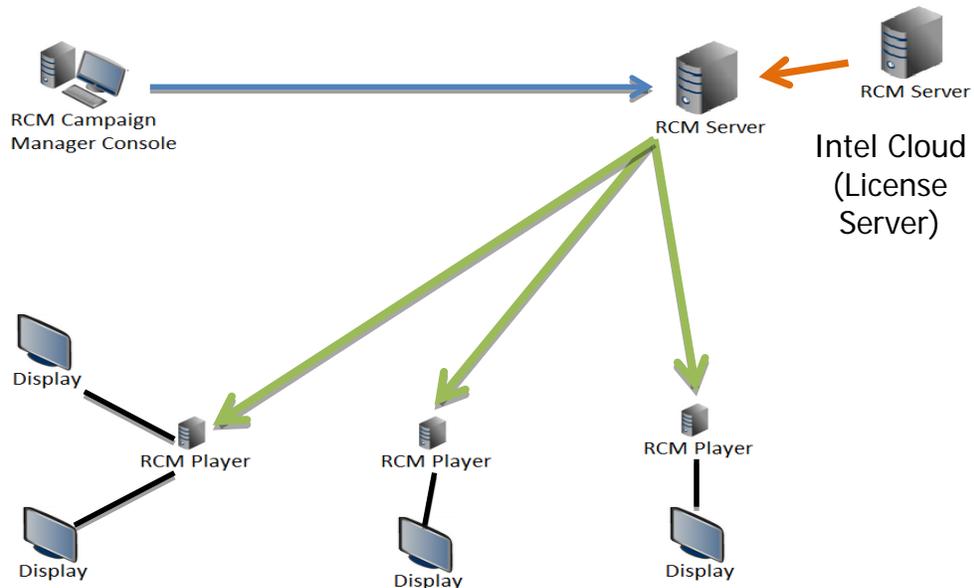
This is Intel RCM at the most basic level. Of course, any real campaign you create will probably be more complex (and interesting) than our sample. There is an unlimited opportunity to create campaigns with playlists, videos, RSS feeds, and multiple zone layouts with complex scheduling shown to channels of displays across multiple geographic regions. But the key concepts that apply to all of that complexity is the *What*, *When*, and *Where* illustrated in our introductory campaign.



## 1.2 Creating Your First Campaign

The purpose of this section is to provide an introduction to the foundation of the Intel RCM components to create a dynamic campaign. We will cover Creating a Channel, Registering a Player, and Creating a Multi-Zone Campaign with varying media.

Below is a graphical representation of the Intel RCM landscape. It may be helpful to refer to this exhibit as a reference as you familiarize yourself with Intel RCM.



### Intel Cloud (License Server)

This is the Intel hosted and managed server that manages licensing for Intel RCM. There is nothing for you to configure. The cloud is shown here for illustrative purposes only.

### RCM Server

The Intel RCM Server is where the content is stored and distributed to the Intel RCM Players. The server may be locally hosted or cloud-based.

### Intel RCM Campaign Manager

The Intel RCM Campaign Manager is the management tool for media, campaigns, channels, scheduling and player management. This is where you will spend the bulk of your time interacting with Intel RCM.

### Intel RCM Player

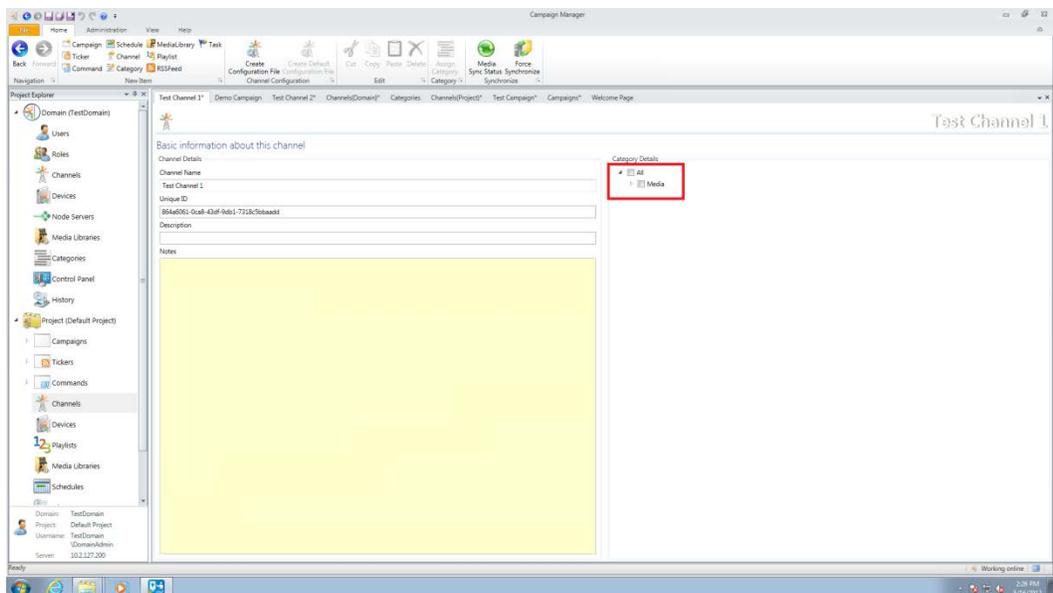
This is the system that is connected to and controls the Display.

## 1.3 Creating a Channel

The idea of a channel in Intel RCM is very similar to the idea of a channel when talking about broadcast television. Channel(s) act as tuning for one or more campaigns or other content entities such as commands and tickers (more on those later). For Intel RCM, players are assigned or "tuned in" to a particular channel where campaigns scheduled to be played back.

There are two general scopes when working in Intel RCM Campaign Manager - the Domain scope and Project scope. The Domain scope can be considered publicly viewable, but narrowly modifiable. The Project scope is limited to a specific project. We are going to work within the Project scope, and will discuss Domain scopes at a later time.

1. At the Project scope: Expand Project from the Project Explorer pane then select **Channels**. To open a tab for a new channel, right-click in the Channels (Project) tab area and select **New** or select the Home horizontal navigation and then click **Channel**.
2. In the New Channel tab, enter a name for the channel. The Unique ID cannot be changed and is used as a reference for the backend database (Intel RCM Server).



3. [Optional] Enter a description for the New Channel and add any pertinent information in the Notes field.
4. On the right side of the Campaign Manager application window, there is a Category Details frame. Select and modify Categories to help distinguish this channel from others, which can be used for various filtering mechanisms.
5. Save the changes and you are finished if you are creating a New Channel at the Project scope. If you are creating a channel at the Domain scope, you will need to toggle which projects in the domain can use the channel then select **Import** after you have made your selections.



#### Channels: How Do They Work?

Channels eliminate the mapping of campaigns to individual players by aggregating many players to a single channel. Campaigns can be played on one or more channels simultaneously. Strategically creating channels in a logical way (by geography, by location type, by time zone, or another way) makes it easy to manage where campaigns will be played.

## 1.4 Registering a Player

Players are the end point where campaigns will be displayed. They can be managed locally or through the Intel RCM Campaign Manager after they are registered. Hardware requirements of the player depend on the campaign displayed (for example, static images, 1080p video, interactivity, etc.). Player Configuration is where we will establish these settings and other properties of the display such as the resolution, refresh rate, number of connected devices (monitors), etc.

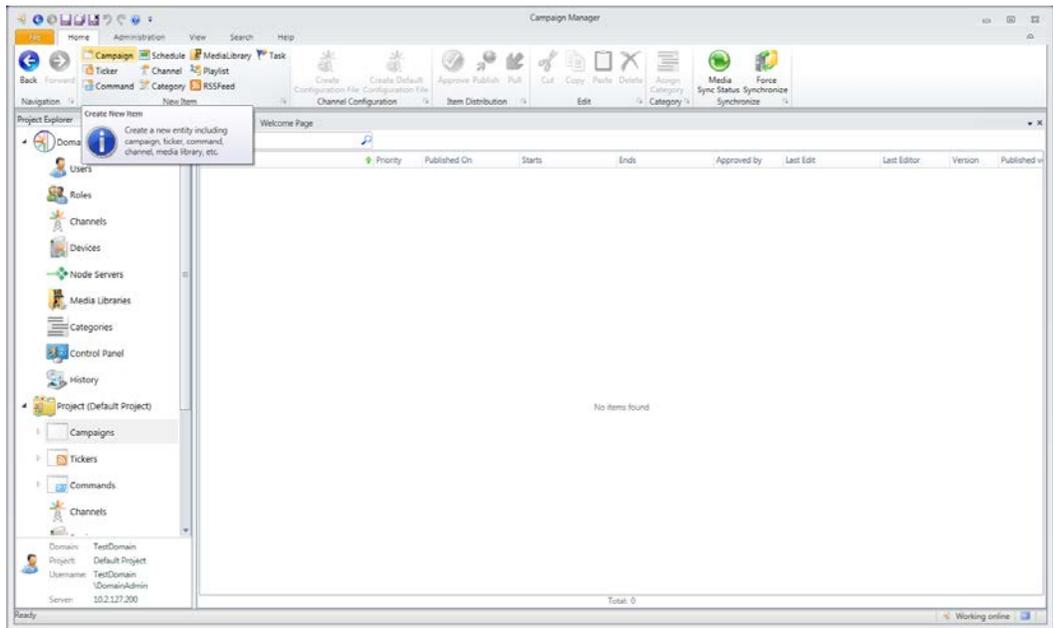
1. In Campaign Manager, expand the Channels from the Project Explorer pane.
2. After a channel has been created, select **Create Configuration File** to create an XML file.
3. Copy the file created in the previous step to the Player System.
4. In Player Configuration, go to File -> **Configure** and open the XML file.
5. Run Diagnostics to confirm configuration.
6. The channel displayed on the player can now be configured from the Player Configuration or Campaign Manager.

#### How Does It Work?

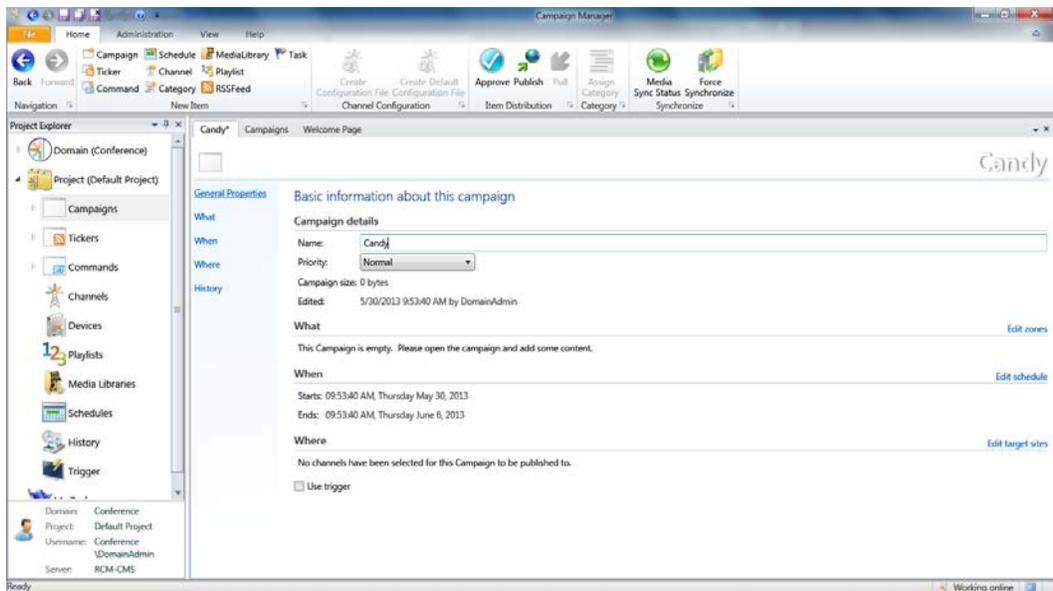
The Intel RCM Player displays a campaign by opening a channel to the Intel RCM Server. The content is pushed from the Intel RCM Server to channels, which determine which campaigns will be shown on individual displays. Approved campaigns are published, are refreshed at preset intervals, and can be pulled from the Campaign Manager. A player can also report metrics to the Intel RCM Server at set intervals.

## 1.5 Creating a Campaign

The campaign is the entity that will display media on players. A campaign can be created to include any number of zones and content from multiple rich sources including video, RSS tickers, web resources, audio, commands, and more.



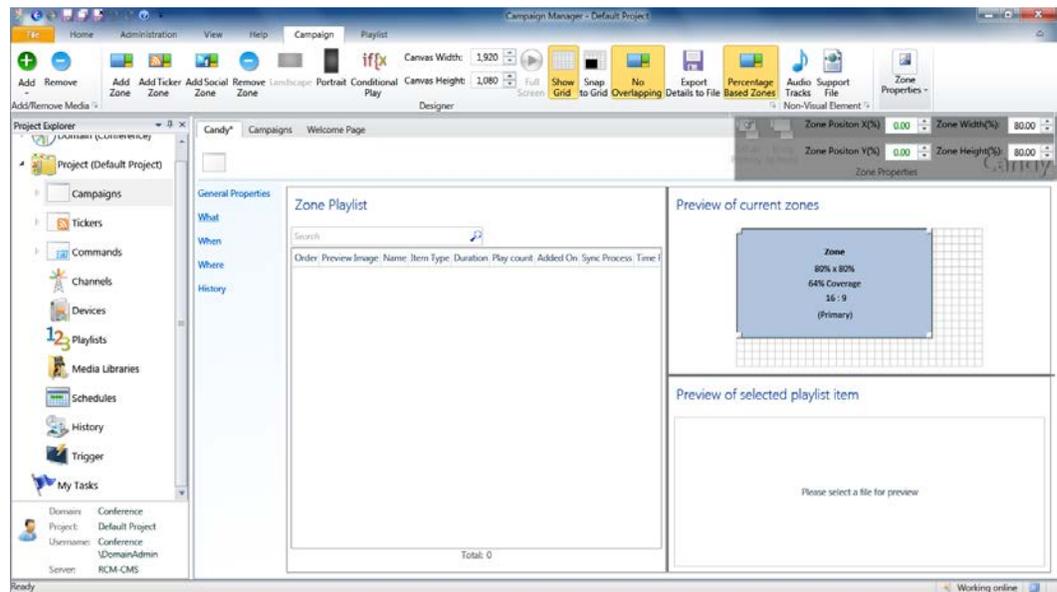
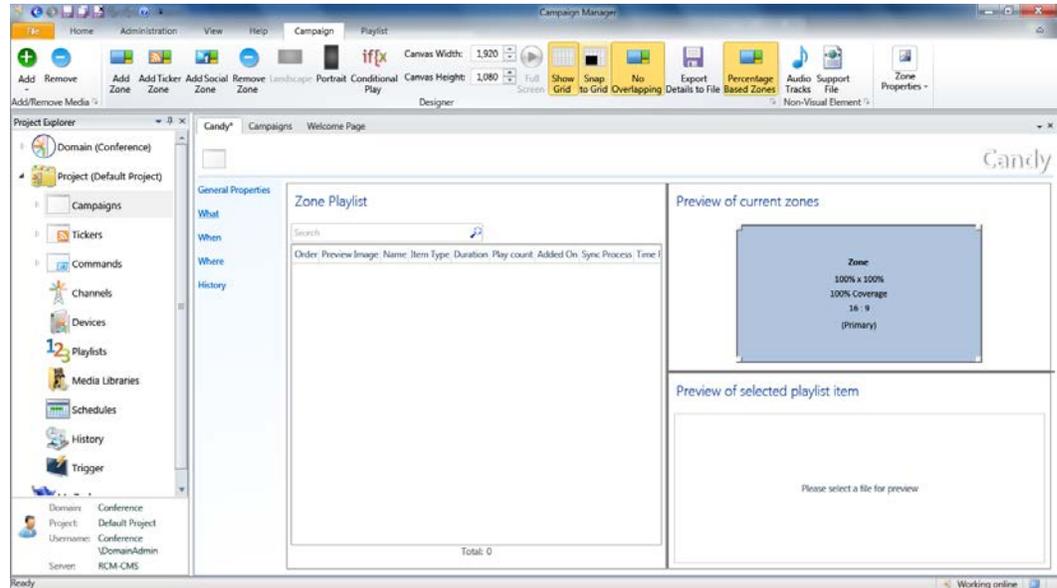
1. In Campaign Manager, go to the Campaigns tab, right-click and select **New Campaign**, or select Campaign from the ribbon and then name your campaign.



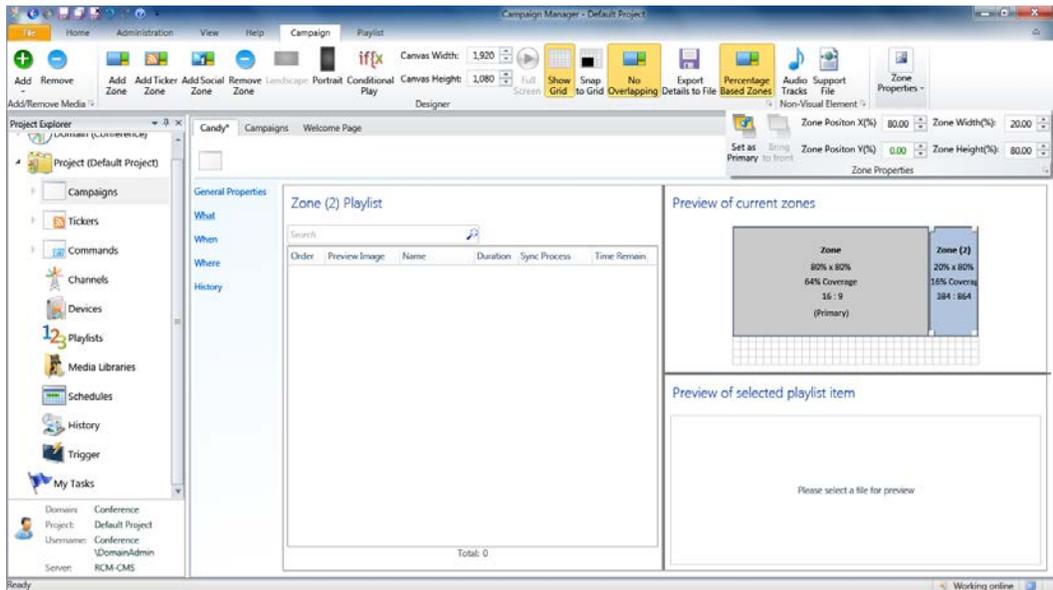
2. In the campaign General Properties, click **What**. Create zones for your campaign by clicking and dragging your zone box. You can also adjust your zone by position, percentage of screen or pixels. To create additional zones right-click in the Preview of current zones.



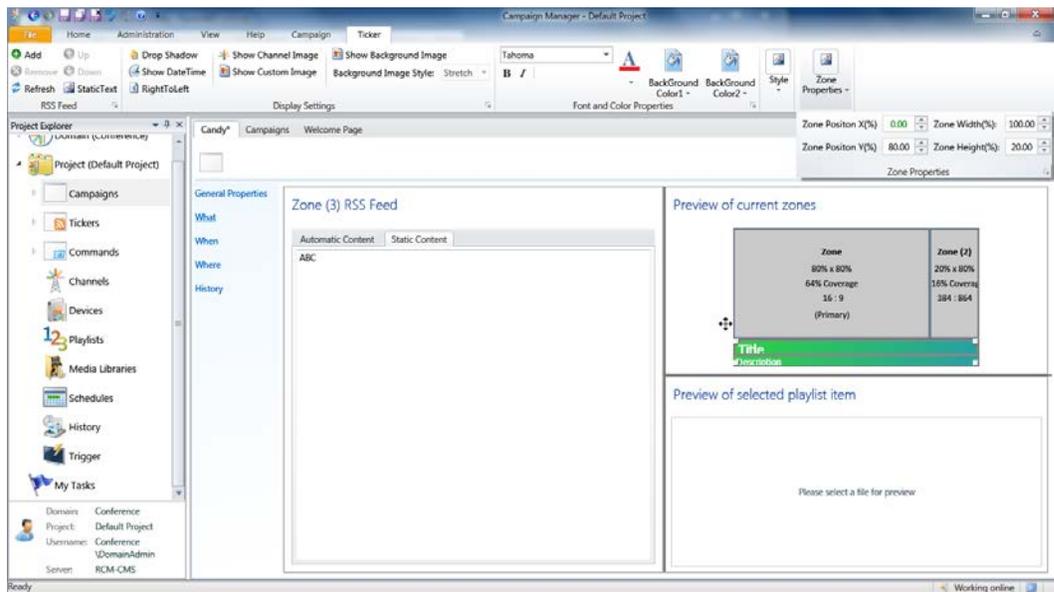
For this campaign, we will use three zones: Zone 1 is our main window with a 16:9 aspect ratio, 80% of full screen. We can adjust the size of the main zone by clicking on the Zone Properties button on the ribbon, and changing the Zone Width and Zone Height both to 80%.



Zone 2 will be our sidebar zone. You can either click **Add Zone** on the ribbon, or right-click in an empty area in the Preview and select **Add Zone** from the context menu. Our sidebar zone is going to be 20% zone width and 80% zone height. Adjust the size as in you did with the Main Zone. You can position your new zone from the Zone Properties to start the X position at 80% and the Y position at 0%. You can alternatively position your new zone by clicking and dragging Zone 2 in the Preview.



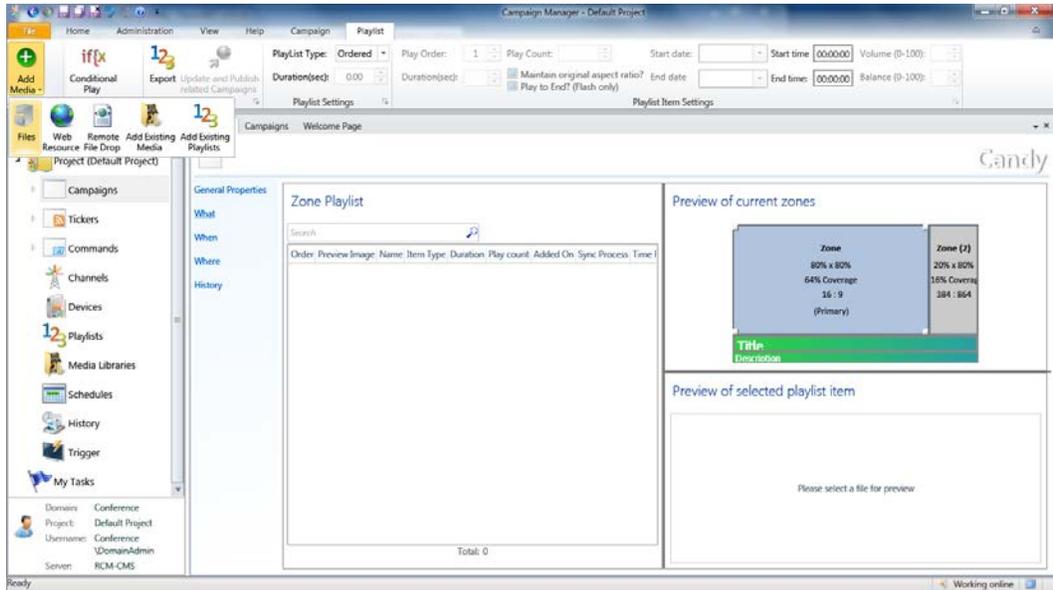
Finally, we will now add our third zone. Instead of a standard media zone, we are going to select a ticker zone from the ribbon. Again, we will adjust the zone properties to our custom layout – 100% width, 20% height. X is positioned at 0%, Y is positioned at 80%.



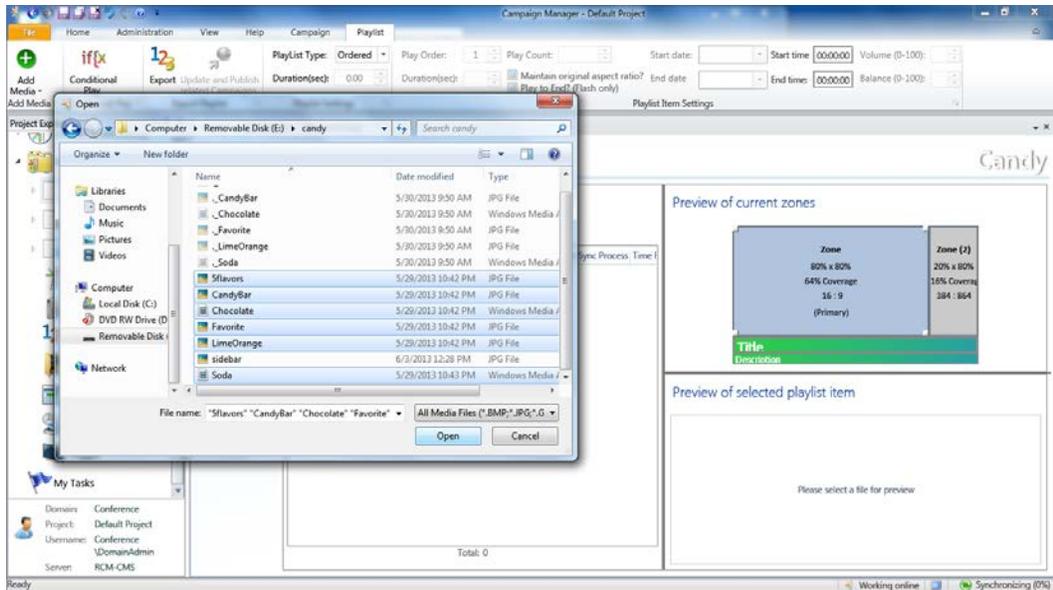
- Next we need to add content to each of our zones. We can add Files (images, videos, Flash, HTML5), Web Resources (Web pages directly loaded in real time of playback), Remote File Drop (placing files onto remote machine for later use) or Existing Playlists (playlists that have already been added and are managed by Intel RCM). For this campaign, we are going to use image and video files from our local hard drive. To add to the Primary Zone, click on the main zone in the preview. Now click in the white space of the Zone Playlist.

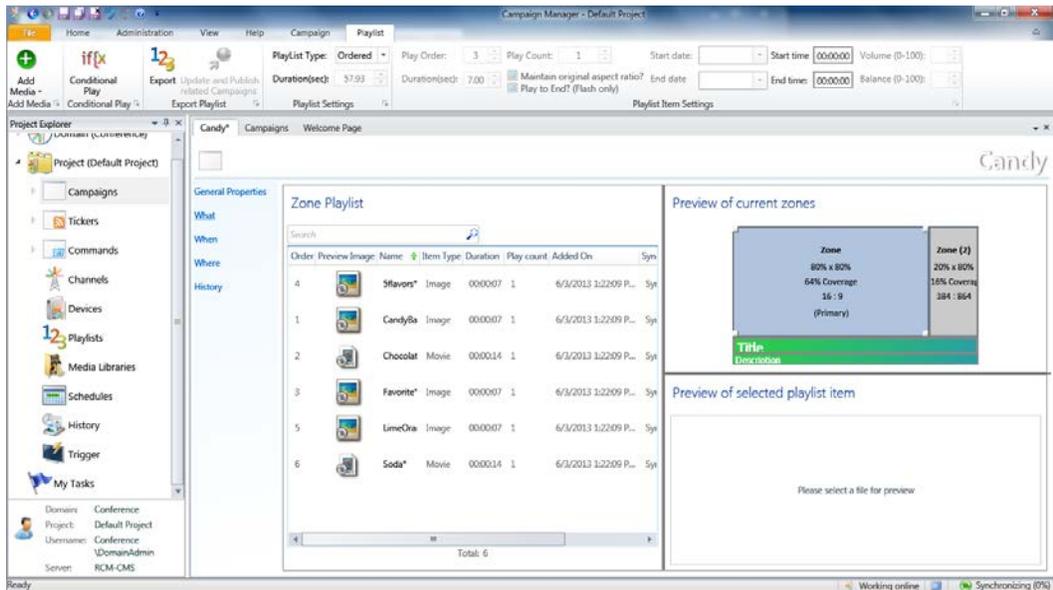


You can add media through the “Add Media” button in the ribbon, or alternatively right-click on the Zone Playlist white space and select Add > **Add Media** from the context menu.



4. Select your files and click **Open**.



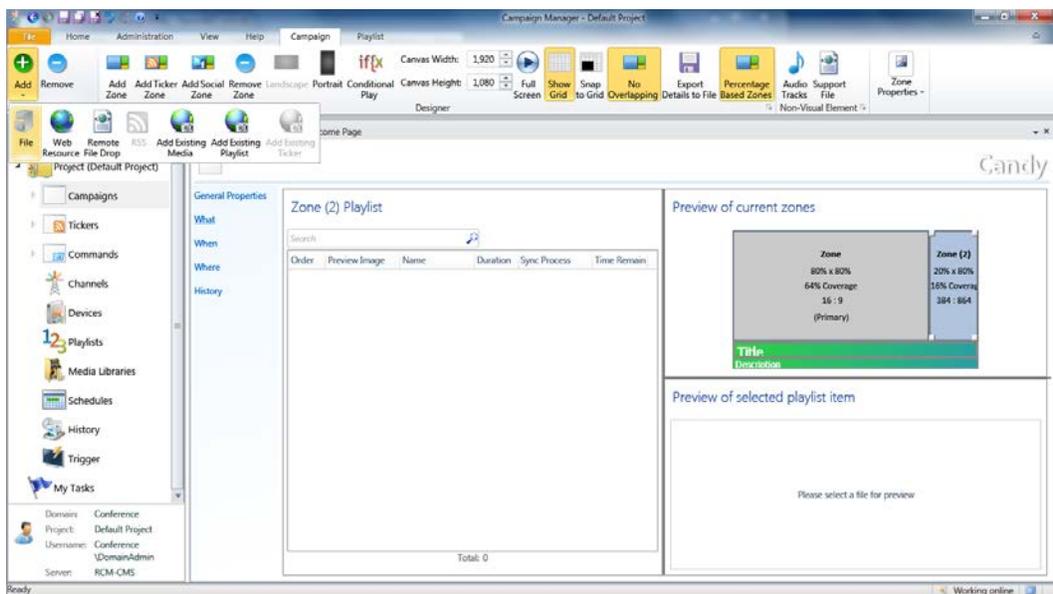


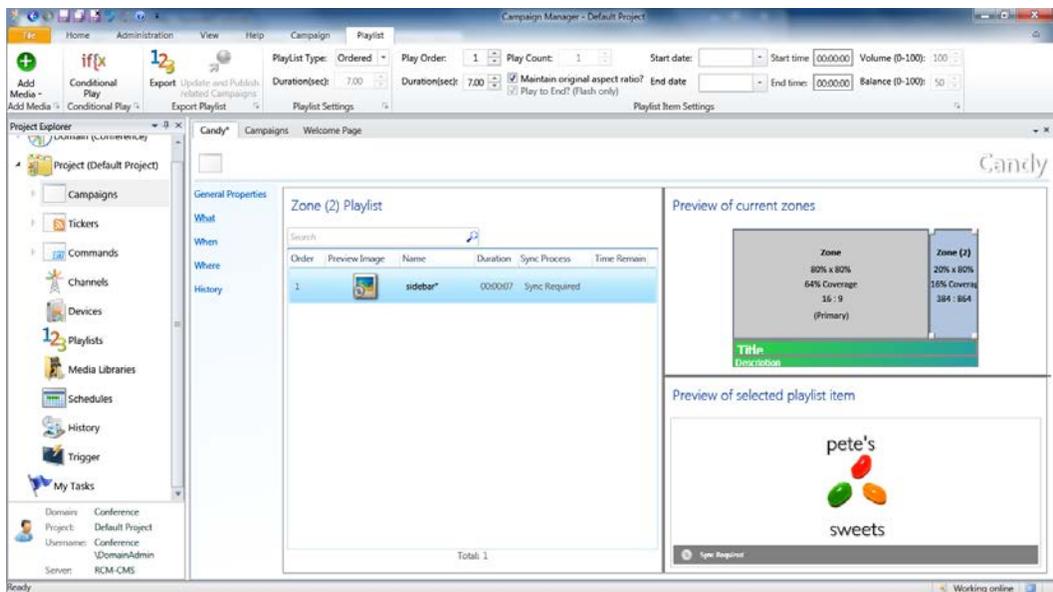
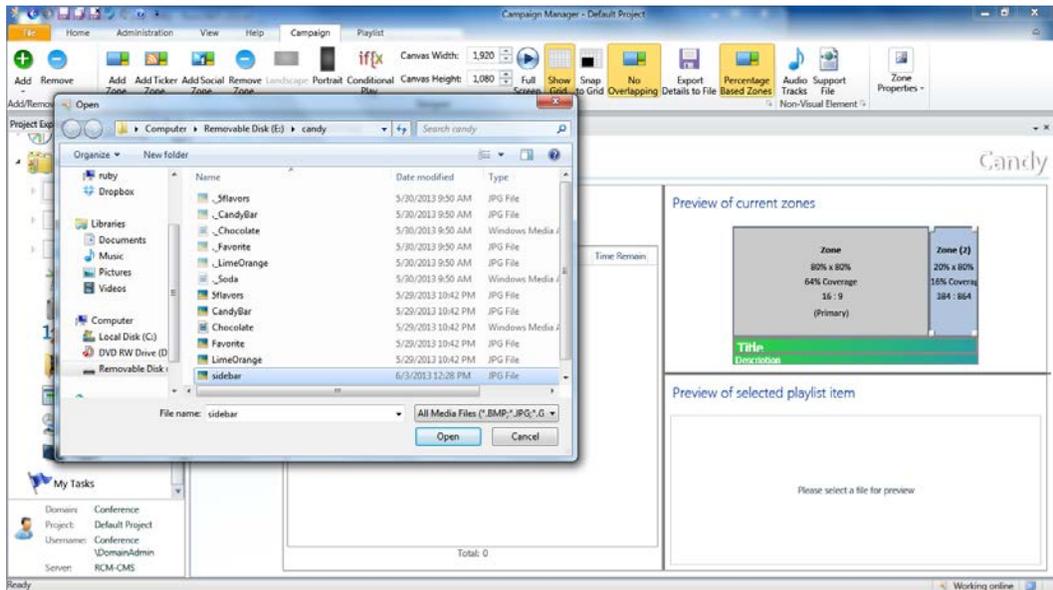
The files are now listed in playback order. You can use “Play Order” in the ribbon or drag and drop to change the order if desired.

From the ribbon you can adjust the playlist from “Ordered” to “Random by Duration”, “Random Count Based” or “Ordered Count Based”. We are going to leave the default setting for “Ordered”.

Also from the ribbon, we can adjust playback time of each item, if desired. Like before, we will leave the default values for our campaign.

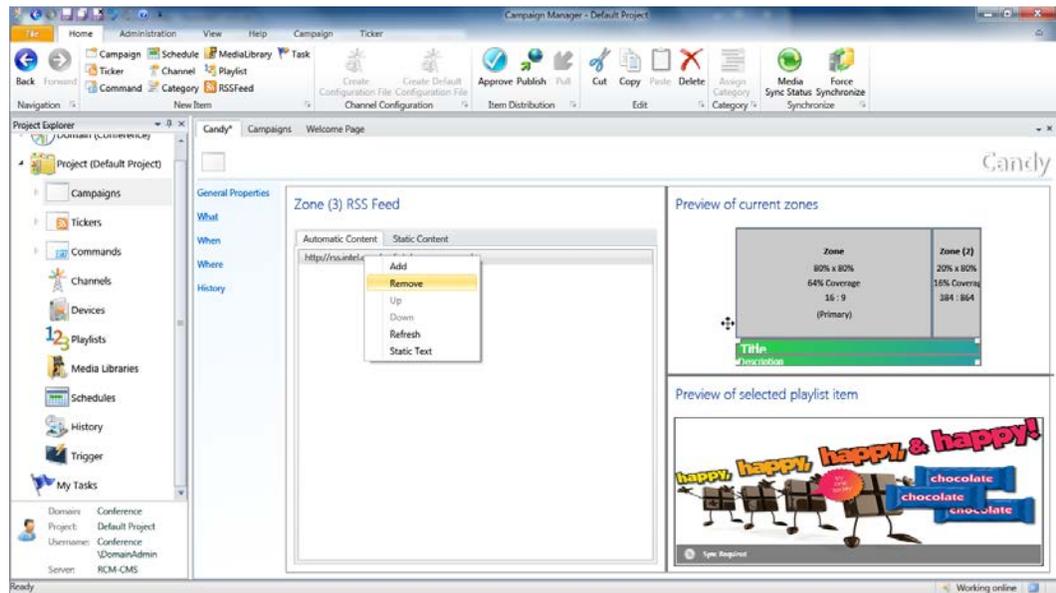
- Next, click on Zone 2 to add content. We are going to add a single image, which has been created to match the dimensions of this zone.





Because there is a single image in the playlist, the image will appear as a static image.

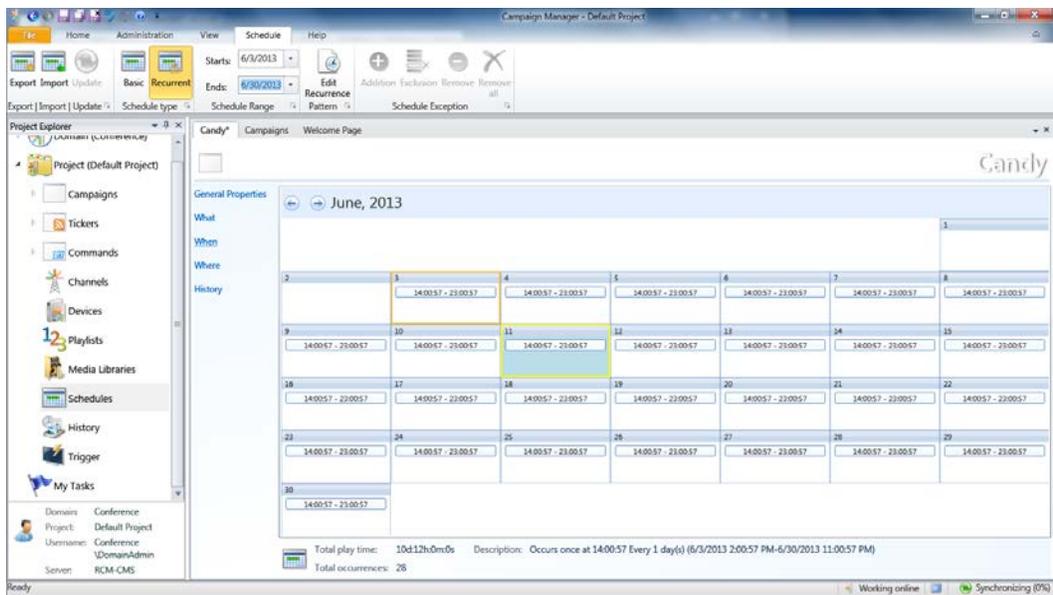
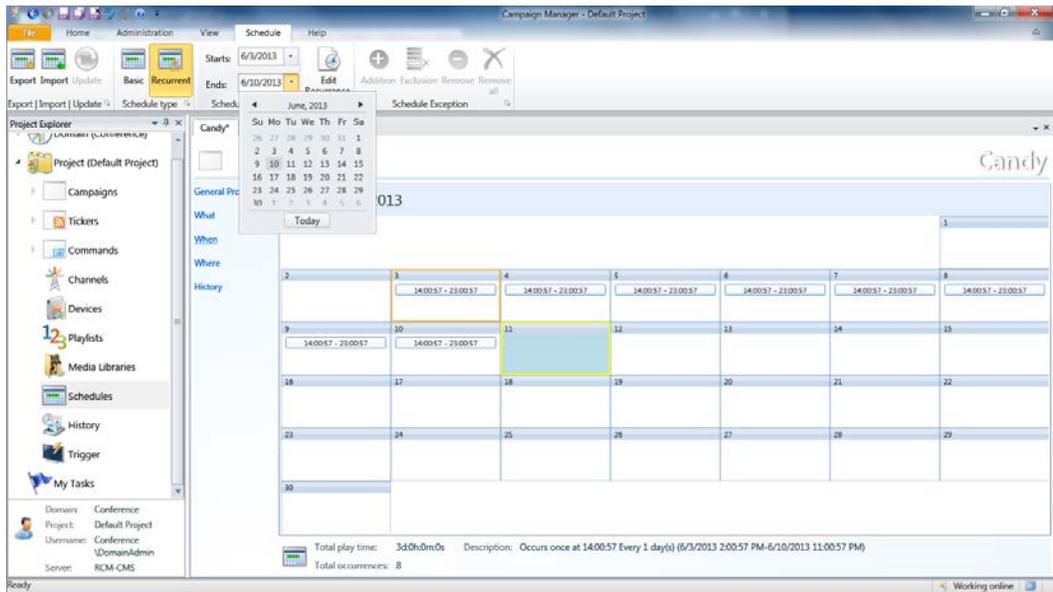
Finally, we need to configure our Ticker Zone. Note the content in the Zone 3 window is set to "Static Content". Here you can change the static content for any message you like, which will scroll at the bottom of the display. You can accomplish this by direct editing, or copying and pasting content directly to this area. You can also use Internet RSS feeds to automatically populate this area. Click on the Ticker Zone in the preview to select and click the **Automatic Content** tab on the Zone 3 window. By default, the automatic content is set to the RSS feed for the Intel Pressroom. You can easily add and remove multiple RSS feeds by right-clicking on the RSS feed and selecting from the context menu.



For this campaign, we are going to use the default Intel Pressroom RSS.

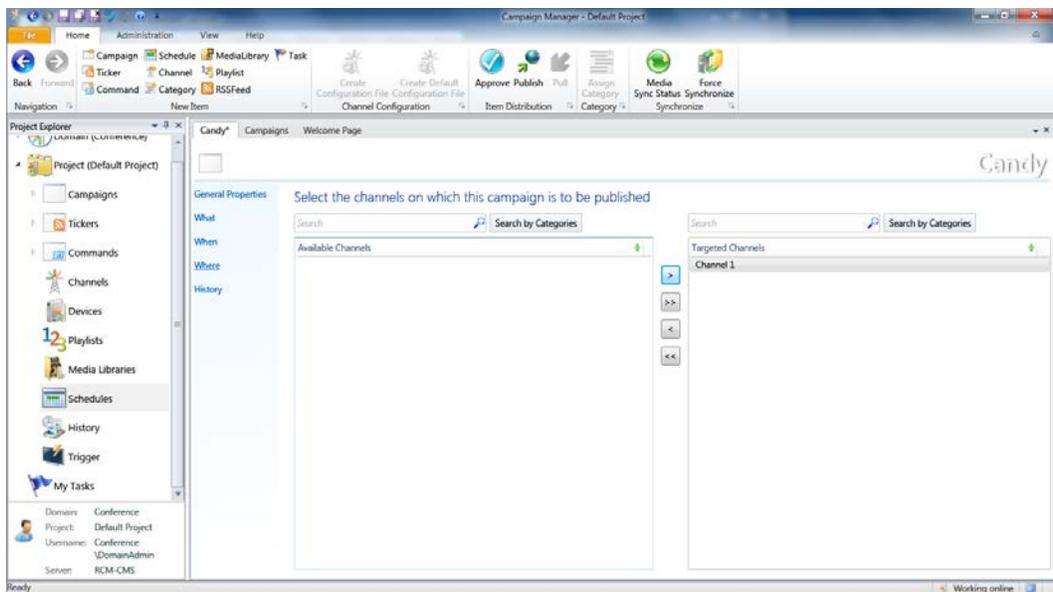
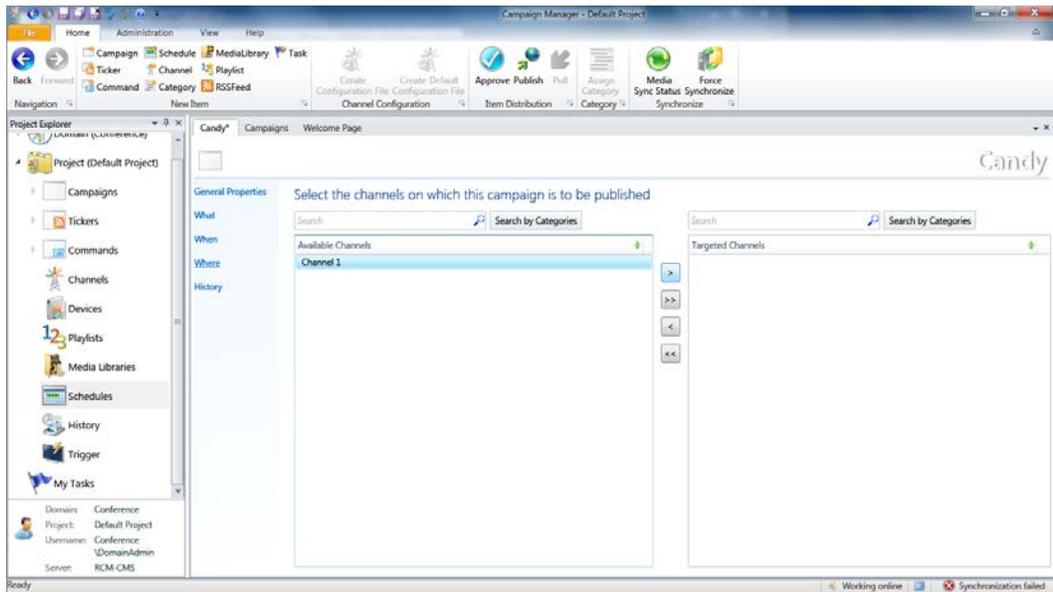
Now that the content for all three zones has been configured, the *What* for this campaign has been configured.

6. Select **When** from the campaign General Properties to set the Schedule for Campaign. By default, the campaign is scheduled to play for one week from the time of creation. Let's extend this campaign out until the end of June. On the Schedule tab, pull down the **End Date** to see the calendar. Select June 30.



Other options for scheduling are detailed later in the Advanced section.

7. Select **Where** from the campaign General Properties to designate the channel where your campaign will display.
8. Highlight **Channel 1** and click > to move it from Available Channels to Selected Channels.



9. Under **What**, click the Campaign Tab, select **Full Screen** to preview your campaign to verify content is displaying correctly.



10. You are now ready to publish the campaign. This will automatically save changes you have made; however, at any time you may save changes to your campaign without publishing to come back to it later.

**Note:** If a user does not have permission to publish, an admin will first approve the campaign before syncing to the player (more on User Permissions in a later module).

#### How Does It Work?

Approved content is pushed out to the players associated with the targeted channel. After the players have downloaded the campaign and its meta data (the schedule, etc.) even if the link between the player and the CMS is broken the player will continue to display the content. The player can refresh content at preset times.

Now that you have created and deployed a Multi-Zone Campaign, you should have a basic working understanding of how to navigate around Intel RCM and how it works. The next sections will discuss advanced features and concepts in detail.

## 2 *Advanced Operations*

### 2.1 Schedules

Schedule defines the period during which a campaign/ticker/command is expected to play. There are two types of schedules, a campaign/ticker/command schedule, which is simply the schedule attached to a campaign/ticker/command and a project-level or shared schedule (also known as public schedule). Public schedules can be shared among different campaigns, tickers and commands within the same project.

#### 2.1.1 Types of Schedules

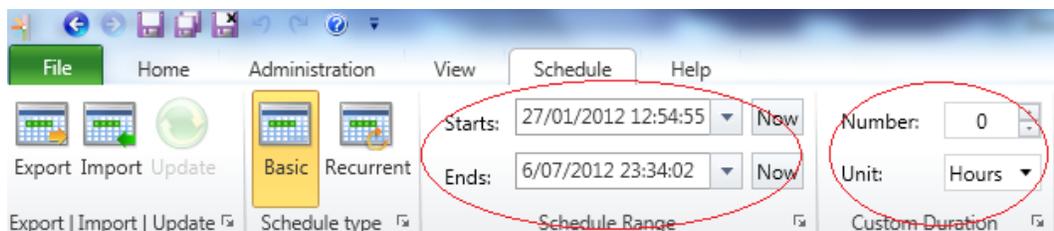
Whether it is a campaign/ticker/command schedule or a public schedule, all schedules are classified as basic and recurring. A basic schedule consists of a start date and time and a finish date and time. Such a schedule will render an associated campaign/ticker/command as being eligible for continuous play out within that period.

A recurring schedule, on the other hand, is pattern based. This means it can allow a campaign to play on a certain time of the day (“dayparting”) or certain day of the week, etc. in a recurrent manner. The recurrent schedule can be further enhanced by introducing additional play blocks or alternatively excluding existing play blocks in an asymmetric manner.

#### 2.1.2 Basic Schedule

To create a basic schedule, open any campaign/ticker/command and select Basic from the ribbon under the Schedule tab. You can set the start date/time and end date/time of the schedule. By default, a new campaign has a 7 day basic schedule period.

If you want the schedule to run for a set number of hours, days etc., you need to set the Number and unit field as appropriate.



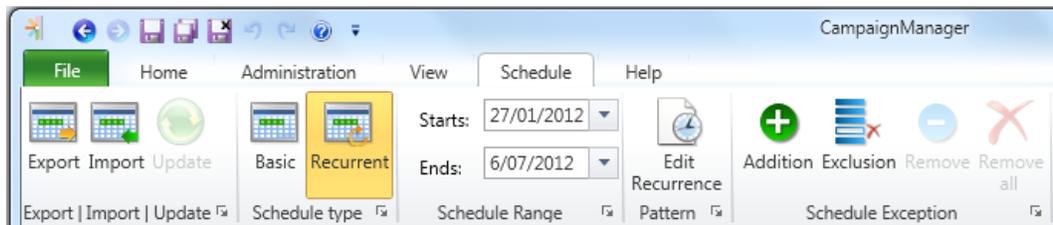
	Title	Description	Notes
1	Starts	Set the start date and time for the schedule	Campaign will start at that time



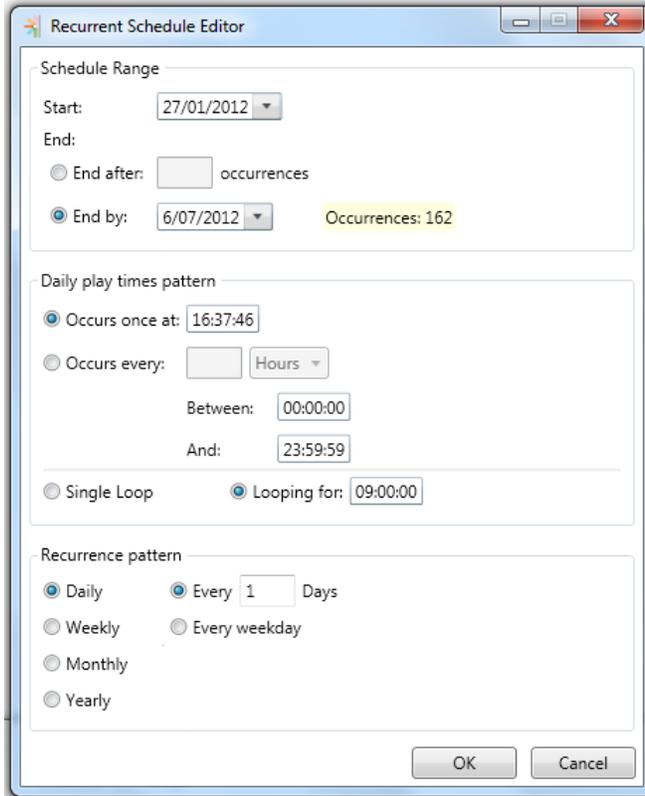
2	Ends	Set the end date and time for the schedule	Campaign will end at that time
3	Number	Set the number of unit that the schedule should run for	For example, set the number as 20 and unit as min. This means that the schedule will run for 20 min. The ends field will reflect the proper end date/time.
4	Unit	Set the unit as seconds, minutes, hour, day, week as appropriate	For example, set the number as 2 and unit as hours. This means that the schedule will run for 2 hours. The ends field will reflect the proper end date/time.

### 2.1.3 Recurrent Schedule

To create a recurrent schedule, open any campaign/ticker/command and select Recurrent from the ribbon under Schedule tab. By default, a new campaign has a 7 day recurrent schedule period.



This opens up the Recurrent Schedule Editor. Set the appropriate start and end date, daily play patterns and Recurrence pattern, and click **OK** to save that recurrent schedule.



A more detailed description of the Recurrence Editor is explained below.

Feature	Title	Description	Notes
Schedule Range	Start	Set the start date for the schedule	
	End after	Select this radio button to set the number of times the Campaign is expected to run	
	Occurrences	Set the number of times the campaign/ticker/command is expected to run	
	End by	Set the end date for the schedule	System will automatically calculate the number of occurrences until the end date. If you select End after option and click <b>OK</b> , the End by date will reflect the appropriate end date, based on the number of occurrences.
Daily Play	Occurs once	Select this to set an exact time	



Feature	Title	Description	Notes
Times	at	of the day when campaign/ticker/command runs	
	Occurs every	Select this to set a range and an interval at which campaign/ticker/command runs	For example, if you select occurs every 1 hour between 00:00:00 and 23:59:59 then the campaign/ticker/command will run every hour within a 24 hour period each day
	Single loop	Select this if you want the Campaign to play once every day when it runs	Campaign will play once and then will play again the next day at the same daily play pattern time
	Looping for	Select this if you want the campaign to play for an extended period every day	The looping for period defines the period each day during which campaign is eligible to play. NOTE: this is not a continuous play, rather it ensures that instead of single play, campaign gets to play for an extended period.
Recurrence Pattern	Daily	Every x days	Select this to set a recurrence interval. For example, if you select every 2 days then campaign will run every alternate day until the end date.
		Every weekday	Select this to play campaign on weekdays only
	Weekly	Occurs every x weeks on	Select this to set a recurrence interval. For example, if you select every 2 weeks then campaign will run every alternate week until the end date.
		Different days checkboxes	Check the days of the week you want the campaign to play
	Monthly	The x day of every x months	For example, select First Monday of every 1 month to ensure that campaign plays first Monday of each month until the end date. Campaign will not play on any other day.
		Day x for every x month	For example, select day 7 of every 1 month to ensure that campaigns plays 7th of each month until the end date. Campaign will not play on any other day.
	Yearly	Occurs every x year	For example, select occurs every 1 year

Feature	Title	Description	Notes
			to run the Campaign every year
		On the x day of x month	For example, select first Tuesday of February to ensure that campaigns plays only first Tuesday of February each year. Campaign will not play on any other day.
		On the x month x day	For example, select On February 7 to ensure that campaign plays on January 7 of each year. Campaign will not play on any other day.

Click **OK** in Recurrence Schedule Editor to save the schedule.

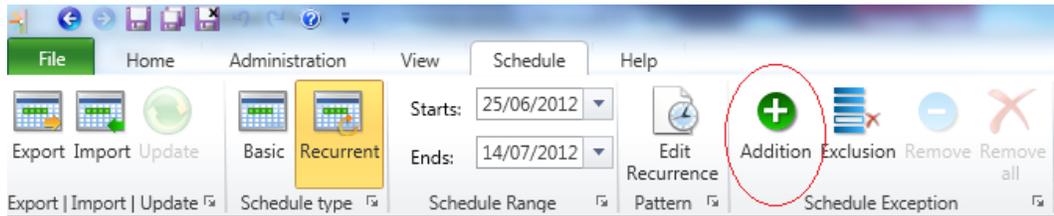
Once set, the schedule calendar will show the proper schedule pattern in calendar view. Click **Save** from the ribbon to save the campaign/ticker/command.

The screenshot shows the 'New Campaign' interface with a calendar view for June 2012. The calendar displays a recurrent schedule pattern from June 25 to July 14, 2012, occurring every 1 week on Monday through Friday from 09:00:00 to 11:00:00 AM. The total play time is 1d:6h:0m:0s and the total occurrences are 15.

The above image shows a typical recurrent schedule calendar view. The recurrent schedule is set as: Start date is 25/6/2012, end date is 14/7/2012, occurs once at 9:00:00, looping for 2 hours, with recurrence pattern as occurs every 1 week on Monday, Tuesday, Wednesday, Thursday, Friday. The schedule description at the bottom of the calendar view shows the exact number of occurrences for this recurrent schedule.

## 2.1.4 Addition

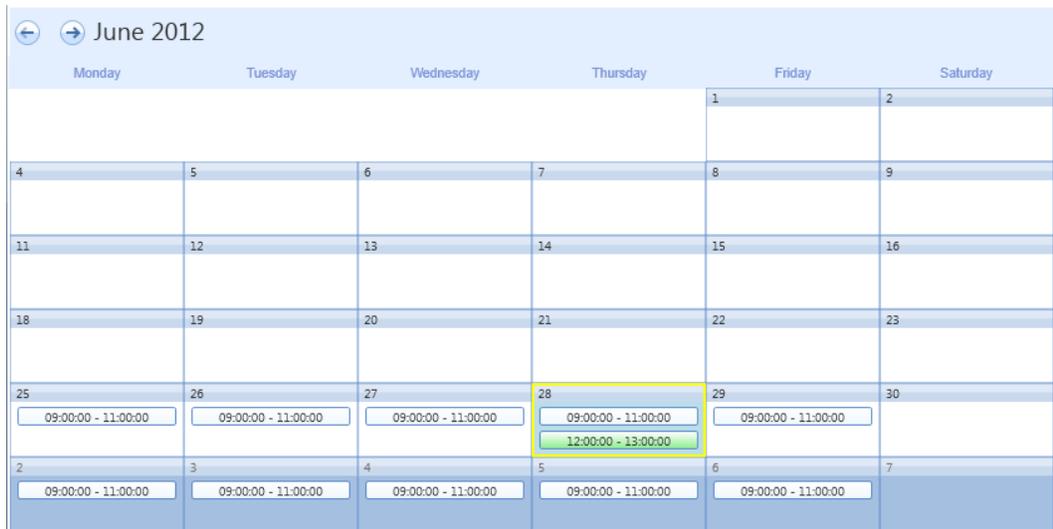
You can add additional play blocks outside the recurrent schedule pattern. To add additional play blocks, select any date in the calendar view and select **Addition** from the ribbon.



Enter a valid period in the Add Additional play UI. This additional play block must be non-overlapping with the recurrence pattern. Click **OK** to add the additional play.

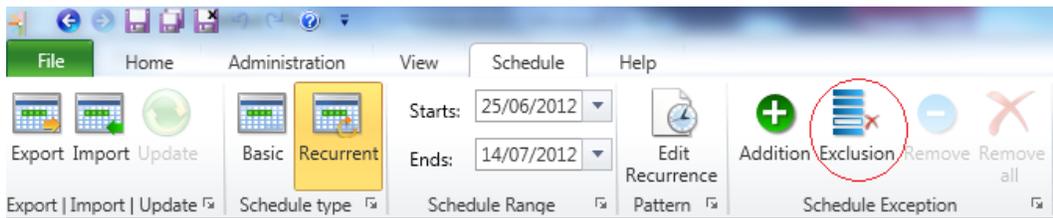


The calendar view will be updated with the additional play block. In the following image, on the 28th of June, the regular play period is from 9:00:00 to 11:00:00. In addition, the campaign will play from 12:00:00 to 13:00:00 as well. Campaign will not play between 11:00:00 to 12:00:00 as there is no playblock for that period on the 28th. Note that additional block applies to that date only.

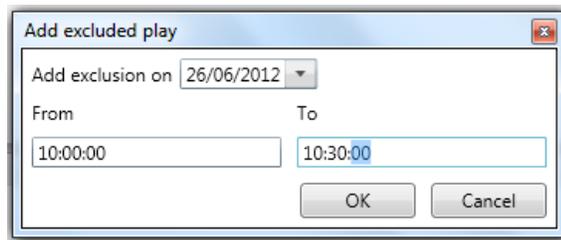


## 2.1.5 Exclusion

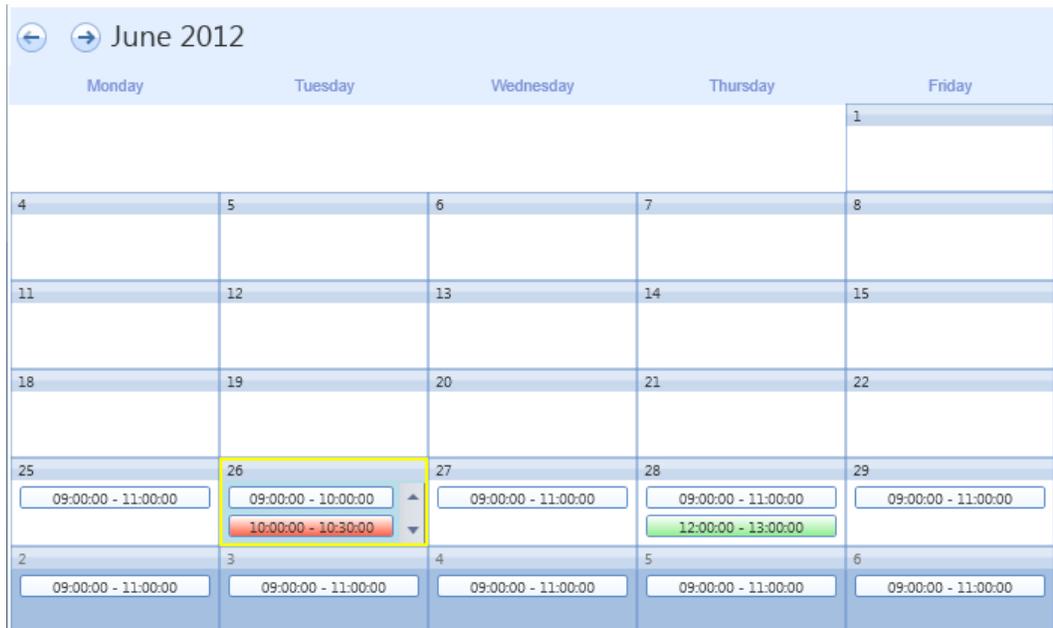
You can exclude certain period from regular recurrent pattern. To exclude a certain period, select any regular recurrent playblock in the calendar view and select **Exclusion** from the ribbon.



Enter a valid period within the regular playback that you want to exclude from the recurrence pattern. Click **OK** to add the exclusion range.



The calendar view will be updated with the excluded play block. In the following image, on the 26th of June, the regular play period is from 9:00:00 to 11:00:00. If, for instance there is a live event that would be distracted by the campaign, we may want to exclude the campaign from playing between 10:00:00 to 10:30:00 (half an hour). The calendar view shows that the 9:00:00-11:00:00 regular play block has now been split into three blocks: 9:00:00 - 10:00:00 (valid), 10:00:00 - 10:30:00 (excluded and shown as red block), 10:30:00 - 11:00:00 (valid). Campaign will therefore not play between 10:00:00 and 10:30:00 on the 26th of June. Note that this exclusion applies to only this date.





You can also exclude the entire regular play block from any day. To perform this, select the play block on any day, right-click to open the context menu and select **Exclude this play span**. This will exclude the entire play block and will be shown as a red block.

### 2.1.6 Remove Addition/Exclusion

To remove any addition or exclusion from the calendar view, select the appropriate play block and click **Remove** from the ribbon.

To remove all additions or exclusions from the calendar view, click **Remove All** from the ribbon.

### 2.1.7 Import/Export Schedule

You can import a public schedule to a campaign/ticker/command. To import the schedule, open any new or existing campaign/ticker/command and select **Import** from the ribbon. This will open a schedule selection UI. Select the appropriate schedule and click **OK**. This adds the schedule to the campaign/ticker/command.

Make some changes to the imported schedule inside the campaign/ticker/command. You can now export this edited schedule to a public schedule. To export the schedule, select **Export** from the ribbon. Enter a valid name for the schedule and click **OK**. This saves the edited schedule as a public schedule.

For a detailed description of the importing/exporting of schedules, please refer to the technical help titled **Importing/Exporting Schedules to a Campaign**.

## 2.2 Role and User Permission

User level Permissions can be set by Domain Admin. This can restrict access to projects, campaigns, content and publishing authority. The concept is to have the ability to compartmentalize an organization's Domain so User Level Control can be set for different user's activity.

User permissions are established by Roles. There are 5 roles automatically assignable with any campaign: Admin, Guest, MediaManager, PowerUser and User. Within these users there are specific operational permissions that can be allowed or disallowed: Create, Read, Write, Delete, Publish, Approve, Import and Change Permission. These Permissions will effect a user's interaction with campaigns, campaign directories, schedules, tickers, commands, players, channels, and categories. This allows delegation of appropriate power to staff while maintaining a secure operation.

1. Creating A New User: In User View, click **Insert** on the ribbon under Administration tab, enter new user name and password (can also right-click in the User window)
2. Modify Existing User: Double-click on a User. We can Reset user's password, name and email, as well as change user Roles.
3. Cannot change Domain Admin username or roles, but can reset password. Domain Admin can also assign other users Domain Admin permissions.

### How Does It Work?

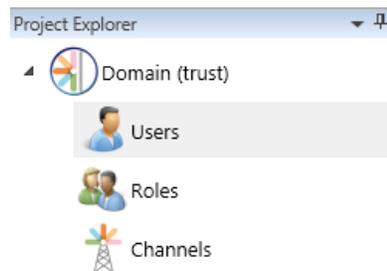
Based on the role permission, a user can have access to one or more projects. The user will only have access to entities within that project, as defined by his roles.

In addition, permissions can be granted on individual entities such as campaign, tickers, etc., as well as such entities as campaign zones. This heightened level of security enables the system to offer enterprise level access to different entities. All these permissions within a project are managed by the domain administrator.

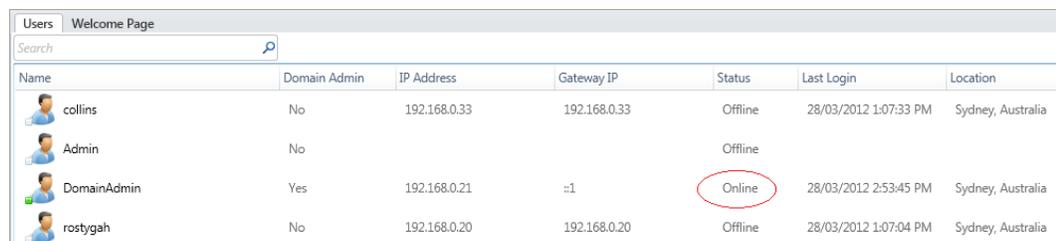
## 2.2.1 Users

Each role has an association with one or multiple projects and consists of a set of permissions. When a role is assigned to a user, that user inherits all permissions for that role. By making changes to the role and saving those changes, it is possible to enforce those new changes to take effect immediately. When this happens, a logged in user is forced to log off. While permissions inherited from a role governs what a user can and cannot access, a user can also be assigned entity level permissions. Users must have appropriate permissions to make changes to users and roles as well as entity permissions.

Select **Users** from Project Explorer under Domain tree view.



This opens the all Users workspace. You can view current status of all users in this domain. You must have appropriate permissions to view this listview.



Name	Domain Admin	IP Address	Gateway IP	Status	Last Login	Location
collins	No	192.168.0.33	192.168.0.33	Offline	28/03/2012 1:07:33 PM	Sydney, Australia
Admin	No			Offline		
DomainAdmin	Yes	192.168.0.21	∓1	Online	28/03/2012 2:53:45 PM	Sydney, Australia
rostygah	No	192.168.0.20	192.168.0.20	Offline	28/03/2012 1:07:04 PM	Sydney, Australia

The all users listview shows a number of information about the user:

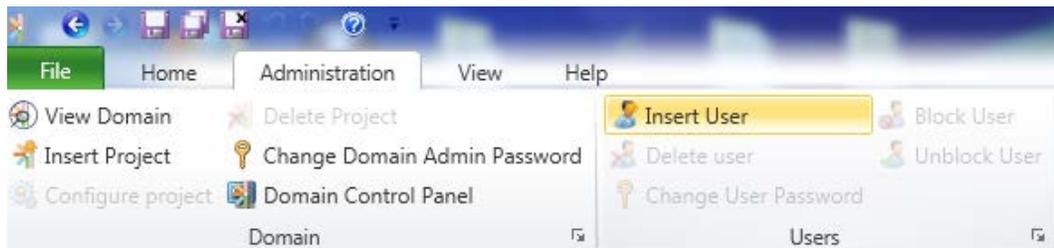
- **Domain Admin** – This shows whether the user is a domain admin.
- **IP address** – This shows the IP address of the logged in user.



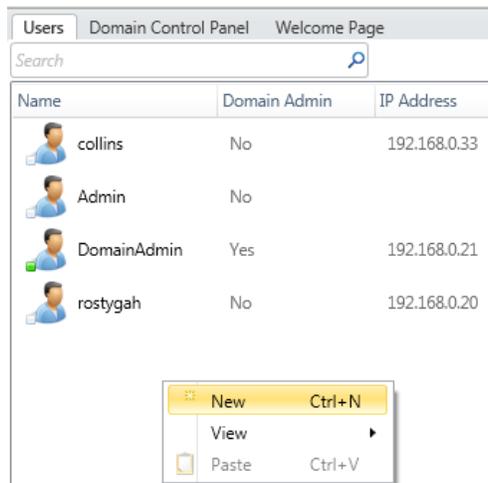
- **Gateway IP** – This shows the IP address of the gateway. For a private network hosting the CM service, IP and gateway IP are the same.
- **Status** – This shows the status of the user (online or offline).
- **Last Login** – This shows the date and time when the user last logged in to this domain.
- **Location** – This shows the location of the Campaign Manager from where the user has logged in.
- **App Version** – This shows the version and build number of the installed Campaign Manager
- **Last Edit** – This shows when the user entity was last edited. Edit operation includes rename, password change, priority change and role change.
- **Last Editor** – This shows which user last edited the user entity.
- **Created On** - This shows when the user entity was created.

## 2.2.2 Create User

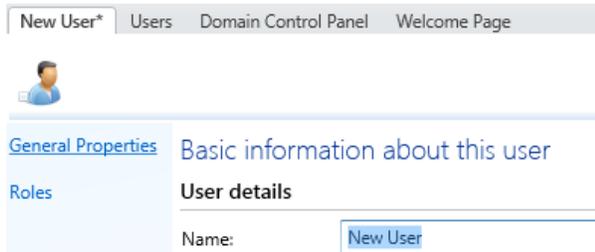
To create a user, select Insert User from Administration tab on the ribbon. This creates a new user workspace.



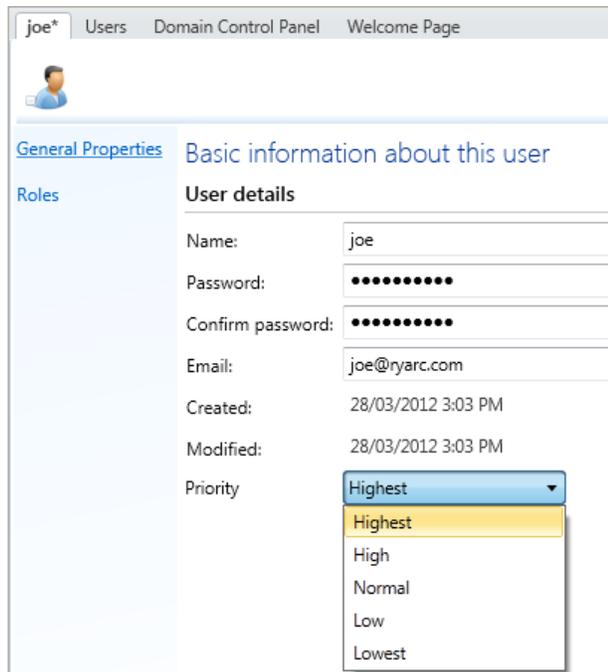
Or, right-click inside all users listview workspace to open context menu and select **New**. This creates a new user workspace.



You can also create a new user workspace by pressing **Ctrl+N**. By default, the new user workspace is labeled as New User\*. "\*" denotes that the workspace is in edit mode.



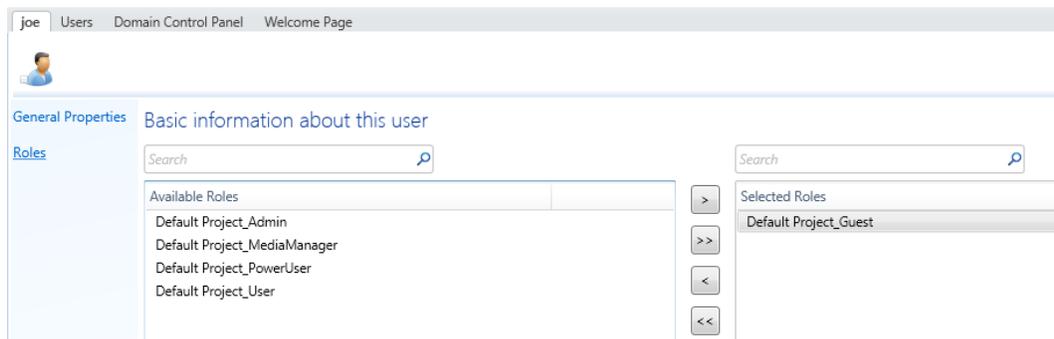
Enter a name, a valid password (must meet minimum requirements), a valid email address, and then select an appropriate priority from the Priority drop-down list.



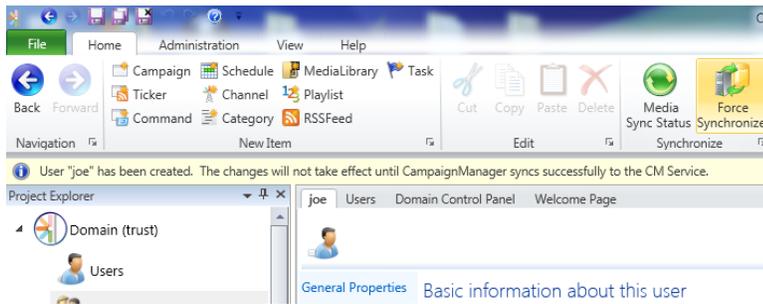


<b>Name</b>	Enter a suitable name for the user
<b>Password</b>	Enter a valid password. Password must meet the minimum requirements.
<b>Confirm password</b>	Re-enter the password
<b>Email</b>	Enter a valid email address
<b>Created</b>	This shows when the user entity is created. This is read only.
<b>Modified</b>	This shows when the user entity was modified. Created and Modified fields are the same when user is created for the first time.
<b>Priority</b>	Select the priority assigned to a user. User will be able to modify the priority level of campaigns/tickers/commands which have the same or lower priority ranking.

With the buttons provided, move appropriate roles from Available Roles listview to Selected Roles listview. You can assign multiple roles to the same user. When multiple roles having different permission templates and associated with the same project are assigned to the same user, then highest role prevails. Use the search control provided above each listview to return a filtered result, based on entity name.



Now click **Save** from the ribbon to save the user. A yellow bar appears warning the user that synchronization needs to be initiated. This means that the newly created user exists only locally. Until synchronization happens and the service data gets updated, newly created user will not be able to login to the domain. Click **Force Synchronization** under the Home tab on the ribbon. The yellow bar will be removed after synchronization completes. You can now log into the domain with the new user credentials.



### 2.2.3 Edit User

To edit any existing user, open the user workspace from all users listview. The following actions can be performed on the workspace:

- Rename – change the name of the user
- Email address – change the email address
- Roles - Change the role assignment
- Priority – Change the user priority
- Password - To change the user password, click **Reset password**. This opens the Change Password dialog window. Enter a valid password and click **OK**. A message window appears informing user whether the password change was successful.

[Basic information about this user](#)

User details

Name:	joe
Email:	joe@ryarc.com
Created:	28/03/2012 3:05 PM
Modified:	28/03/2012 3:05 PM
Priority:	Highest



Click **Force Synchronization** under the Home tab on the ribbon to sync the latest changes. Logged in user will be forced to log off to enforce these changes.

**Note:** Only DomainAdmin or users with domainadmin privileges can change other user password. However users with domainadmin privileges cannot change DomainAdmin password.



## 2.2.4 Delete User

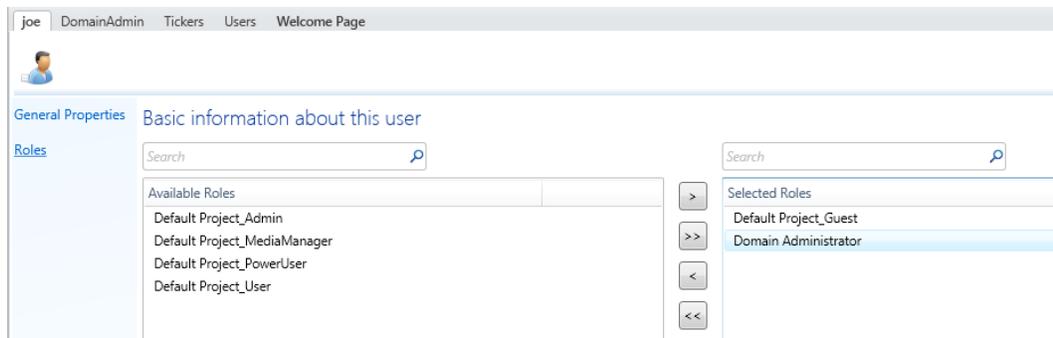
To delete a user, select the user and press **DEL** from keyboard. Or, select the user and select **Delete User** from the Administration tab on the ribbon. You can also select the user, right-click to open the context menu and select **Delete** to delete the user.

## 2.2.5 Set as DomainAdmin

To assign domainadmin permissions to a user, select the user in all user listview. Right-click to open context menu and select **Set As DomainAdmin**. This assigns the user with domain admin privileges. When the user logs back in, user will have full access to the entire domain.

User will now be able to make changes to all entities including all users, roles and roles permission. However this user will not be able to make any permission changes to the DomainAdmin since it is a system generated built-in user.

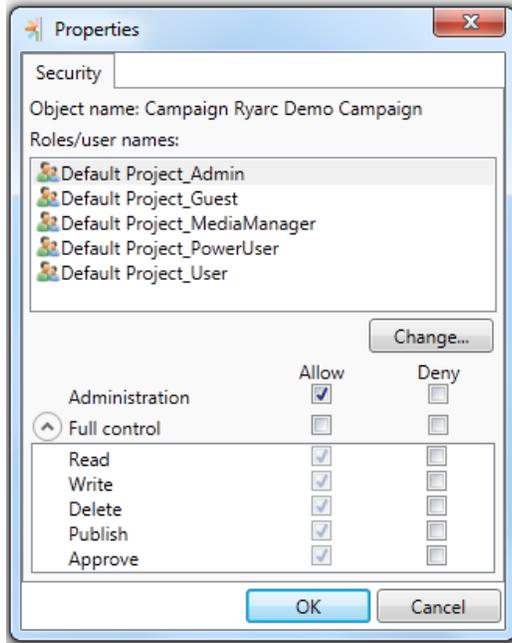
Open the user that has been assigned domainadmin privileges. In the Roles page of the user workspace, the Selected Roles listview now includes a role called Domain Administrator.



To remove domainadmin privileges from a user, select the user in all users listview, right-click to open the context menu and select **Remove As DomainAdmin**.

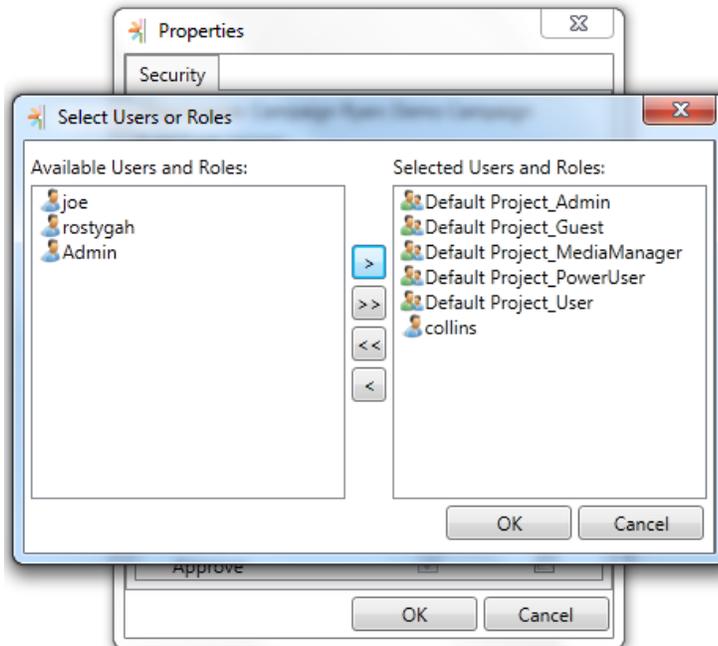
## 2.2.6 Entity Level Permission for User

User can be assigned specific permissions on specific entity. For example, even if a user has guest roles assigned (guest roles have read only permission for all entities), on a particular campaign the user can be assigned full permission. To assign such permission on a campaign, select the campaign and right-click and select **Properties**. This opens the Properties window, which lists the user and roles and their associated permissions on this entity. Click **Change** to add an existing user to the permission list.



<b>Administration</b>	Check this if you want the user or role to have delegation authority. This means that a user who has Administration permission can assign full control to other users as well.
<b>Full control</b>	Select this checkbox to check all checkboxes in the list. This includes: read, write, delete, publish, approve
<b>Read</b>	Check this to allow read permission on this Campaign. By default, all roles have read permission on Campaigns. Check Deny to deny read permission. If read permission is denied, user will not be able to see the Campaign in the all Campaigns listview.
<b>Write</b>	Check this to be able to make changes to the Campaign. Check Deny to deny write permission.
<b>Delete</b>	Check this to be able to delete the Campaign. Check Deny to deny delete permission.
<b>Publish</b>	Check this to be able to publish the Campaign. Check Deny to deny publish permission.
<b>Approve</b>	Check this to be able to approve the Campaign. Check Deny to deny approve permission.

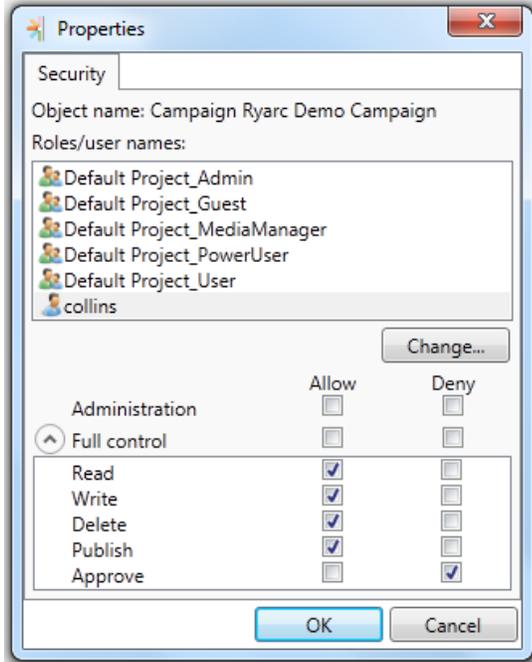
This opens the Select Users and Roles window. Move users from Available Users and Roles list to Selected Users and Roles list by using the buttons (>, », «, <). Click **OK**.



>	Use this button to move a single user or role from Available Users and Roles list to the Selected Users and Roles list
>>	Use this button to move all users and roles from Available Users and Roles list to the Selected Users and Roles list
<<	Use this button to remove all users and roles from Selected Users and Roles list to the Available Users and Roles list
<	Use this button to remove a single user or role from Selected Users and Roles list to the Available Users and Roles list

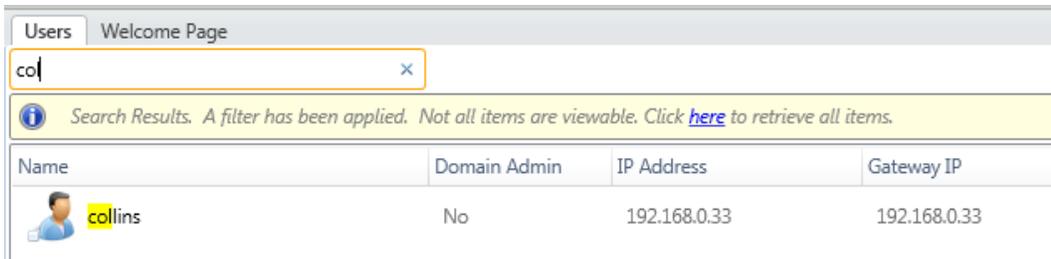
This opens the Properties window again. The list now includes the added user or role. Select the user or role and check all permissions that apply. Click **OK**. This saves the entity level permission for the user. For example, in the following image, user "collins" is given all permissions but denied Approve permission. This means that "collins" will be able to view the campaign, makes changes to it, delete the campaign as well as publish it. The only action "collins" is unable to perform is approve the Campaign.

NOTE that "collins" is originally assigned guest role which allows read only permission on all entities. With the entity level permission, "collins" is now able to perform a number of actions on the selected campaign, as defined by his entity permissions. Similar permissions can be set on other entities, zones and ticker zones.



## 2.2.7 User Search

To search users from all users listview, click inside the search control and enter the search text. Workspace will return a filtered result of users that have matching text string in the Name field. The string will be highlighted in yellow. Click "Click here" to cancel the filtering and return the full list of users.





## 2.2.8 User Status

To view the online user status, select Users from Project Explorer under Domain treeview. This opens all Users listview. Users that are currently logged in to this domain will appear as online under the Status column. User icon will also denote the status of the user. The different user states that are supported by Campaign Manager include:

- Online – This denotes user is currently logged in to this domain and active. This is denoted by a green overlay icon.

 DomainAdmin	Yes	192.168.0.21	:::1	Online
---	-----	--------------	------	--------

- Offline – This denotes that user is not currently logged in to this domain or connection from user's CampaignManager has dropped. This is denoted by a grey overlay icon.

 collins	No	192.168.0.33	192.168.0.33	Offline
---	----	--------------	--------------	---------

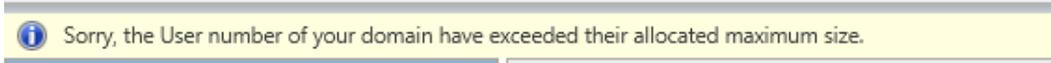
- Blocked – This denotes that user is currently blocked. Under blocked condition, user login will fail. To login successfully to the domain, user must be unblocked. This is denoted by a blocked overlay icon.

 rostygah(Blocked)	No	192.168.0.20	192.168.0.20	Blocked
---	----	--------------	--------------	---------

- Inactive – This denotes that there are more users than the domain license permits. Users that are created last (Created On column has later date/time than others) will be marked as inactive. User login will fail until domain limit for users is increased. This is denoted by a red overlay icon.

 joe	Yes	192.168.0.21	:::1	Inactive
---	-----	--------------	------	----------

- When user limit is exceeded and user is in inactive state, a yellow bar is shown with a warning text that domain has exceeded the user limit. Open Configure Domain wizard in realm to update the domain limits.



## 2.2.9 User Details View and Tasks

To open user details view, select any existing user and press **Ctrl+E**. Or, select the user, right-click to open the context menu and select **View Details**. You can also open the Details View by selecting **Details Window** from View tab on the ribbon. The Details View panel for selected user is defined below.



1	<b>Label and status</b>	This shows the name of the user and status. Status can be one of the four: online, offline, blocked and inactive. The user icon will also show an overlay for status: green for online, grey for offline, block for blocked and red for inactive.
2	<b>Status information</b>	This shows different information about the user i.e., IP address, gateway IP address, status, user's Campaign Manager version, when the user last logged into the domain and user's location.
3	<b>Tasks</b>	This lists the most commonly used tasks for a user. Select the individual tasks to initiate it.
4	<b>Recent History</b>	This shows a certain number of history records (20) for the user in descending order of time.
5	<b>Refresh</b>	Click this button to refresh the recent history
6	<b>More</b>	Click this button to open a new history workspace labeled as History (username) which shows the entire history records for the user.

A more detailed description of the individual tasks is given below:

<b>Manage permissions</b>	Select this to open the Roles page on user workspace. Assign appropriate roles to the user and save.
<b>Reset password</b>	Select this to open Change Password dialog window. Enter a new password and click OK. A message window confirms whether the password was successful.
<b>Block user</b>	Select this to block the user. A message window confirms whether the user was successfully blocked.
<b>Delete user</b>	Select this to delete the user. A message window appears asking user to confirm the operation. Click <b>Yes</b> to confirm the delete operation. A message window appears confirming whether the delete was successful.

## 2.2.10 Roles

Role is an entity that defines the permissions levels for all other entities. A user is assigned with one or more roles. If multiple roles are assigned to the same user, then the highest role prevails. The association of role with one or more project defines whether the user is able to open that project.



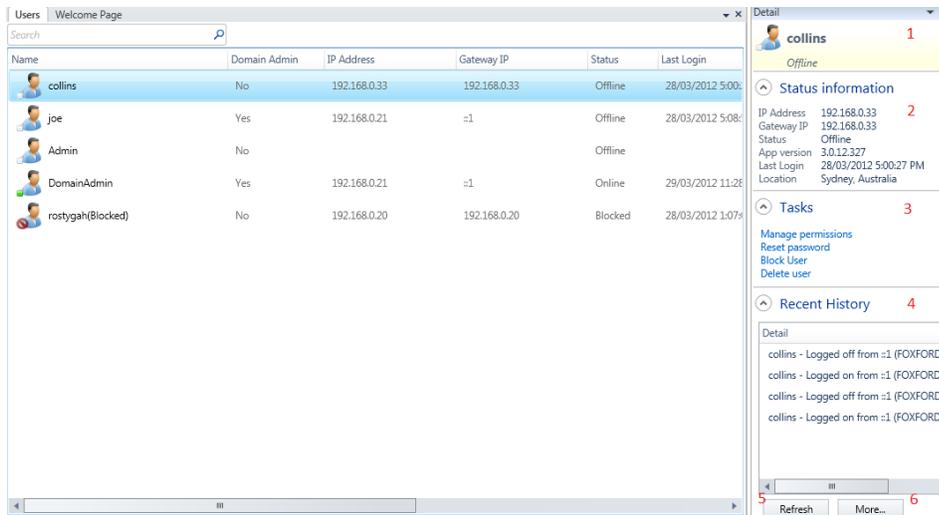
### 2.2.10.1 Default Roles

When a new project is created, five default roles are created and automatically associated with this project. The project name is used to label the roles who have pre-defined permission levels. For example, if a new project called "Project1" is created then the five default roles created will be labeled as:

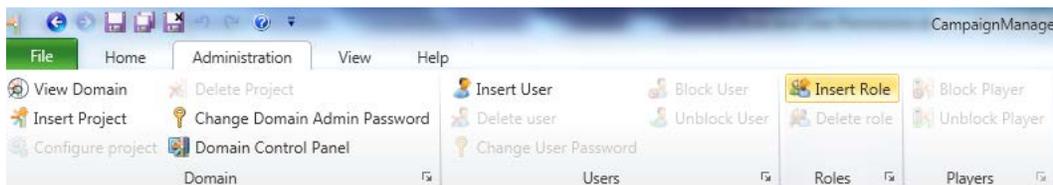
- Project1\_Admin
- Project1\_Guest
- Project1\_User
- Project1\_PowerUser
- Project1\_MediaManager

### 2.2.10.2 Create Custom Role

To create a new role, select **Insert Role** from Administration tab on the ribbon. You must have appropriate permission to create role.

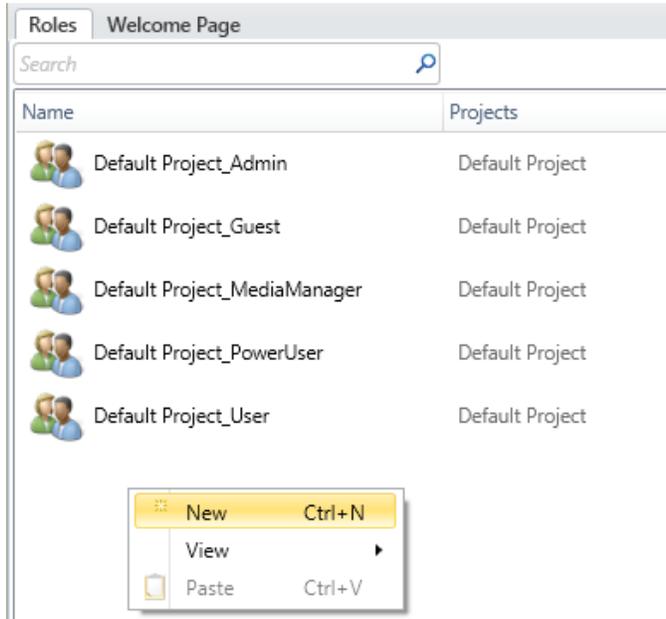


Or, you can select **Roles** from Project Explorer, right-click inside all roles listview and select **New**.

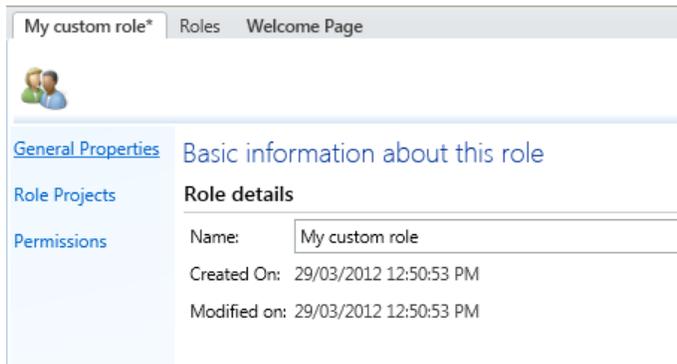


You can also click inside all roles listview and press **Ctrl+N** to create a new role workspace. By default, the workspace is labeled as New Role and opens on General Properties page. Enter a suitable name for the role. The Created on and Modified on fields represent when the role was created and last modified.

These read only fields initially have the same value when the role is created. Select **Role Projects** from the navigation panel.



Associate the role with one or more projects by checking the project checkboxes. By default all project checkboxes are unchecked. Select a permission template from the drop-down list for each project. Select **Permissions** in navigation panel to view the permission levels.



By default, the pre-defined permission levels are loaded when a permission template is selected. You can make changes to the permission page. To change the existing permissions, uncheck/check the different permissions as appropriate.



My custom role\* Roles Welcome Page



General Properties Project Permission template

Role Projects  Default Project ProjectAdmin

Permissions  my second project ProjectAdmin

The different permissions for different entities are explained below.

<b>Campaign</b>	Create	Check this to allow user to create a new campaign in the associated project
	Read	Check this to allow user to view existing campaign in the associated project
	Write	Check this to allow user to edit existing campaigns in the associated project
	Delete	Check this to allow user to delete existing campaigns in the associated project
	Publish	Check this to allow user to publish a campaign in the associated project
	Approve	Check this to allow user to approve a campaign in the associated project
	Change Permission	Check this to allow user to assign permissions to other users or roles. By default, DomainAdmin or users with domainadmin privileges have this permission.
<b>Campaign Directory</b>	Create	Check this to allow user to create a new directory in Project Explorer under campaign entity in project treeview.
	Read	Check this to allow user to view custom directory in Project Explorer under campaign entity in project treeview.
	Write	Check this to allow user to rename the campaign directory
	Delete	Check this to allow user to delete the campaign directory
<b>Schedule</b>	Create	Check this to allow user to create a new public schedule in the associated project

	Read	Check this to allow user to view existing public schedules in the associated project
	Write	Check this to allow user to edit existing public schedules in the associated project
	Delete	Check this to allow user to delete existing public schedule in the associated project
	Change Permission	Check this to allow user to assign permissions to other users or roles. By default, DomainAdmin or users with domainadmin privileges have this permission.
<b>Ticker</b>	Create	Check this to allow user to create a new ticker in the associated project
	Read	Check this to allow user to view existing tickers in the associated project
	Write	Check this to allow user to edit existing tickers in the associated project
	Delete	Check this to allow user to delete existing tickers in the associated project
	Publish	Check this to allow user to publish a ticker in the associated project
	Approve	Check this to allow user to approve a ticker in the associated project
	Change Permission	Check this to allow user to assign permissions to other users or roles. By default, DomainAdmin or users with domainadmin privileges have this permission.
<b>Command</b>	Create	Check this to allow user to create a new command in the associated project
	Read	Check this to allow user to view existing commands in the associated project
	Write	Check this to allow user to edit existing commands in the associated project
	Delete	Check this to allow user to delete existing commands in the associated project
	Publish	Check this to allow user to publish a command in the associated project



	Approve	Check this to allow user to approve a command in the associated project
	Change Permission	Check this to allow user to assign permissions to other users or roles. By default, DomainAdmin or users with domainadmin privileges have this permission.
<b>Player</b>	Read	Check this to allow user to view existing players in the associated project
	Write	Check this to allow user to edit existing player configurations in the associated project
	Delete	Check this to allow user to delete existing players in the associated project
<b>Channel</b>	Create	Check this to allow user to create a new channel in the associated project
	Read	Check this to allow user to view existing channels in the associated project
	Write	Check this to allow user to edit existing channels in the associated project
	Delete	Check this to allow user to delete existing channels in the associated project
	Import	Check this to allow user to import domain channels to project
	Change Permission	Check this to allow user to assign permissions to other users or roles. By default, DomainAdmin or users with domainadmin privileges have this permission.
<b>Category</b>	Create	Check this to allow user to create new category
	Read	Check this to allow user to view category treeview in the associated project
	Write	Check this to allow user to edit category in the associated project
	Delete	Check this to allow user to delete category in the associated project
<b>Playlist</b>	Create	Check this to allow user to create a new playlist in the associated project
	Read	Check this to allow user to view existing playlists in the associated project

	Write	Check this to allow user to edit existing playlists in the associated project
	Delete	Check this to allow user to delete existing playlists in the associated project
	Publish	Check this to allow user to publish playlist in the associated project
	Change Permission	Check this to allow user to assign permissions to other users or roles. By default, DomainAdmin or users with domainadmin privileges have this permission.
<b>MediaLibrary</b>	Create	Check this to allow user to create a new media library in the associated project
	Read	Check this to allow user to view existing media libraries in the associated project
	Write	Check this to allow user to edit existing media libraries in the associated project
	Delete	Check this to allow user to delete existing media libraries in the associated project
	Import	Check this to allow user to import domain media library to project
	Change Permission	Check this to allow user to assign permissions to other users or roles. By default, DomainAdmin or users with domainadmin privileges have this permission.
<b>User</b>	Create	Check this to allow user to create a new user
	Read	Check this to allow user to view existing users in the associated project
	Write	Check this to allow user to edit existing users in the associated project
	Delete	Check this to allow user to delete existing users in the associated project
<b>Role</b>	Create	Check this to allow user to create a new role
	Read	Check this to allow user to view existing roles in the associated project
	Write	Check this to allow user to edit existing roles in the associated project



	Delete	Check this to allow user to delete existing roles in the associated project
<b>Report</b>	Create	Check this to allow user to create reports
<b>History</b>	Read	Check this to allow user to read project history
<b>Trigger</b>	Write	Check this to allow user to send trigger events to player. If this permission is unchecked, the trigger entity is removed from the Project Explorer. This is because with no write permission to send triggers, user has no reason to view the trigger workspace.

If the role is associated with multiple projects, then all the projects appear under each entity in the Permission page. To view the projects and their related permissions for each entity, expand any entity in the permissions page.

Entity\Permission	Create	Read	Write	Delete	Publish
▼ Campaign	<input checked="" type="checkbox"/>				
▼ CampaignDirectory	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▼ Schedule	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▼ Ticker	<input checked="" type="checkbox"/>				

You can make independent permission changes to each project by checking/unchecking permission checkbox for each project. To view project related permissions only, select the desired project from the Project drop-down list.

Entity\Permission	Create	Read	Write	Delete	Publish
▲ Campaign	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Default Project	<input checked="" type="checkbox"/>				
my second project	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
▼ CampaignDirectory	<input checked="" type="checkbox"/>				

### 2.2.10.3 Edit Role

User must have appropriate permissions to make changes to roles. Editing an existing role includes the following operations:

- Rename – Rename either from all roles listview by pressing **F2** or open a role workspace and change the name. You can also select the role in all roles listview, right-click to open the context menu and select **Rename**. The role name will be in edit mode.
- Change role projects – go to Projects in role workspace and check/uncheck all projects that apply as well as configure with appropriate permission templates
- Role permission – go to Permissions in role workspace and check/uncheck all permissions that apply for each associated project
- Click **Save** from the ribbon to save the changes.

### 2.2.10.4 Delete Role

To delete a role, select the role in all roles listview and press **DEL** from keyboard. Alternatively, you can select the role and select **Delete** from Home tab on the ribbon. You can also select the role, right-click to open the context menu and select **Delete**. The role will be deleted from the domain. If a user is assigned with this role, then the role will be removed from the user workspace. A logged in user whose role has been deleted will be forced to log off. If the user tries to login again, his login will fail, unless he has other roles assigned to him.

## 2.2.11 Entity-Specific Permission

You can assign entity level permissions for users and roles on particular entities.

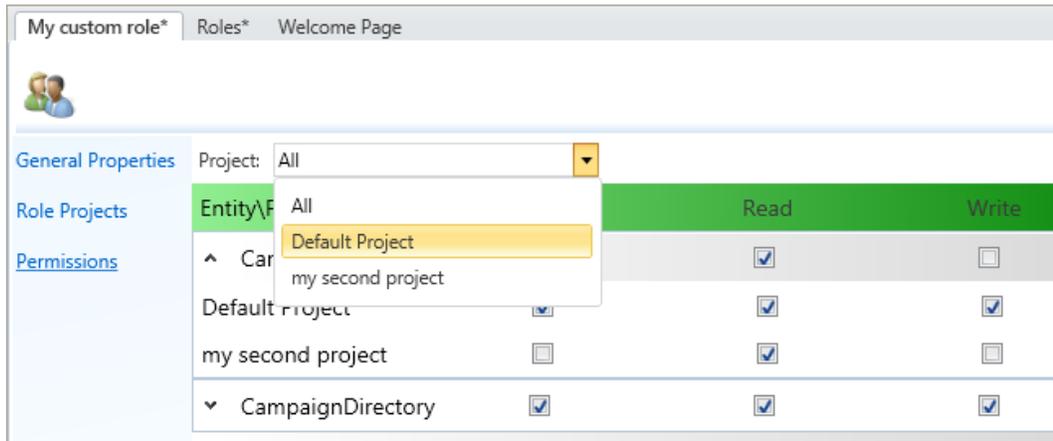
### 2.2.11.1 Entity Properties

To assign permission to an entity, select the entity and right-click to open the context menu. Select Properties. This opens the Properties window which lists the user and roles and their associated permissions on this entity. Click Change to add a user or role to the permission list and set appropriate permission for that user. Click OK to save the permission.

Even if the user has a certain role that may or may not allow such operations for the generic entity, entity level permissions will enable the user to perform the actions on the specific entity (such as a particular campaign, a particular ticker, a particular command, a particular channel, a particular playlist, a particular media libraries and a particular schedule).

### 2.2.11.2 Zone Permission

You can assign zone permissions to a user. To assign permission to a particular campaign's zone playlist, open the campaign and go to the What section. Right-click on any zone to open context menu and select **Properties**. This opens the Properties window. Add the appropriate user or role and configure the user or role with appropriate permissions (check all checkboxes that apply).



You can also assign permissions on ticker zone within a Campaign. To assign permission on ticker zone, right-click on ticker zone to open context menu and select Properties. This opens the Properties window. Add a user or role to the list and configure the user or role with appropriate permissions (check all checkboxes that apply).

**Note:** Zone permissions enforce certain exceptions to the role permissions. These are explained below.

User has role that denies read permission to all Campaigns	If zone permission is provided on a Campaign for this user, then user automatically is assigned read permission on the Campaign. So user will see this Campaign in all Campaigns listview.
User has no roles assigned	If zone permission is provided on a Campaign for this user, then user automatically is assigned read permission on the Campaign. So when user logs in to the domain, he will be able to select the project in the Project selection UI. Normally, without any role, user will not be able to open any project.
User has zone permission but then denied Campaign read permission	The last permission applied prevails and user will not be able to view the Campaign.

### 2.2.11.3 Administrative Permission

In Properties window, check this checkbox to assign administration permission to user or role. A user assigned with this permission will be able to delegate full control to other users or roles. If a user or role is assigned administration permissions then that user can change its own restrictions on that entity.

## 2.3 Playlists

Playlist is a collection of media that can be added to a campaign.

A playlist is always considered as public playlist, which means that it can be shared across different campaigns within the same project.

Playlist can also contain another playlist as a media item.

### 2.3.1 Create Playlist

A playlist can be created either from context menu or from the ribbon.

From context menu: To create playlist from the context menu, you need to:

1. Click **Playlist** from Project Explorer. This opens all playlist listview workspace.
2. Right-click on the workspace and select **New** from the context menu. This opens up a new playlist workspace.
3. Add media to the playlist from context menu or ribbon
4. Click **Save** from the ribbon. Enter a name for the playlist and click **OK**.

From the ribbon, to create a playlist:

1. Click Playlist from the Home tab on the ribbon under **Insert Item** ribbonBar. This opens a new playlist workspace.
2. Add media to the playlist from context menu or ribbon.
3. Click **Save** from the ribbon. Enter a name for the playlist and click **OK**.

**Note:** You can add a playlist inside another playlist. However recursive playlist is not allowed.

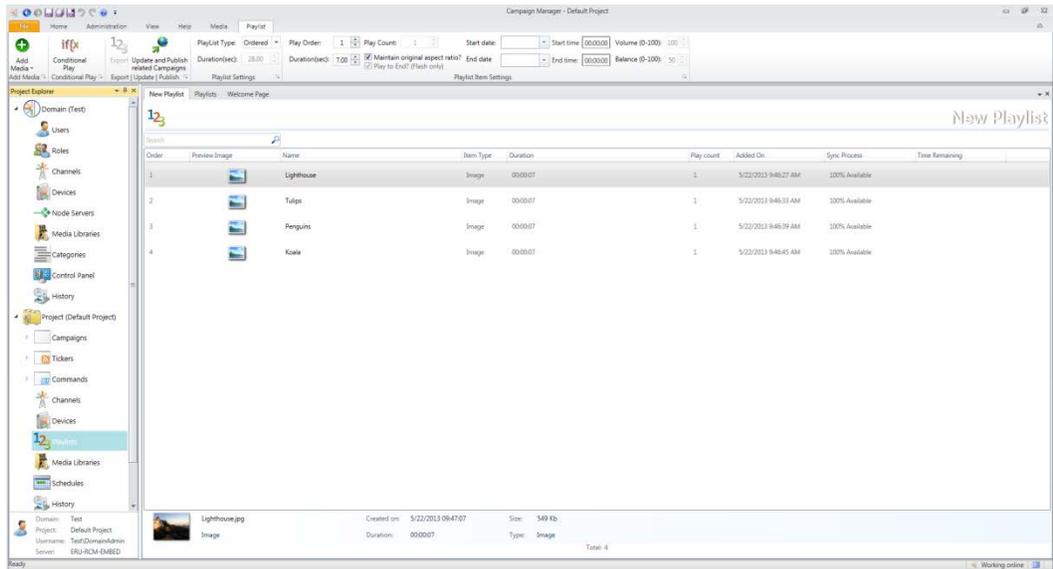
### 2.3.2 Types of Playlists

**Ordered** - An ordered playlist plays all the media in exactly the same order as it is defined by the Order ID.

Ordered playlist total duration is the sum of all the media duration and cannot be changed.

For individual media, you can change duration, order, start and end date as well as volume and balance (only for media with audio) in the ribbon under playlist tab. However in ordered playlist you cannot change the play count.

If individual media duration is changed, this will automatically reflect on the ordered playlist total duration.



**Random by duration** - A random by duration playlist plays all media but in random order. The total duration reflects the sum of all media duration.

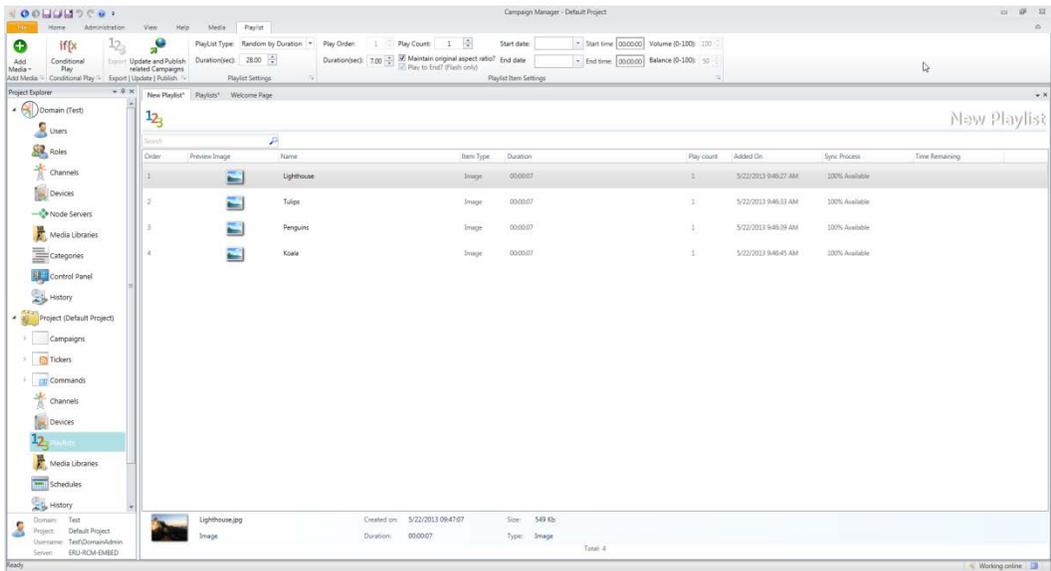
However this value can be edited. For individual media, you can change duration, count, start and end date as well as volume and balance (only for media with audio) in the ribbon under playlist tab. However in random by duration playlist, you cannot change the order of the individual media, as this is calculated by the application.

If the total duration is less than the sum of all media in the playlist, then the number of media playing during that period is determined by the individual duration of each media. For example, a playlist has 3 images each with 7 sec duration and a total duration of 21 sec. If you change the total duration to 14 sec, then during the playlist play period, it can only play 2 images.

If the play count is changed for individual media then that media will play that many times until the entire playlist count is exhausted.

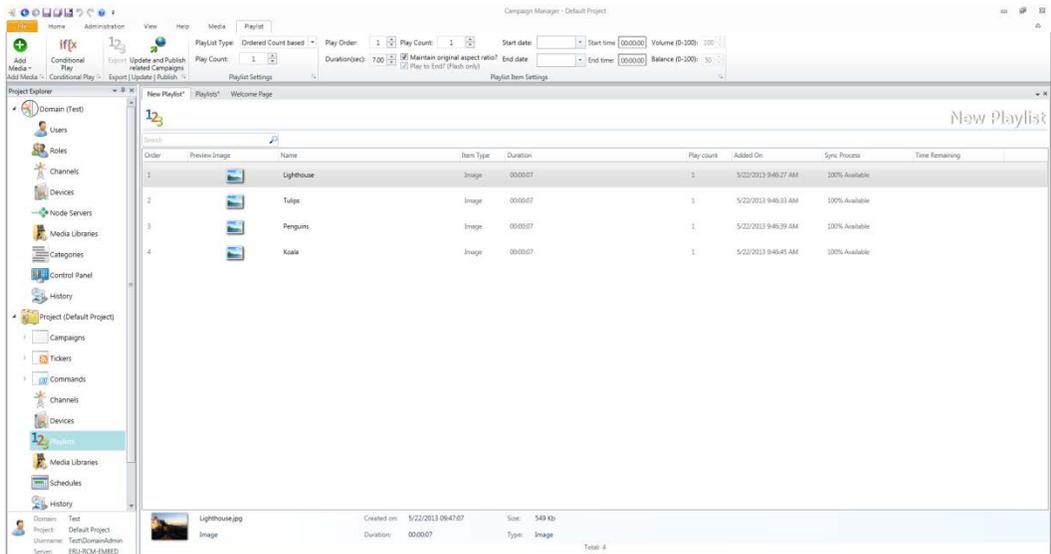
However the entire process will happen in a random order and no media will be play back-to-back.

**Randomly Count-based** - A randomly count-based playlist plays only the number of media in random order, as defined by the play count, instead of total duration. For example, if the playlist count is 3 and there are 5 media in the playlist then in each play period, only 3 files get to play. For individual media, you can change duration, play count, start and end date as well as volume and balance (only for media with audio) in the ribbon under playlist tab.



If the play count is changed for individual media, then that media will play that many times until the entire playlist count is exhausted over multiple play periods. NOTE that in randomly count based playlist, no media will be play back-to-back.

**Ordered count-based** - An ordered count-based playlist plays only the number of media (defined by the play count) in exactly the same order as the Order ID. For example, if the playlist count is 3 and there are 5 media in the playlist then in each play period, only 3 files get to play in the exact order. For individual media, you can change all the fields in the ribbon under playlist tab.





**Note:** If the play count is changed for individual media, then that media will play that many times until the entire playlist count is exhausted over multiple play periods.

**Import/export playlist** - Playlist can be imported to an existing campaign from Helper window using drag & drop.

Alternatively a customized zone playlist can be exported to a public playlist so that it can be shared across different campaigns within the same project.

To import a playlist to a campaign:

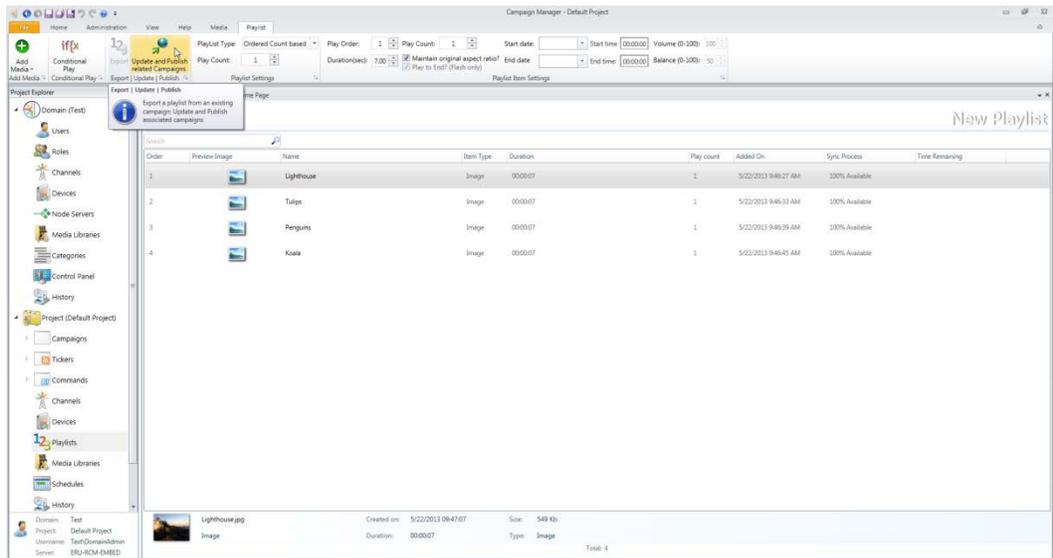
1. Open the campaign and switch to What section
2. Right-click on zone playlist and select **Add existing playlist**. This opens the Helper window
3. Select the playlist you want to import and drag & drop it to the zone playlist. You can either drag & drop it directly on the zone playlist or you can drag & drop it on the zone.
4. Playlist is added as an item to zone playlist

To export a zone playlist:

1. Open the campaign and switch to What section
2. Click **Export** on ribbon in Playlist tab
3. Enter a name for the playlist and click **OK**
4. Click **Playlist** on Project Explorer
5. The recently exported playlist now appears in the all playlist list

**Update related Campaigns** - Campaigns that are associated with a playlist can be updated automatically using this option, following editing of the playlist. To update the related Campaigns:

1. Open a playlist and add a media to it
2. Save the playlist
3. Click **Update related Campaigns** from the ribbon in Playlist tab. This opens the Update Selected Campaigns UI.
4. Select the campaigns you want to update and click **Update Only**. This will update the relevant campaigns.

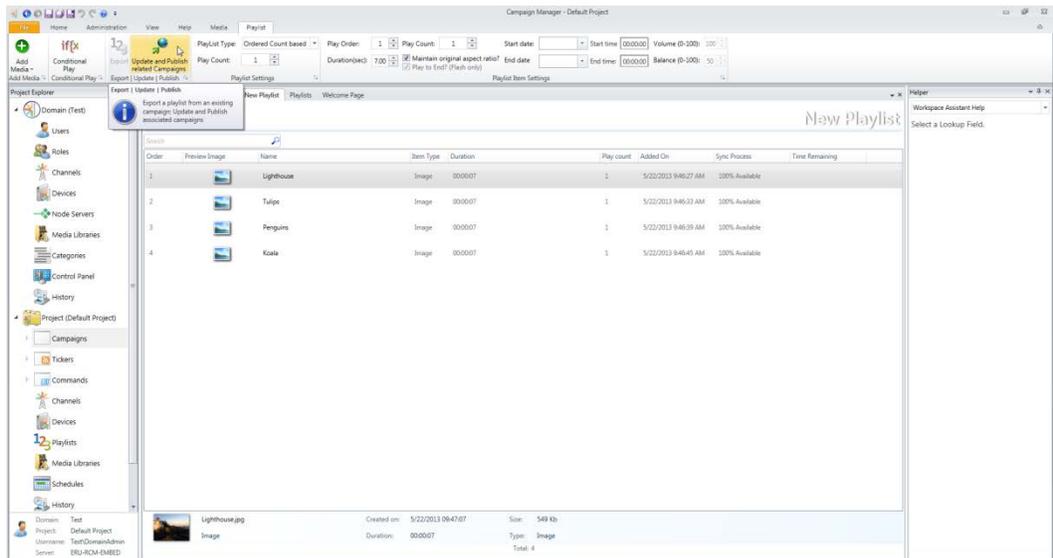


If a Campaign is published then following Update playlist action, the campaign will in edited mode.

**Note:** The update playlist option updates the campaign s only locally. You need to republish the campaign to have the changes reflected on the player.

**Update related Campaigns and Publish** - Campaigns that are associated with a playlist can be republished automatically using this option, following editing of the playlist. To update and publish the related campaign s:

1. Open a playlist and add a media to it
2. Save the playlist
3. Click **Update related Campaigns and Publish** from the ribbon in Playlist tab.
4. If publish is successful, a task dialog will inform the user.
5. Player will start playing the updated playlist upon syncing.



**Note:** The **Update related Campaign and Publish** option will publish all campaigns associated with that playlist. So care needs to be taken in using this option to prevent unintended changes from being published.

**Conditional play** - Conditional play is defined as a set of conditions that define whether a media is likely to play on the CM Player.

If conditions associated with a media are not met, then CM Player will not play that media on the screen.

You can set conditional play either on a media within a playlist or a zone playlist or on a playlist itself within the zone.

To set conditional play on a media or playlist:

1. Open the playlist or zone playlist
2. Select the media or the playlist, right-click and select **Add Conditional Play** from the context menu. You can also select **Conditional Play** from the ribbon. This opens the Helper window.
3. Click **Add Condition** in the Helper window
4. Assign the appropriate condition for the media or playlist item
5. Click **Save** from the ribbon

For more information on Conditional Play, see Campaign conditional play.

### 2.3.3 Details View

Select any playlist and press Ctrl+E or select View > **Details View** from the ribbon in View tab.

This opens up the Details view panel.

**What** - You can preview media thumbnail of playlist items. Media specific information such as duration, size etc. are also displayed in this section.

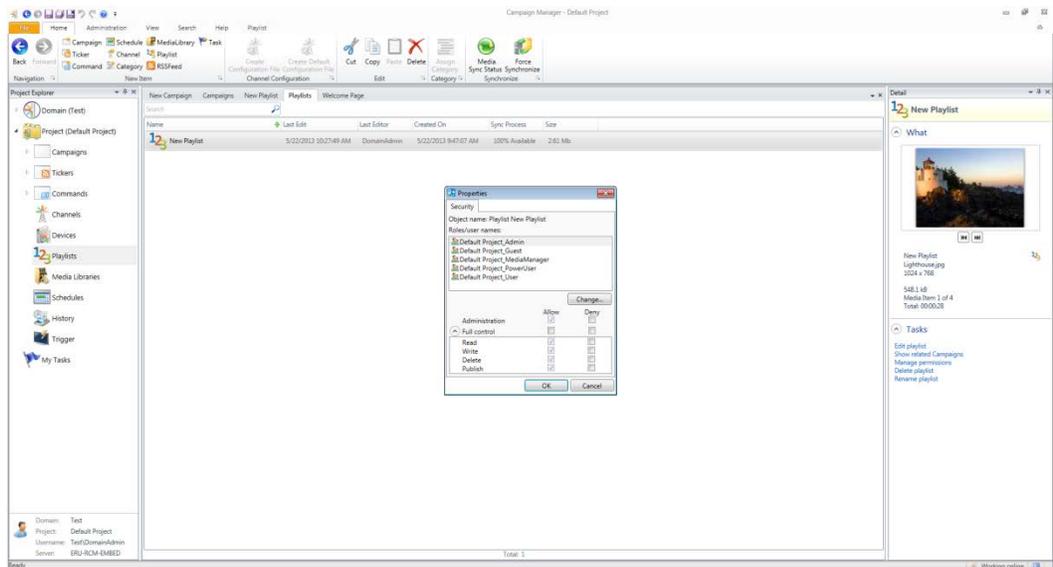
**Tasks** - Most commonly used functions associated with a playlist are listed in this section.

**Edit Playlist:** This option allows you to open the playlist workspace.

**Show related Campaigns:** This option allows you to view a filtered result of all campaigns that are associated with this playlist. The result includes active, published, expired and pulled campaigns.

**Manage permissions:** This option allows you to assign users and roles to this playlist as well as configure their permission level. For example, if you want user "Joe" to be only able to read this playlist but not make any changes to it, then you need to,

1. Click **Manage Permissions** on Tasks. This opens up the Properties UI.
2. Click **Change**
3. Select a user from Available Users and Roles list and move it to the Selected Users and Roles list
4. Click **OK**
5. Click on user "Joe" and in the bottom section select the appropriate permission. In this case, click the checkboxes for Read under Allow while select the remaining checkboxes under Deny. This will only allow Read permission for "Joe" for this playlist.



**Delete playlist:** This option allows you to delete the playlist. A confirmation message appears. Click **Yes** to permanently delete the playlist.



**Rename playlist:** This option allows you to rename the playlist in the all playlist listview workspace.

## 2.4 Commands

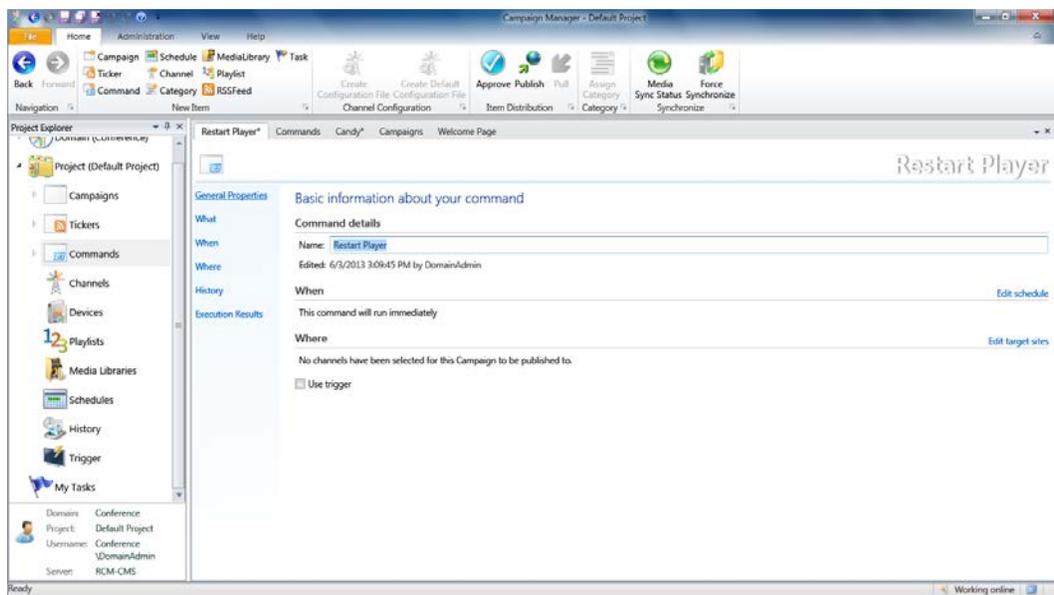
Commands are actions we want to execute on the remote device.

There are a number of predefined commands that we can execute but there are also ways to create our own custom commands.

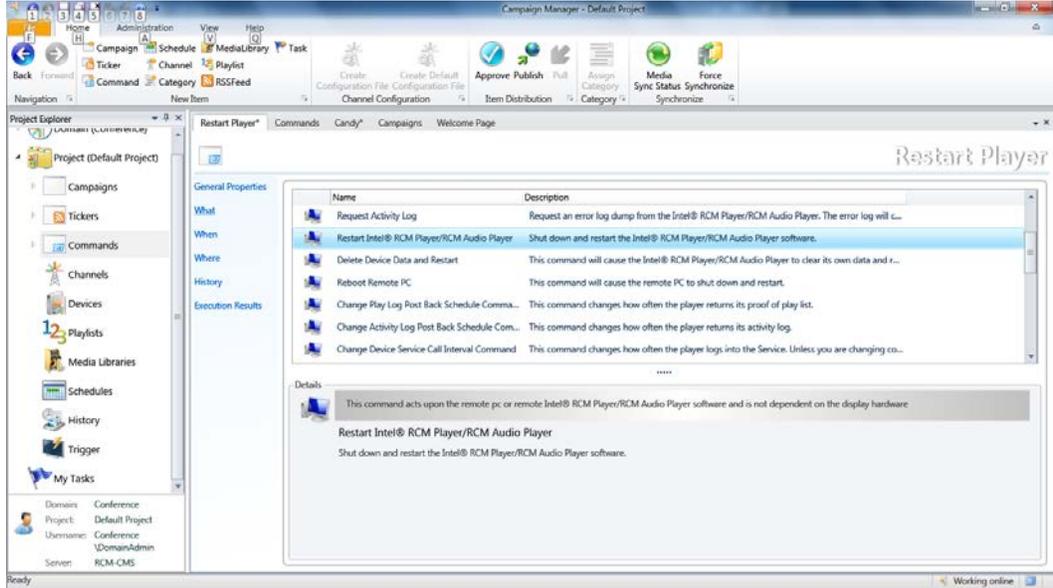
### Example using Command Entity

Like other Entities in Intel RCM, using the Command Entity is very similar to using the Campaign Entity. You will use the same ideas of What, When, and Where. Let's walk through an example of restarting the Intel RCM Player.

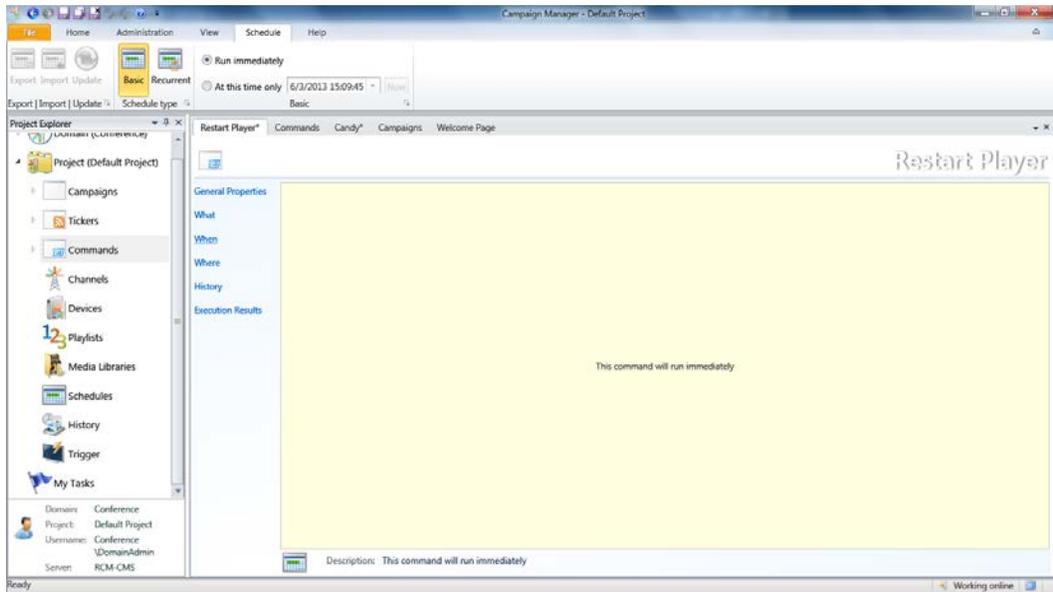
1. From the Commands Menu, select **New Command** from the ribbon (or right-click to get the context menu.) We will name this command "Restart Player"



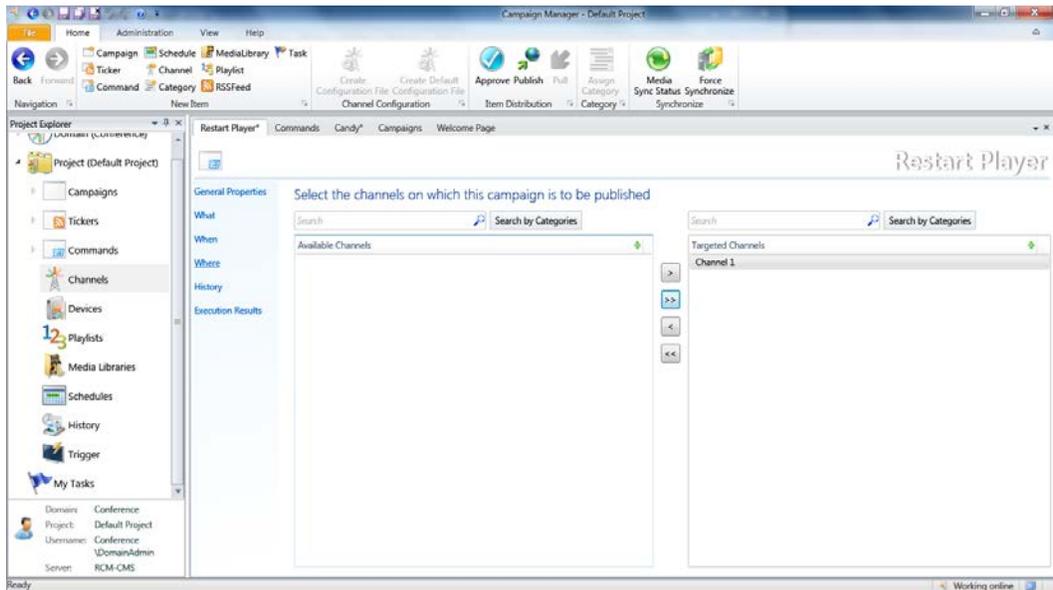
2. Next, select **What** and scroll to select "Restart Intel® RCM Player/RCM Audio Player"



We can schedule this command to execute later, or by default the command will run immediately. We will leave the default.



3. Click to the Where tab to select the Channel to execute the command. Here we will move Channel one from Available Channels to Targeted Channels.



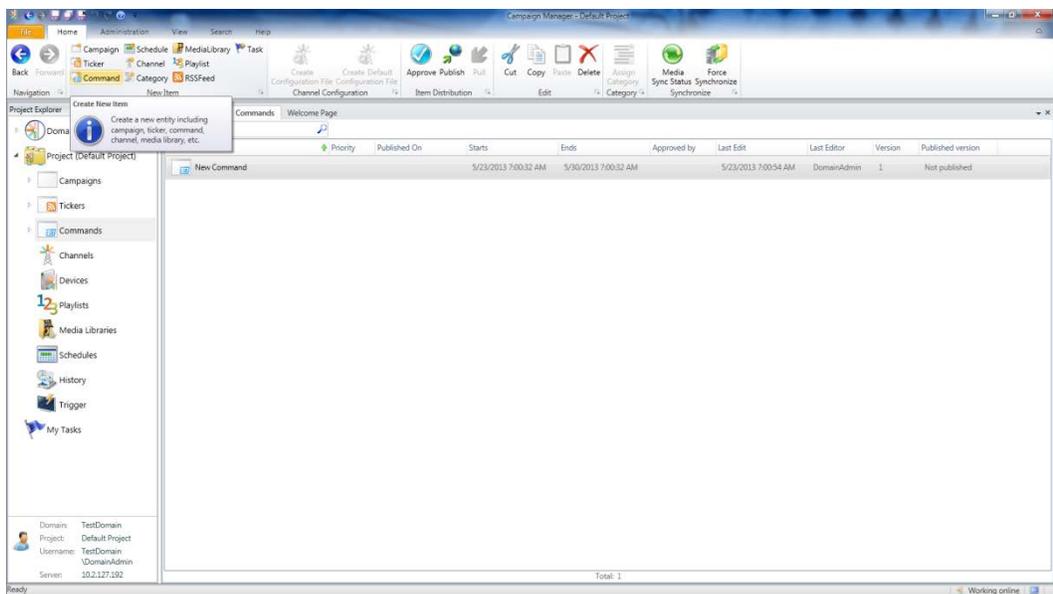
4. Now, click **Publish** to execute the command. To view the results, click **Execution Results**.

## 2.4.1 Create a Command

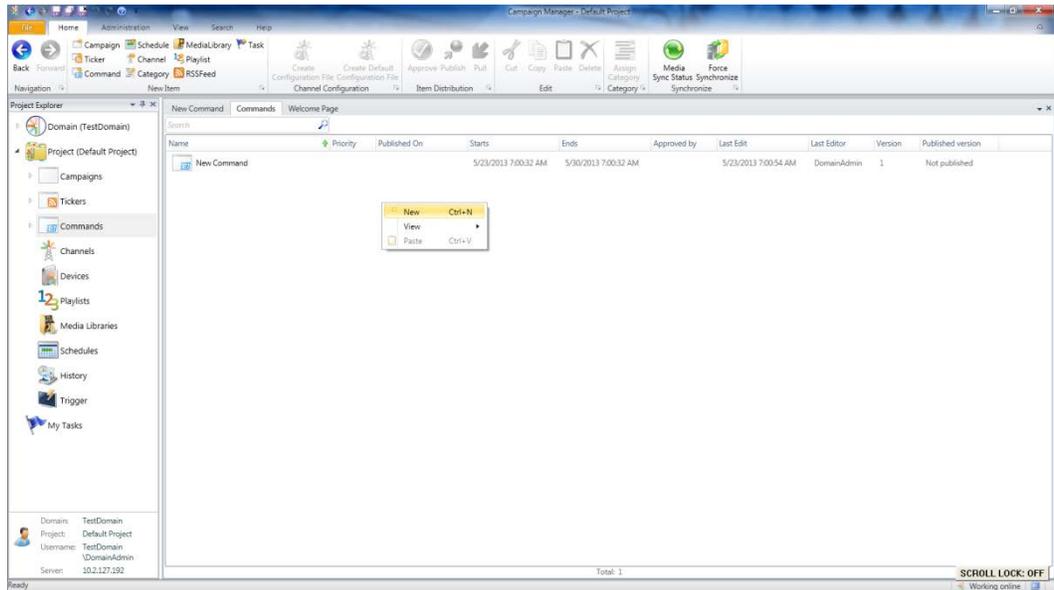
Like every entity there are three ways to create commands.

While in project view, we click on the command icon.

One way is from the ribbon; we choose the command button under the Administration tab.



The second way is to right-click and choose **New** from the context menu.

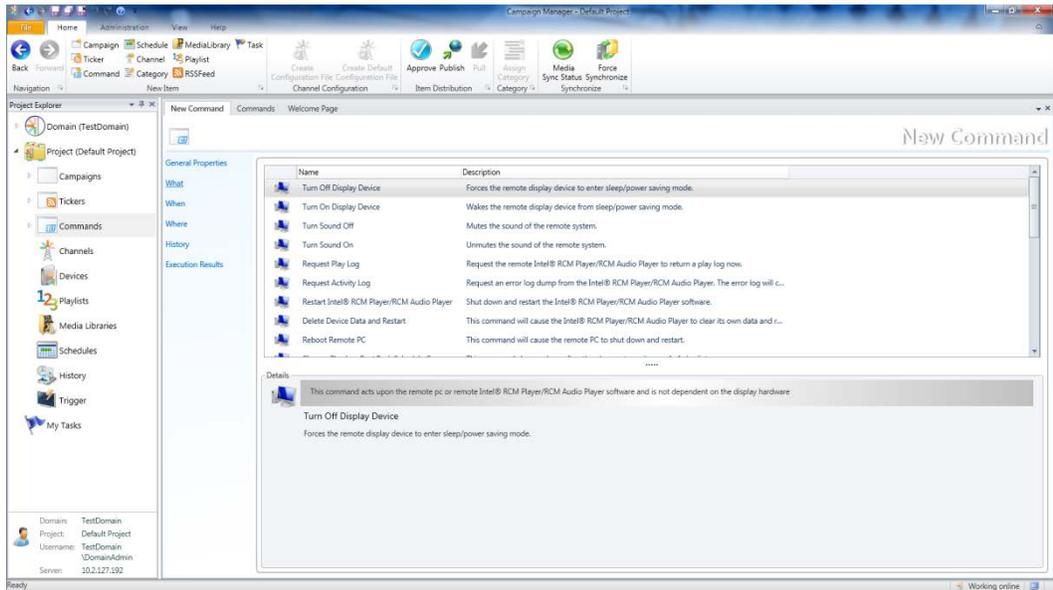


The third way is with using the shortcut keys **Ctrl+N**.

## 2.4.2 Add Command

Adding an action to the campaign can be done in the What section of the command.

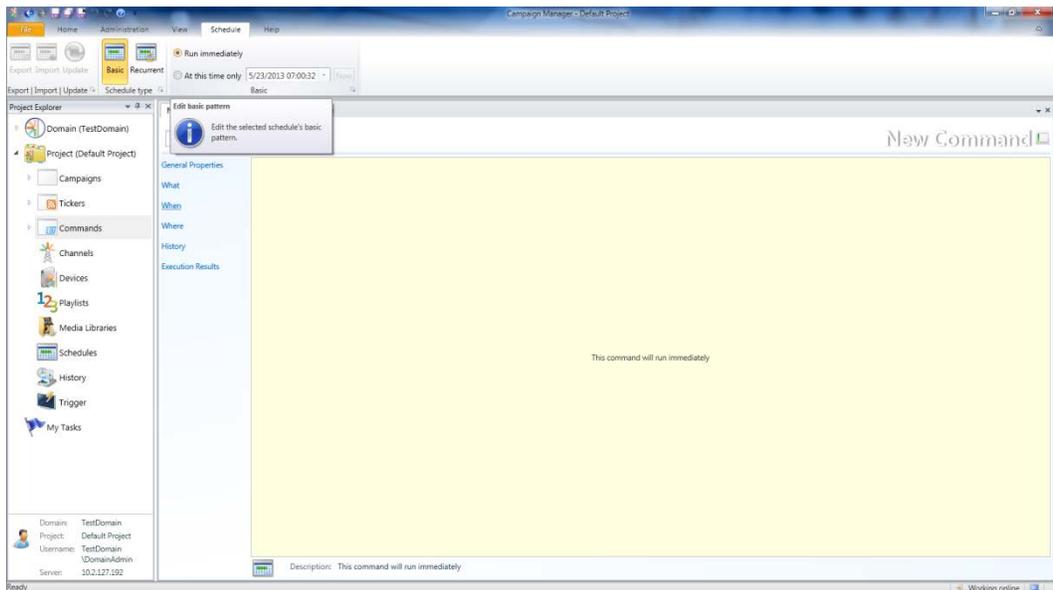
There are 24 predefined actions that can be added and each action has description.



### 2.4.3 Add Schedule

To edit the time we want the Command to be executed on the player we edit its schedule.

The schedule is edited in the When section.

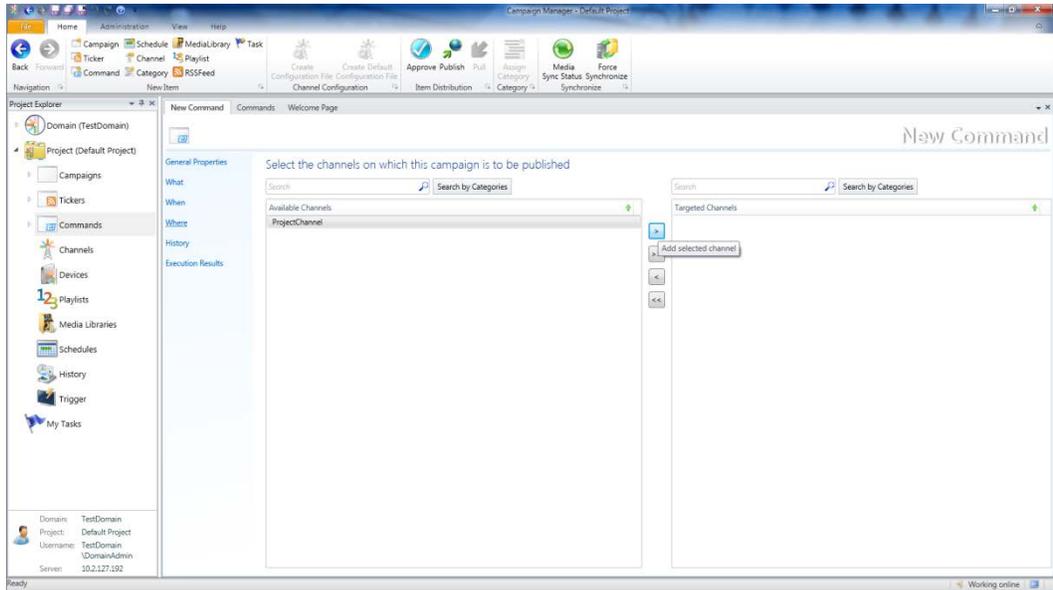


When setting a schedule to a command there is an option for run immediately or at specific time under the Basic schedule.

There is also an option for inserting recurring schedule.

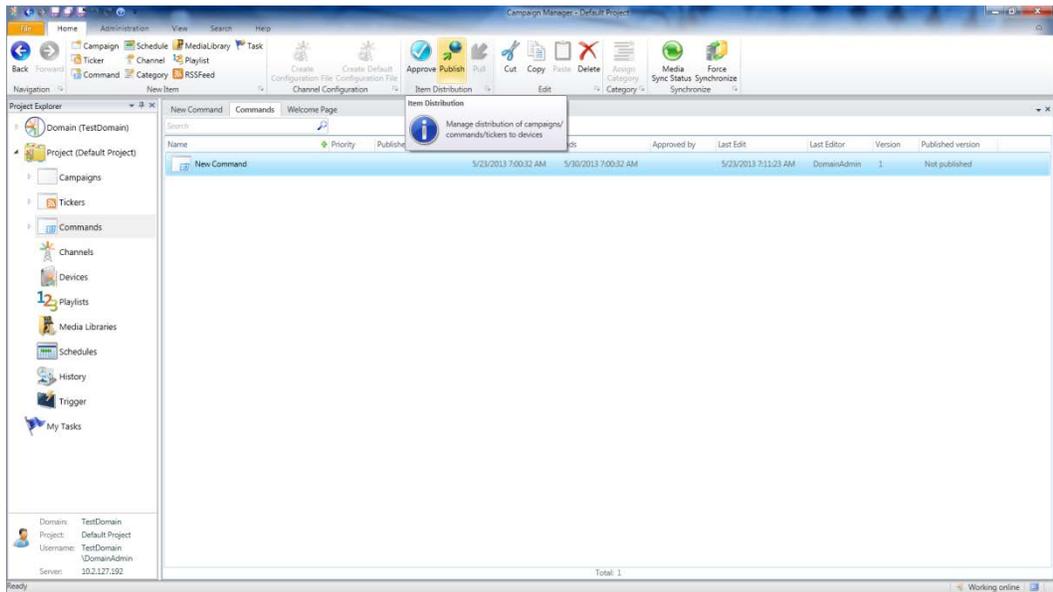
## 2.4.4 Add Target Site

To add a target site to a command we simply open the command, we go to the Where section and we choose the channels that we want the command to be executed to and we press on the '>' button which puts the Available Channels to the Targeted Channels.

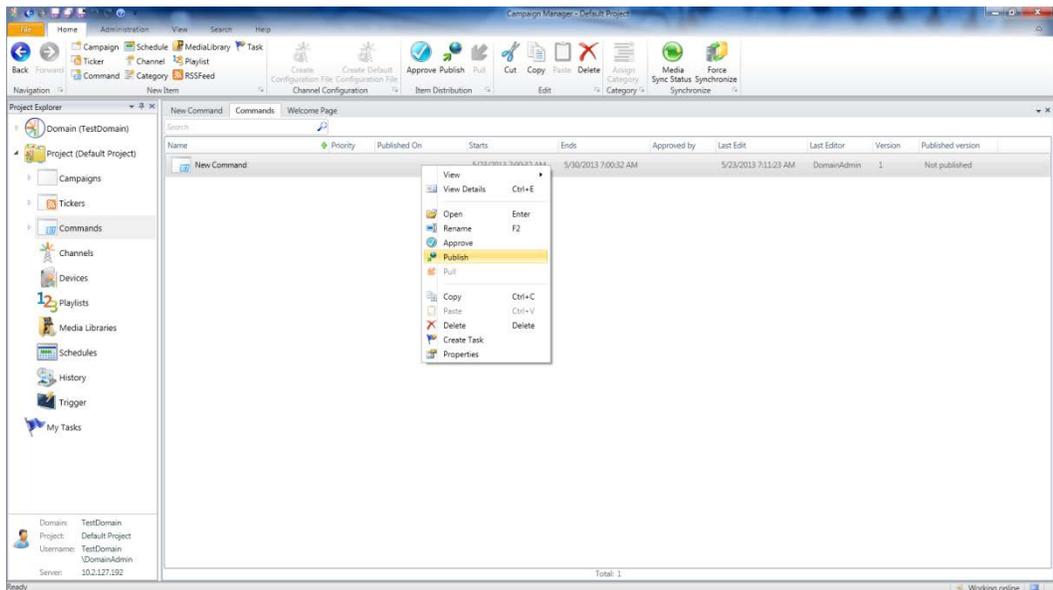


## 2.4.5 Publish

To publish a command we select the command and click **Publish** on the ribbon under the Home tab.

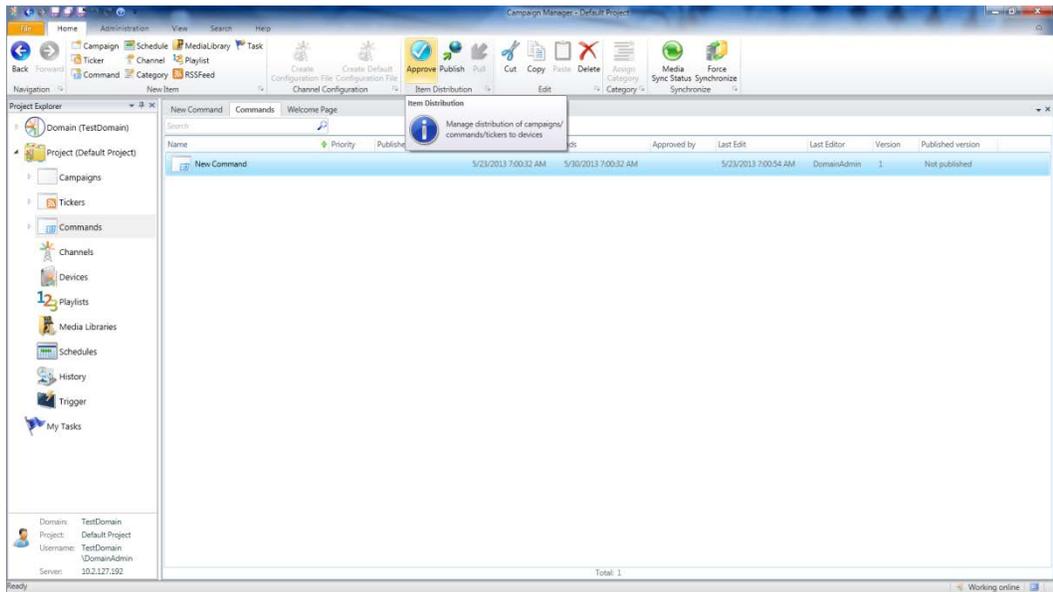


We can also publish a command by right-clicking on the command and choosing **Publish** from the context menu.

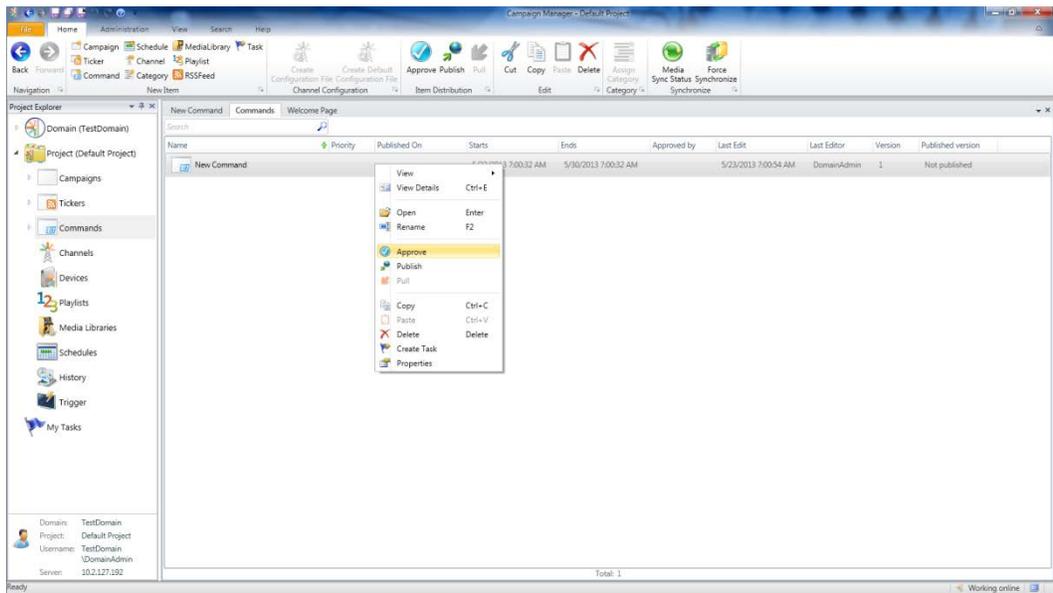


## 2.4.6 Approval

To approve command for publishing we select the command and then click **Approve** on the ribbon under the Home tab.

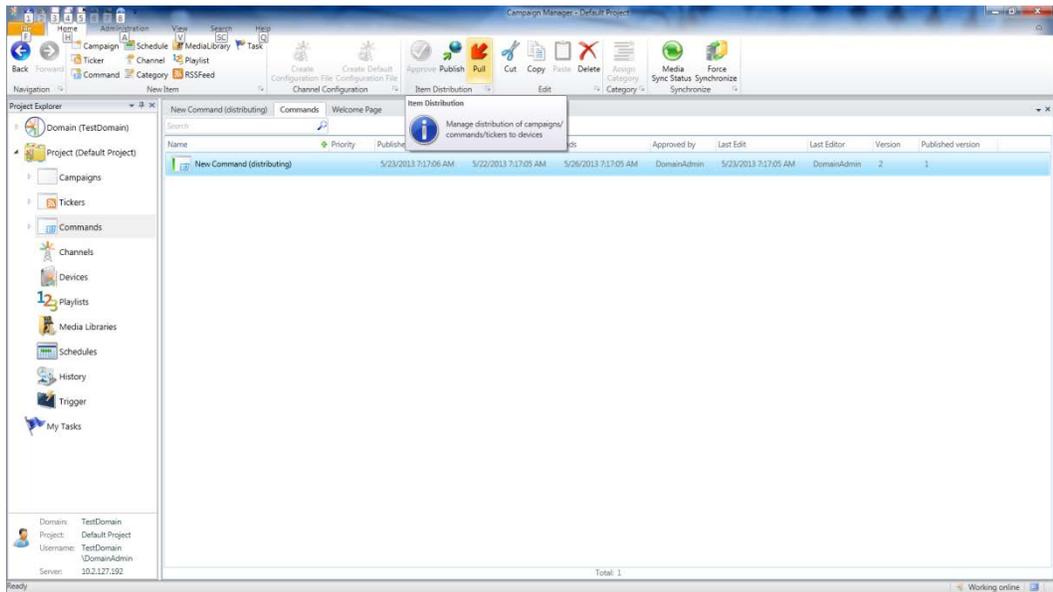


Approval can also be made by right-clicking and selecting **Approve** from the context menu.

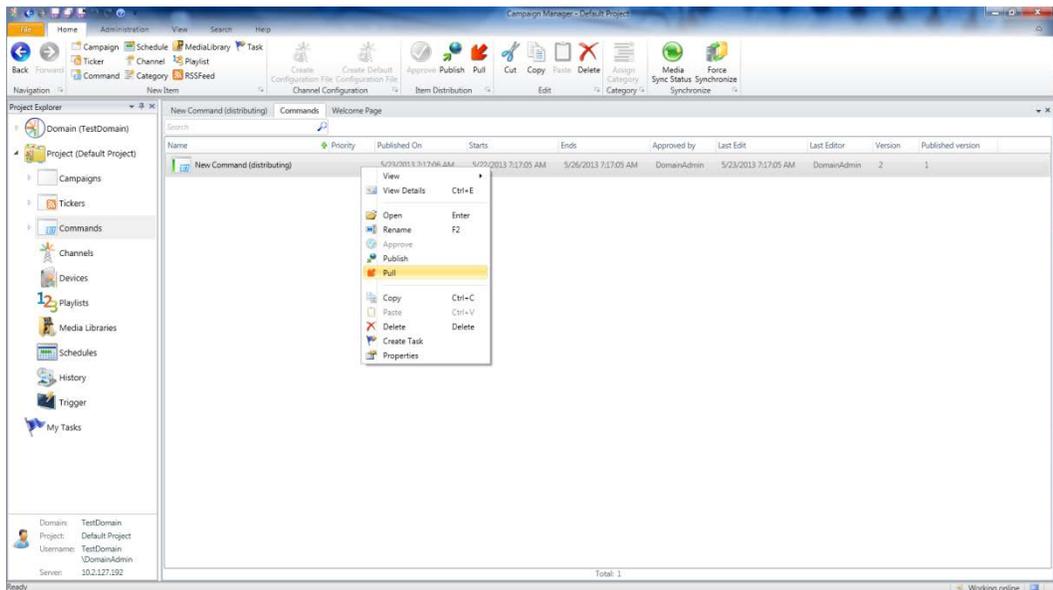


## 2.4.7 Pulling

If we want certain action to stop executing on the players we select the published command and click **Pull** on the ribbon under the Home tab.



We can also pull a command by right-clicking and selecting **Pull** from the context menu.

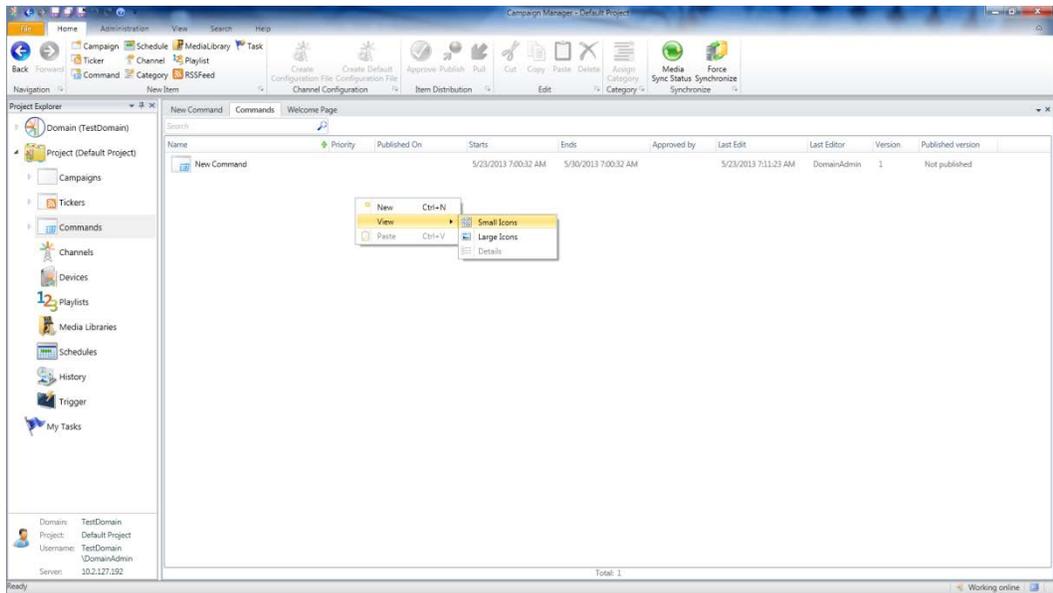


## 2.4.8 Different Views

There are three different views in Campaign Manager.

- Small Icons
- Large Icons
- Details

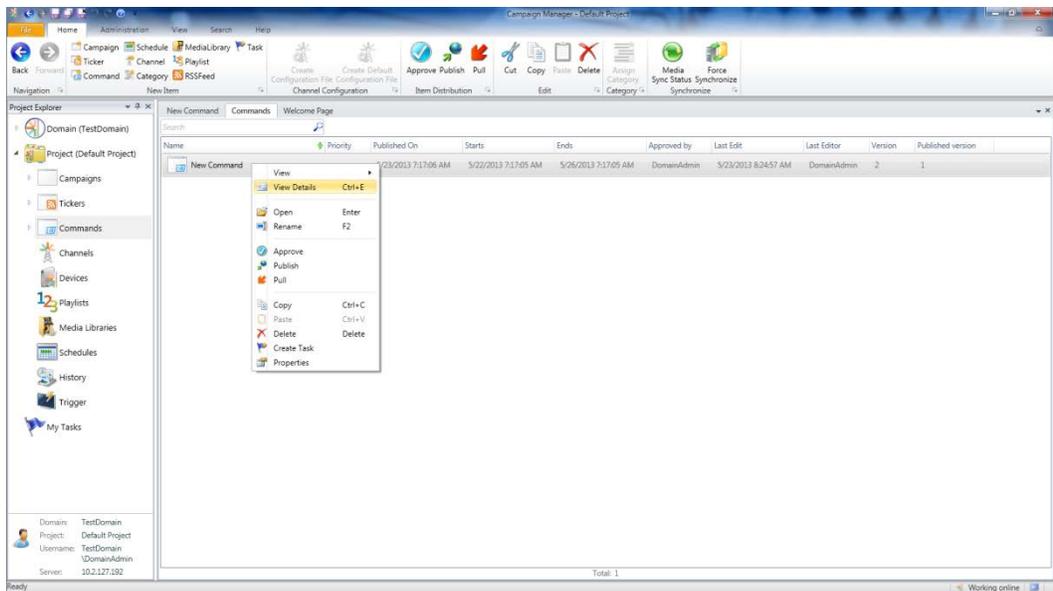
We can change the view from the ribbon under the View tab and while in the command workspace with right mouse button click.



## 2.4.9 Details View

For each command there is a details view where we can observe several features.

To toggle the Details view, select the ticker and with right mouse button we click on the Detail View.





Another way is by selecting the ticker and choosing Detail view from the ribbon under the view tab.

1. What - Under What section we can observe what action we want to perform with the command.
2. When - Under When section we can observe the schedule of the command.
3. Where - Under Where section we can observe the target sites (players) where the command has been published.
4. Tasks - Under Tasks section we can see if there are any tasks assigned to the specific command.
5. Are We There Yet - Under Are We There Yet section we can observe what is the status of the command and if it has reached the players.

### **Execution Results**

When a command is created and published we can see its execution results.

The execution results can be found in the main features of the command.

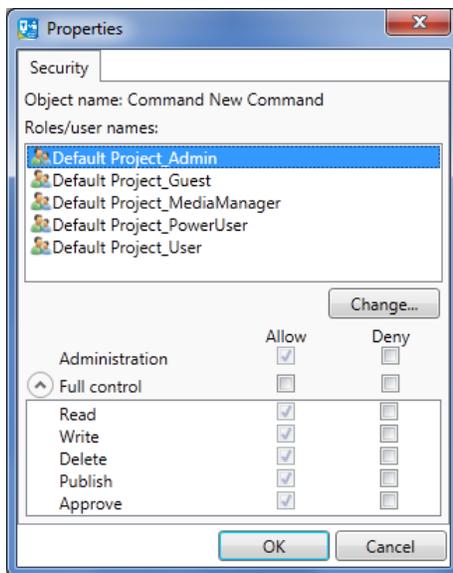
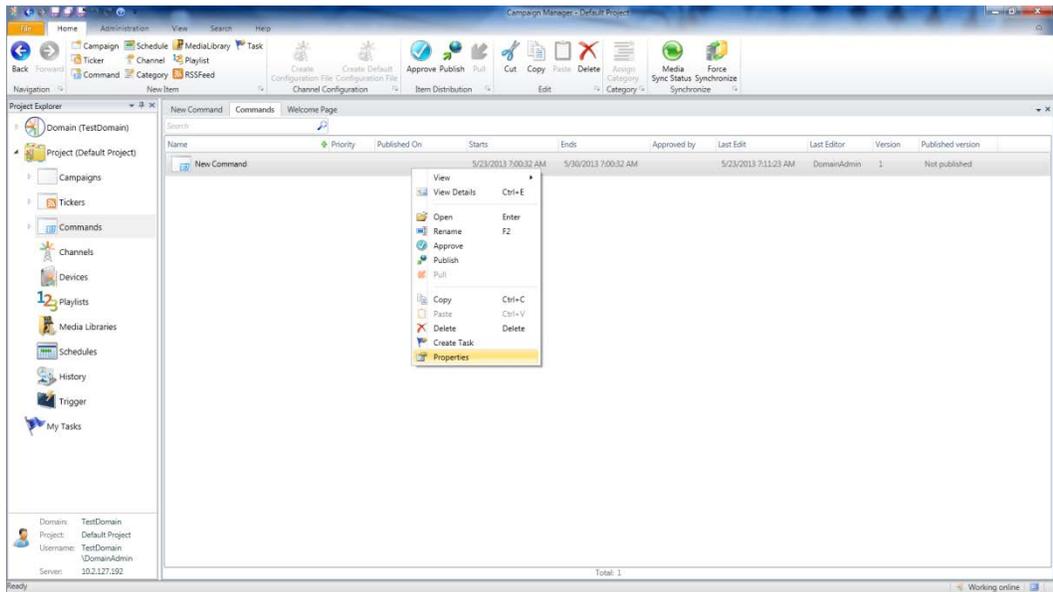
When we open the section we can see some information of the commands execution.

- Occurred is for when the command occurred.
- Machine gives us information on which machine this command occurred.
- Channel gives us information about on which channel was the command executed.
- Success gives us information if the command executed successfully.
- Output gives us extra information about the command execution. For example if the command was Request Play Log than the result will be a link here which would take us to the execution results.

### **Manage permission**

To manage command permissions, select a command and right-click and select properties.

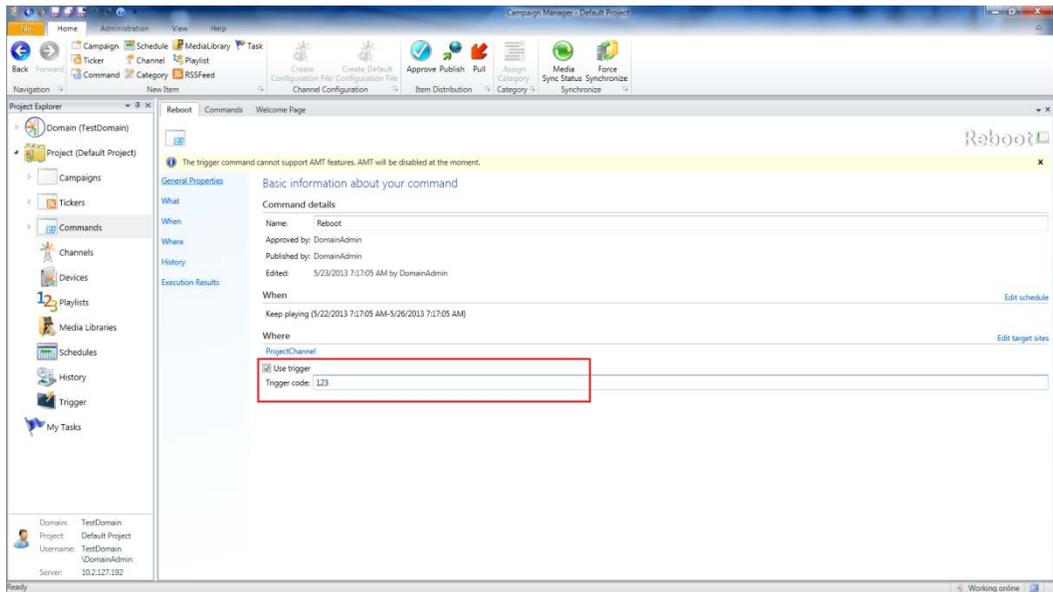
In properties we can manage which roles have which permissions over a command.



## Command trigger

Command trigger is a feature we use if we want to execute the command on the player immediately with triggering.

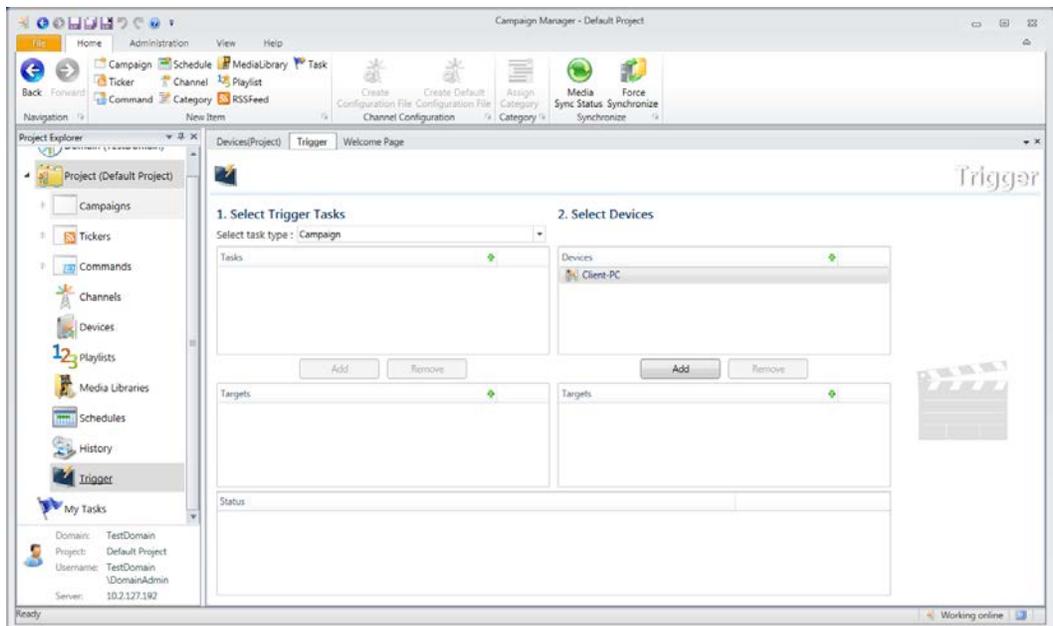
To configure a trigger command we enter in the command and in general properties section we tick the option Use trigger.



After ticking this option a text box appears where we enter the code of the trigger.

This code will be later used in order to initiate the trigger.

After configuring the command for triggering we go in the trigger section in the projects view.

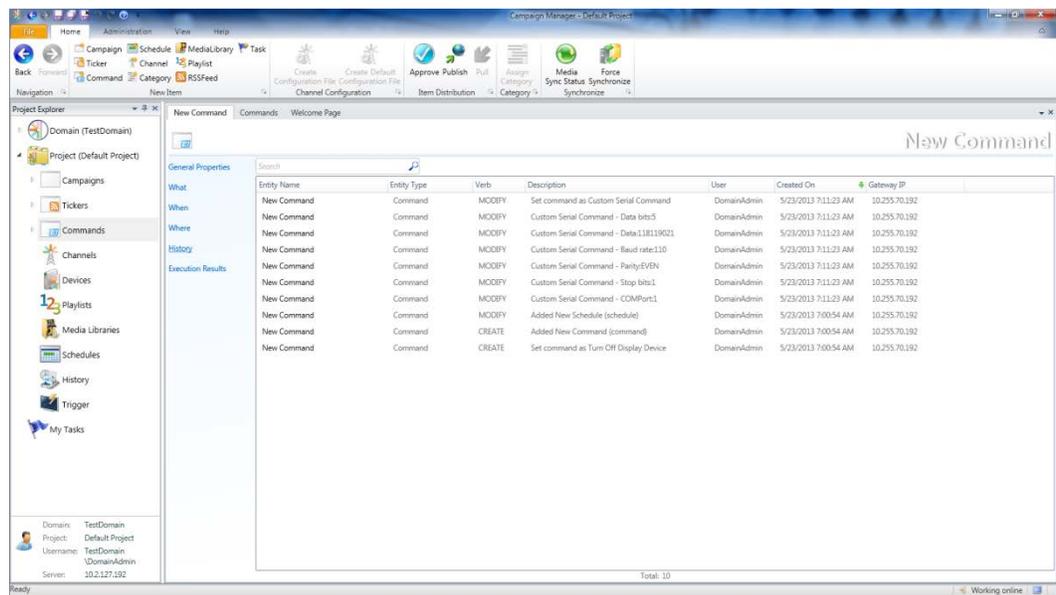


When we want to trigger a command we choose the command, we then choose the players that we want this command to be played and we press on the button with the clapperboard.

Select task type : Command

## History

To see the history of the command we open the history section of the command and there we have almost all the actions that were done upon the selected command.



The screenshot shows the Campaign Manager interface with the 'New Command' history table. The table lists various actions performed on commands, including modifications and creations. The columns are Entity Name, Entity Type, Verb, Description, User, Created On, and Gateway IP.

Entity Name	Entity Type	Verb	Description	User	Created On	Gateway IP
New Command	Command	MODIFY	Set command as Custom Serial Command	DomainAdmin	5/23/2013 7:11:23 AM	10.255.70.192
New Command	Command	MODIFY	Custom Serial Command - Data bits5	DomainAdmin	5/23/2013 7:11:23 AM	10.255.70.192
New Command	Command	MODIFY	Custom Serial Command - Data118119021	DomainAdmin	5/23/2013 7:11:23 AM	10.255.70.192
New Command	Command	MODIFY	Custom Serial Command - Baud rate110	DomainAdmin	5/23/2013 7:11:23 AM	10.255.70.192
New Command	Command	MODIFY	Custom Serial Command - ParityEVEN	DomainAdmin	5/23/2013 7:11:23 AM	10.255.70.192
New Command	Command	MODIFY	Custom Serial Command - Stop bits1	DomainAdmin	5/23/2013 7:11:23 AM	10.255.70.192
New Command	Command	MODIFY	Custom Serial Command - COMPort1	DomainAdmin	5/23/2013 7:11:23 AM	10.255.70.192
New Command	Command	MODIFY	Added New Schedule (schedule)	DomainAdmin	5/23/2013 7:00:54 AM	10.255.70.192
New Command	Command	CREATE	Added New Command (command)	DomainAdmin	5/23/2013 7:00:54 AM	10.255.70.192
New Command	Command	CREATE	Set command as Turn Off Display Device	DomainAdmin	5/23/2013 7:00:54 AM	10.255.70.192

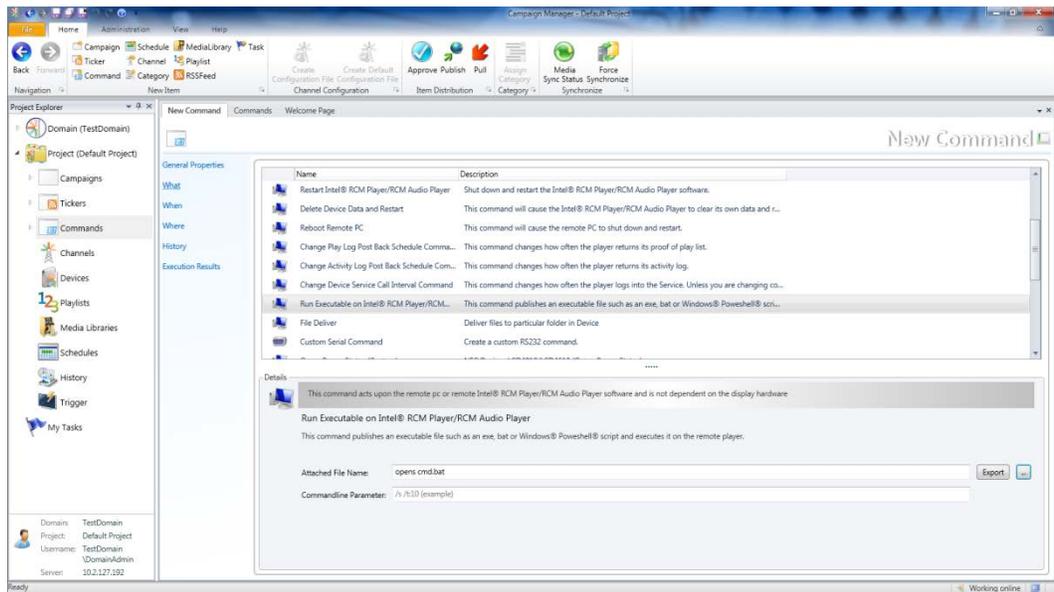
For each action there is information about the Entity name, the entity type, Verb (Explaining what the action was), Description (Defining the action into more detail), User and IP address.

## Run executable command

This command publishes an executable file such as an exe, bat or Windows PowerShell script and executes it to the remote player.

This command is not dependent on the display and runs on the player's pc software.

In order to create command like this, we create new command and we select the Run executable command option in the What section.



We can see that there are two fields that require our input.

The first one require to point to the executable exe, bar or PowerShell script file and the second one is to input the commands parameters.

The command parameters are the parameters that can be used while executing this file in command line of windows.

So for example if we upload batch script and input the command line parameters:

/s/t:10 – this means that we want the file to execute in 10 seconds.

/s – parameter for starting

/t – parameter for setting the execution time

### Custom serial command

There are LCD screens which can be connected to the machine with serial interface.

These screens can receive commands through the serial interface for powering down, powering on without the need of our intermediate attention.

In Intel RCM Campaign Manger we can create commands and save them so we can use them later.

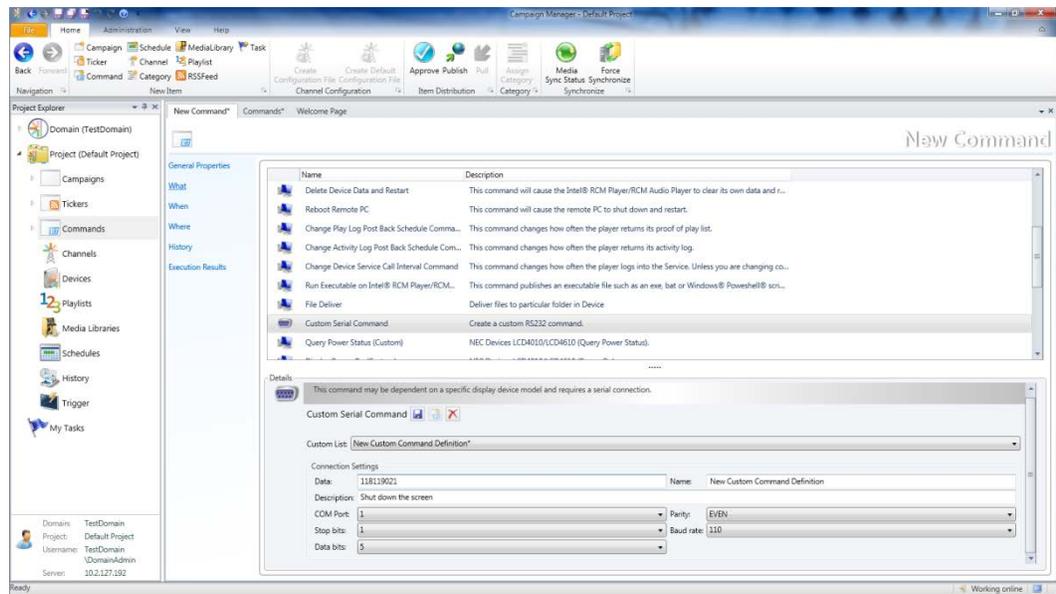
### New command

To create a custom serial command, in the What section select **Custom serial** command and there are option we need to input in order to define the command. Then we can save the command for later usage.

## Command definition

In the command definition we can set several options of the serial command.

1. We can set the name of the command which we will alter save and reuse the command with the name.
2. The Data field explains the code for the serial command provided by the screen vendor
3. Description is used to explain the data field, so we can now what this code is used for
4. Com Port we select the port that the screen is connected to the remote player.
5. Parity we select the parity of the serial command that we are sending.
6. There is also setting for the Baud rate, the stop bits and the Data bits.



**Note:** We set this feature according to the instructions manual provided to us by the screen's vendor.

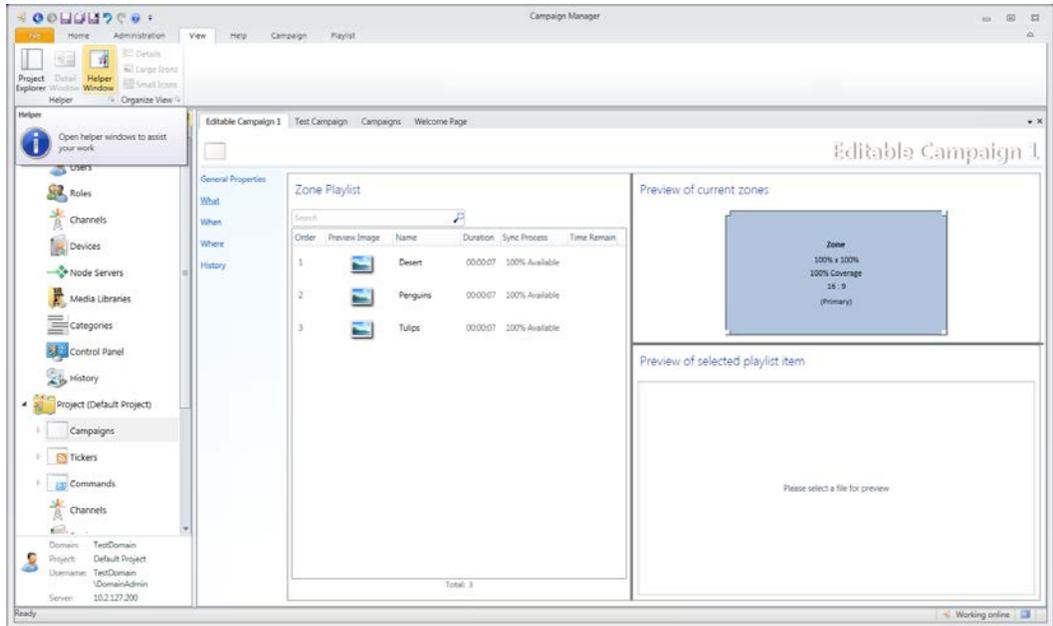
## 2.5 Conditional Play and Intel® Audience Impression Metrics Suite (Intel® AIM Suite) Integration

Intel RCM comes with one of the peak features in digital signage called Conditional Play. The conditional play lets us organize our players by category and then play certain content from campaign to certain screens, without the need to create different campaigns.

Apart from category based conditional play there is Intel AIM Suite based play. Intel® AIM Suite is a technology which with a help of a camera determines the number of users, their gender even their age. With the help of this technology we can make condition as which media will play on the screens based on its audience.

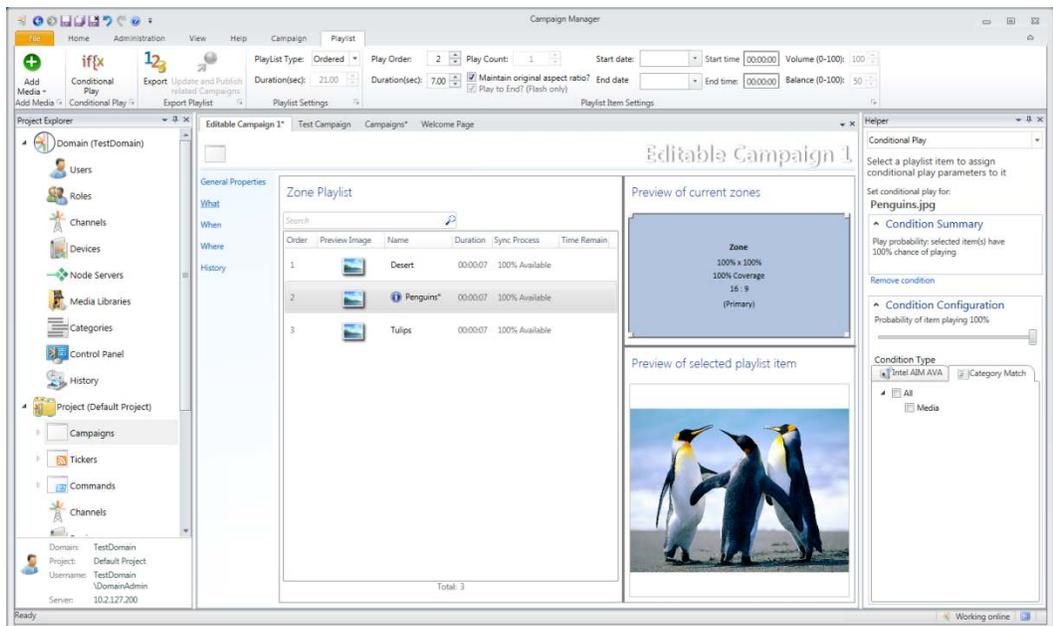


On the ribbon under the view tab we select the helper window button in order to see the options to set the conditional play.



## 2.5.1 Category Based Play

To set conditional play based on the category of the screen, in campaign under what section we select a media.

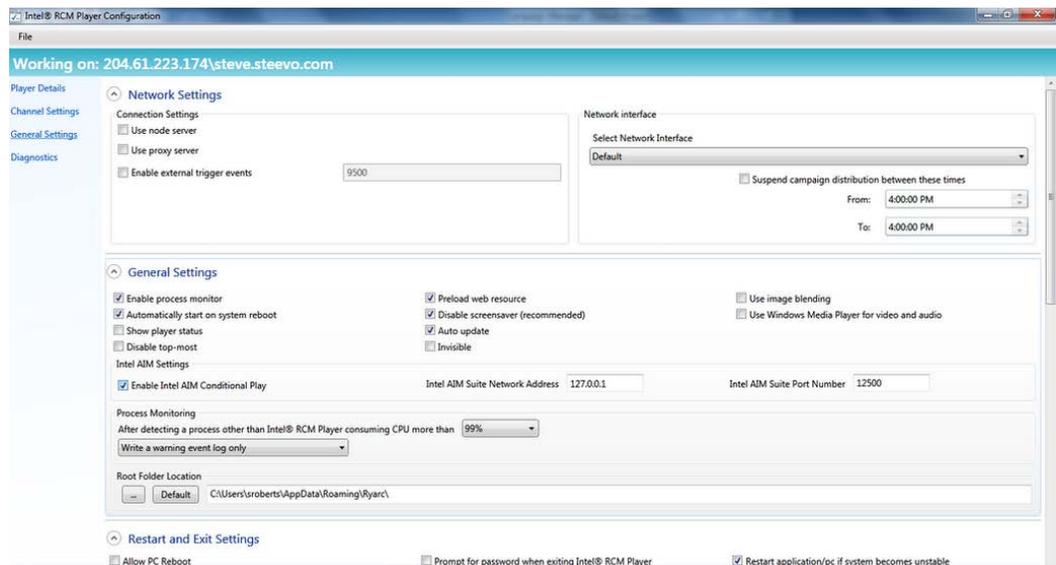


Below in the category match tab we select on which category of players we want the media to air.

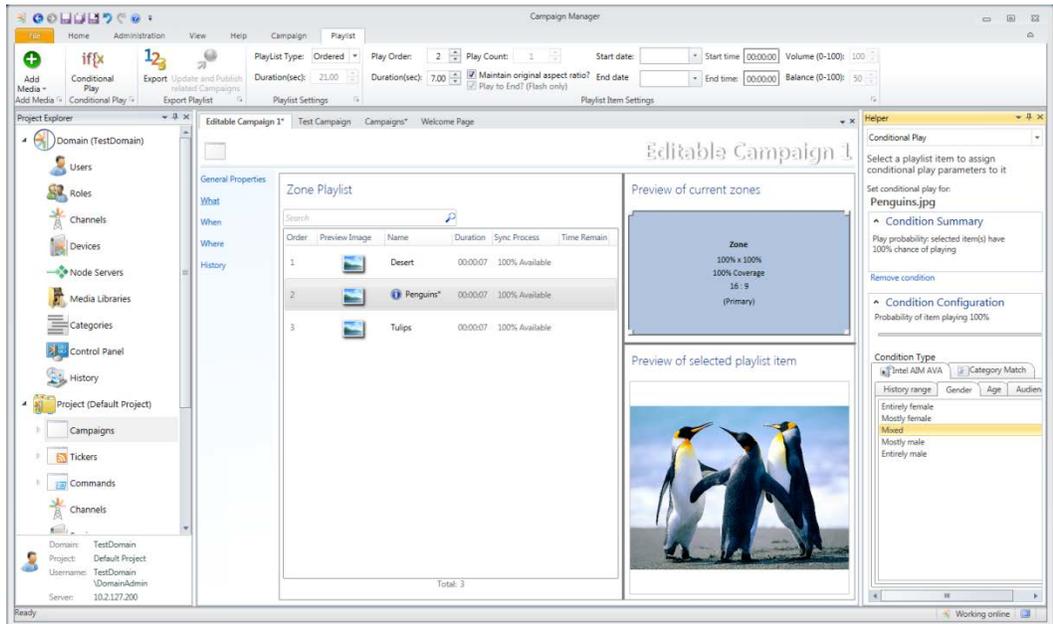
## 2.5.2 Intel AIM Suite Based Play

Your Intel AIM Suite must be active prior to using this feature. For more information or to login to your account go to <https://aimsuite.intel.com/>.

To link your Intel AIM Suite account to the network Check the box in either Player Configuration or Campaign Manager and confirm the Intel AIM Suite Network Address and Port Number.



To condition a media to play with the help of Intel AIM Suite technology we select a media and we choose the Intel AIM AVA tab in the conditional play section.



- Gender Under the gender tab we can select for which gender this media is intended.
- Audience Under the audience tab we can select the operator and for how many viewers we want to display the media.
- History range Under the history range we can select for which age range is the media intended.

### 2.5.3 Triggers

In Intel RCM, a “Trigger” is a special campaign that runs only when an external resource sends a special trigger message to the player. A trigger campaign can be setup as a trigger initially, or an existing campaign may be modified to be a trigger campaign. Either way, the user will select the “Use Trigger” checkbox, and choose a Trigger Code. The Trigger Code can be any unique alphanumeric text pattern. The user also has the choice of selecting “Interrupt other campaigns immediately” which will start the trigger campaign as soon as the player receives the trigger code, otherwise the trigger campaign will begin as soon as the current campaign loop has completed.

1. To configure a trigger campaign we enter in the campaign and in general properties section we select the option Use Trigger.
2. After selecting this option a text box appears where we enter the code of the trigger.

This code will be later used to initiate the trigger.

3. There is also the option if we want the triggered campaign to interrupt the running campaign on the screen immediately.
4. After configuring the campaign for triggering we go in the trigger section in the projects view.

5. When we want to trigger a campaign we choose the campaign, we then choose the Displays that we want this campaign to be played and we press on the button with the clapperboard.

#### How Does It Work?

Triggers operate as campaigns that are pushed out to individual Players like any other campaign. Instead of being bound by a schedule, however, they are called upon when a triggering event occurs. This can be any from any source that can initiate the Code to be sent to the player.

Triggers can be highly customized and interact with a number of sources to create real-time interaction with the Display

### 2.5.4 Domain and Project Level History

History is a section in the Intel RCM Campaign Manager where we can inspect all the actions that took place over our entities and features in the campaign manager.

In the domain level history, the history is recorded for all the entities of the domain:

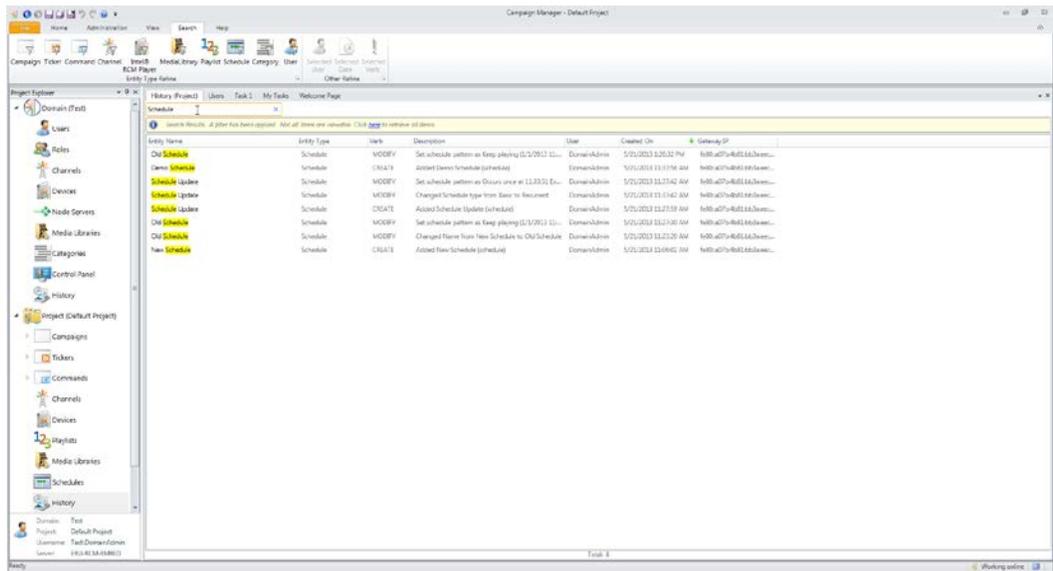
Users, Roles, Channels, Players, Media Libraries and Categories.

For the project level history, the history is recorded for all the entities of the project:

Campaigns, Commands, Tickers, Commands, Playlists and Schedules.

For each entity, no matter if it is Domain or Project level we can see information about:

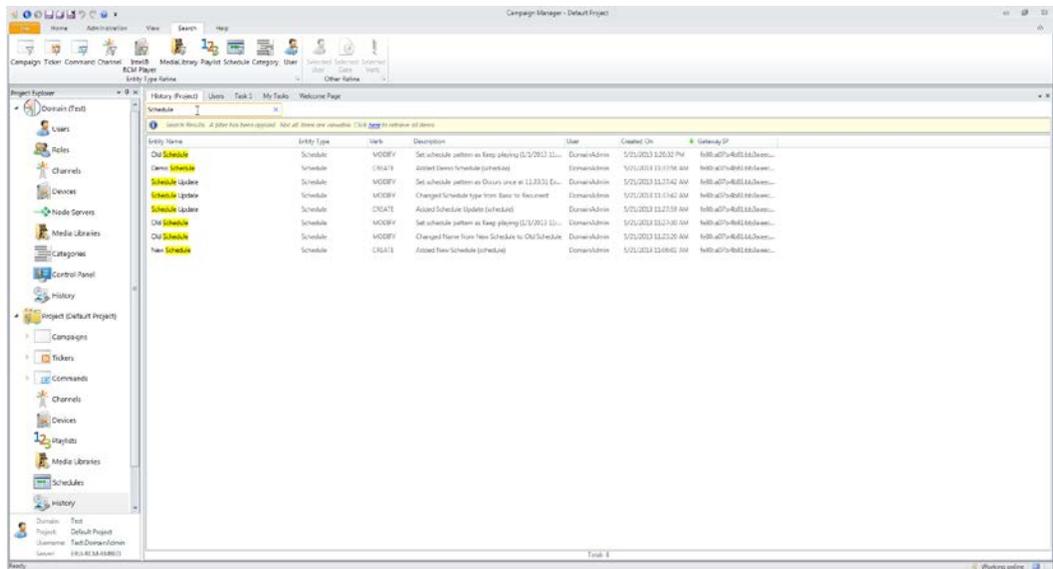
- **Entity Name:** The name of the entity, for example the user name or the campaign name
- **Entity Type:** Whether it's a channel or user or campaign
- **Verb:** What action took place, modifying, creating, deleting
- **Description:** Gives some extra information about the user logged in and the domain
- **User:** Tells which user performed this action
- **IP Address:** The IP address of the machine we are performing this action
- **Gateway IP:** The IP address of the gateway that the machine connects to the internet
- **Created On:** The date and time of the action



## 2.5.5 History Search

The history search is located at the top of the history window.

The search is performed based on the entity name. Simply we start writing and the results are presented to us with auto-complete.

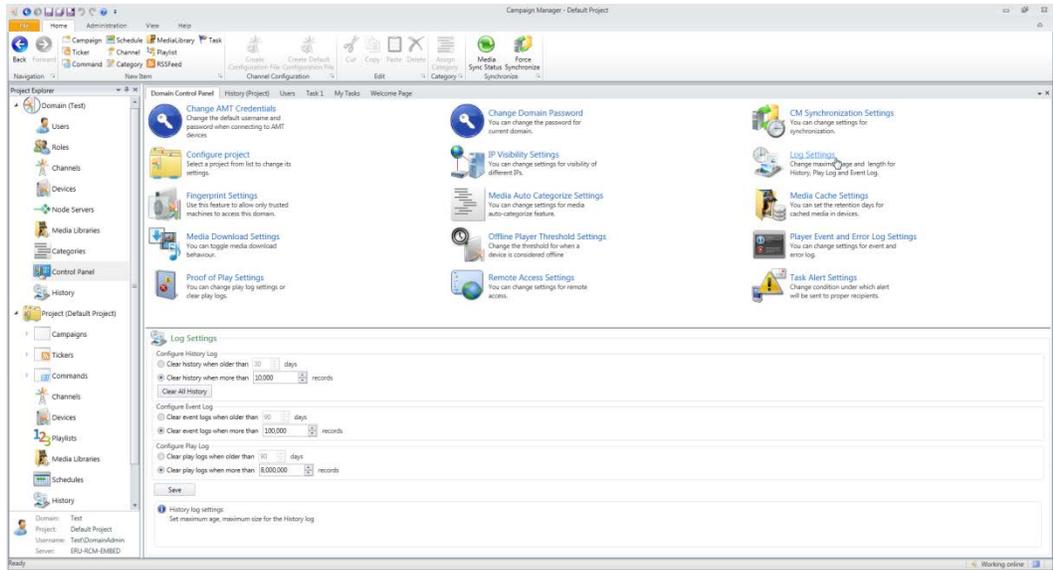


## 2.5.6 History Settings

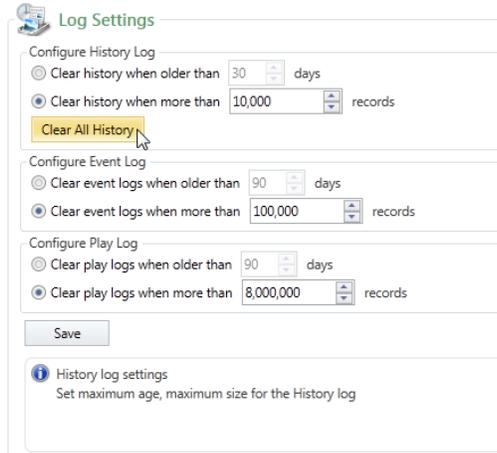
To set the history settings to our preference we go to the domain level feature Control Panel and there we have the history settings.

There are two options we can set, the history to be cleared after certain time or after certain records.

After setting the settings we save them by clicking **Save**.



Under the history settings there is an option to clear the history.



**Note:** Only domain admin users have access to the domain level history and the domain control panel and hence they are the only users who can manipulate with these settings.

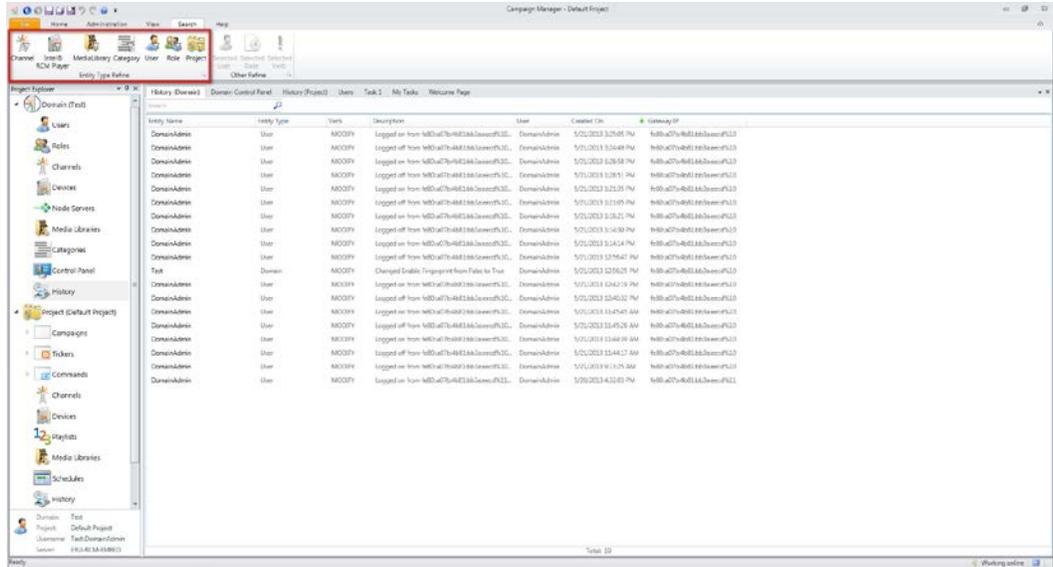
### History filter

While in history view we can filter our results by entities.

To filter the history we select the search tab in the ribbon.

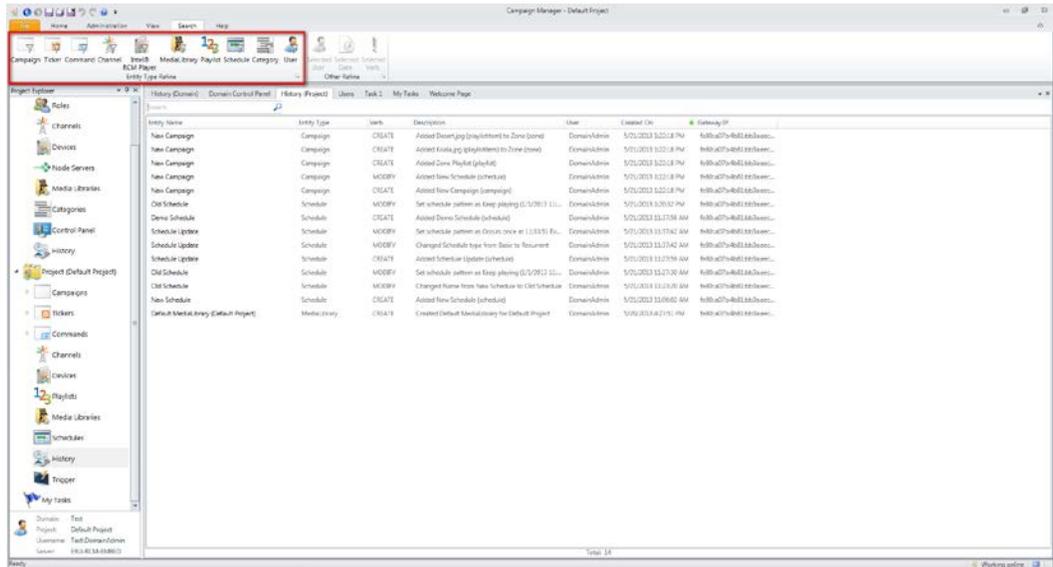


While we are in domain history, we can filter our results by Channel, Player, Media Library, Category, User, Role, Project.

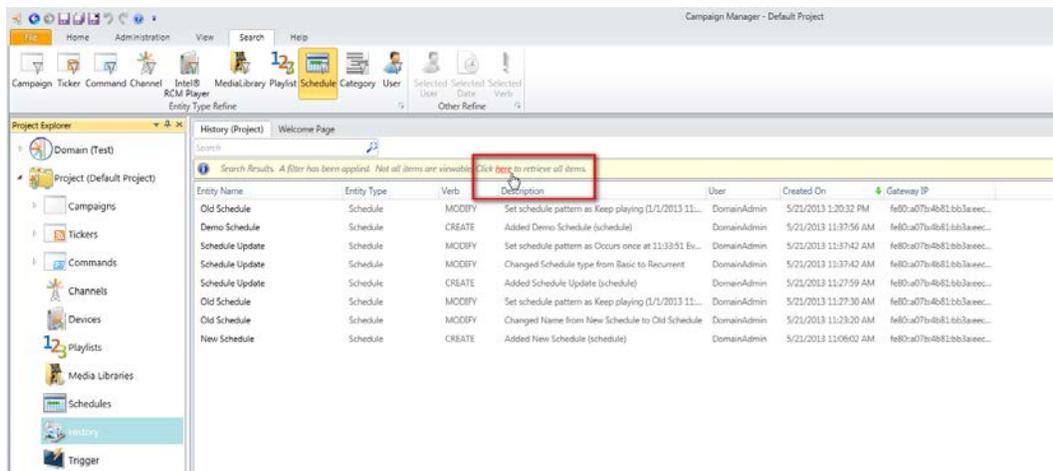


While we are in project history we can filter our results by different entities, which are recorded actually in the project history.

We can filter by Campaign, Ticker, Command, Channel, Player, MediaLibrary, Playlist, Schedule, Category and User.



We can retrieve the whole history from the popup that is appearing in the top.





## **3**     *Intel<sup>®</sup> RCM Sys Admin*

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- Server setup; system connectivity of CM, CS, CMP; create realm and domains; Licensing setup
- Ongoing diagnosis and management using AMT

## 4 *Intel<sup>®</sup> RCM Business Admin*

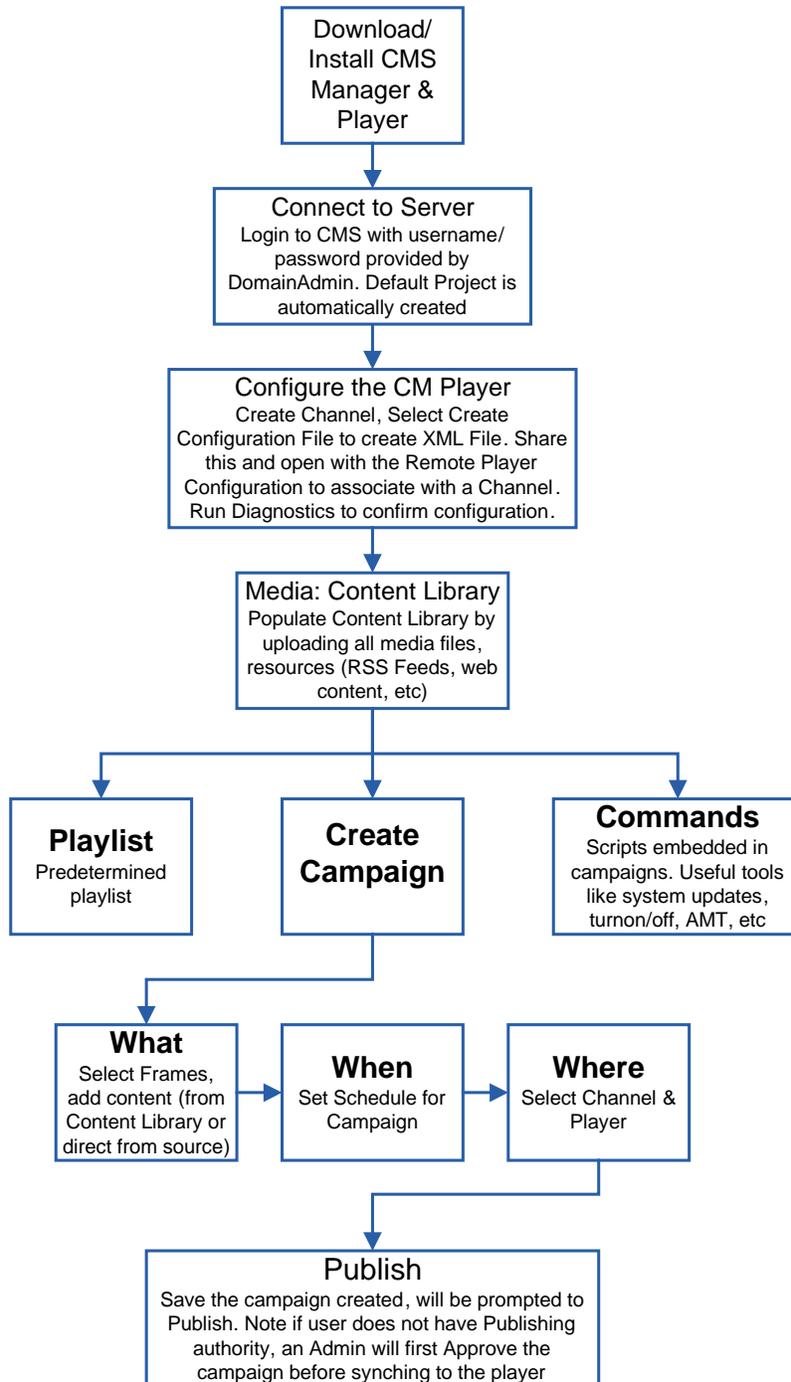
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- Manage user accounts including feature accessibility by roles ([Media Maker Here](#)):

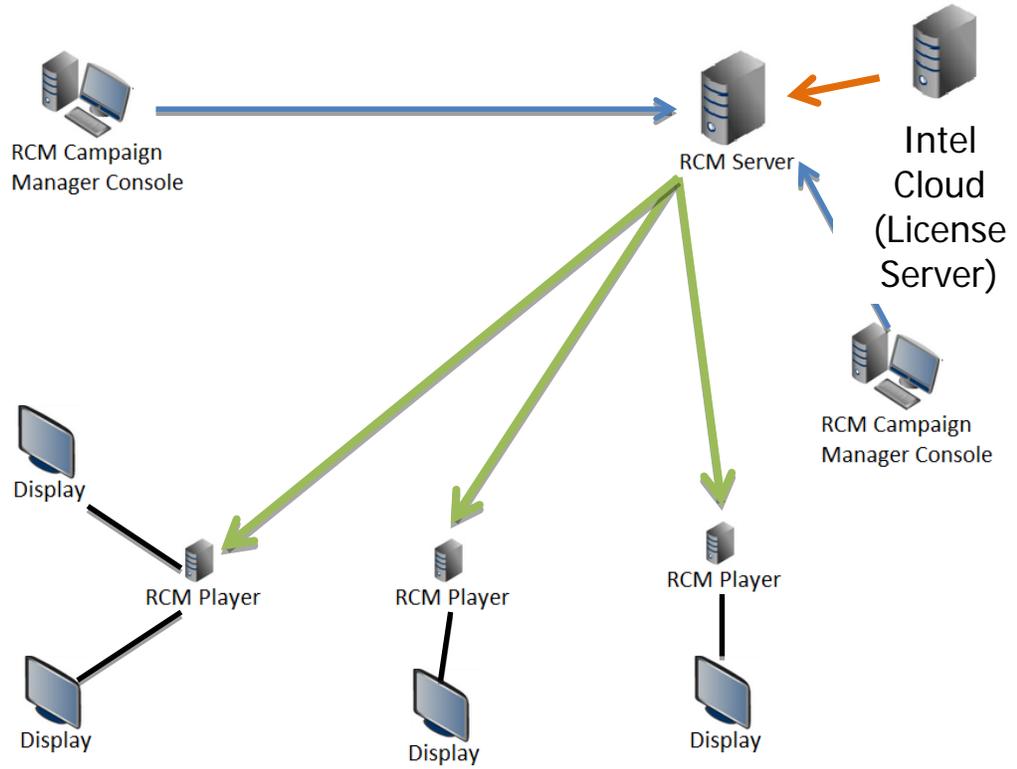


## Exhibit 1: Work Flow

The workflow below can be used as a Quick Start reference:

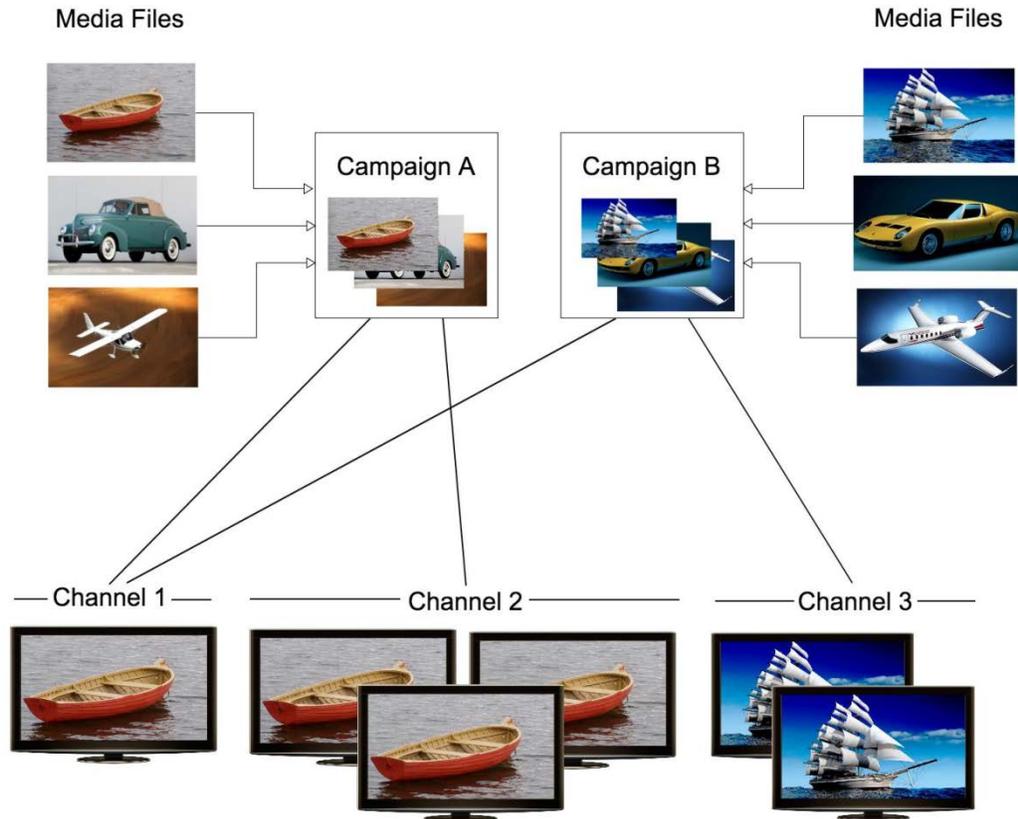


**Exhibit 2: Network Topology**





### Exhibit 3: Content Distribution Topology



- Media is assigned to campaigns individually or through playlists.
- Campaigns are distributed to one or several Channels.
- Channels may display one or several campaigns simultaneously or by priority.