Multi player (Video Wall) Synchronization Instructions

Download the latest Version of BA from the website.

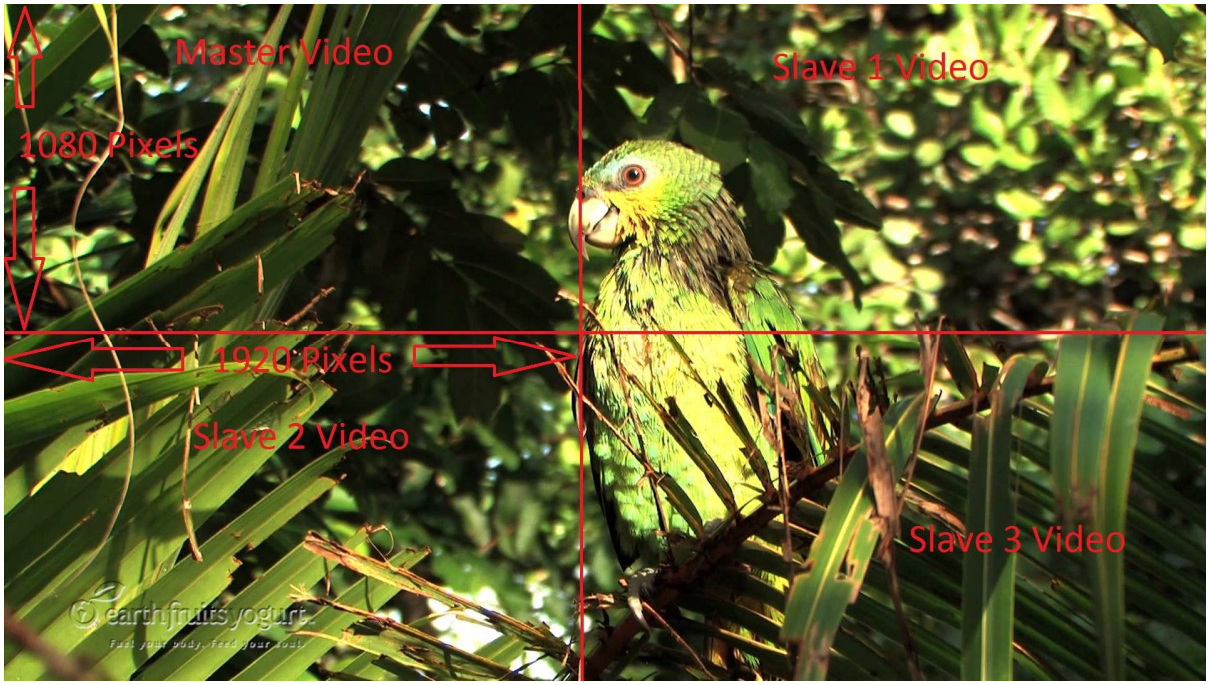
Download the latest firmware from the website and install it on all units (all unit must run the SAME FW VERSION).

Please note that h.264 Transport stream video files are better suited for video Synchronization (See the video technote or FAQ in the support section of our website for further details on Video Encoding tips).

All files should have the same duration (same total number of frames – same encoding settings) with no audio track. Synchronization of multiple audio files across multiple players is not supported. Synchronization of a video file on one player and an audio file on a different player is not supported.

The SD card should always stay in the player. Do not remove the card from the player whilst a presentation is playing back.

As per the example below each video file will have to be broken down in equal pieces (see the example below for 2x2 video wall split to be driven at 1920x1080 by each player). Each player will only playback one portion of the video. Therefore it is necessary to encode and spilt the content accordingly before importing the relevant video files in BrightAuthor.

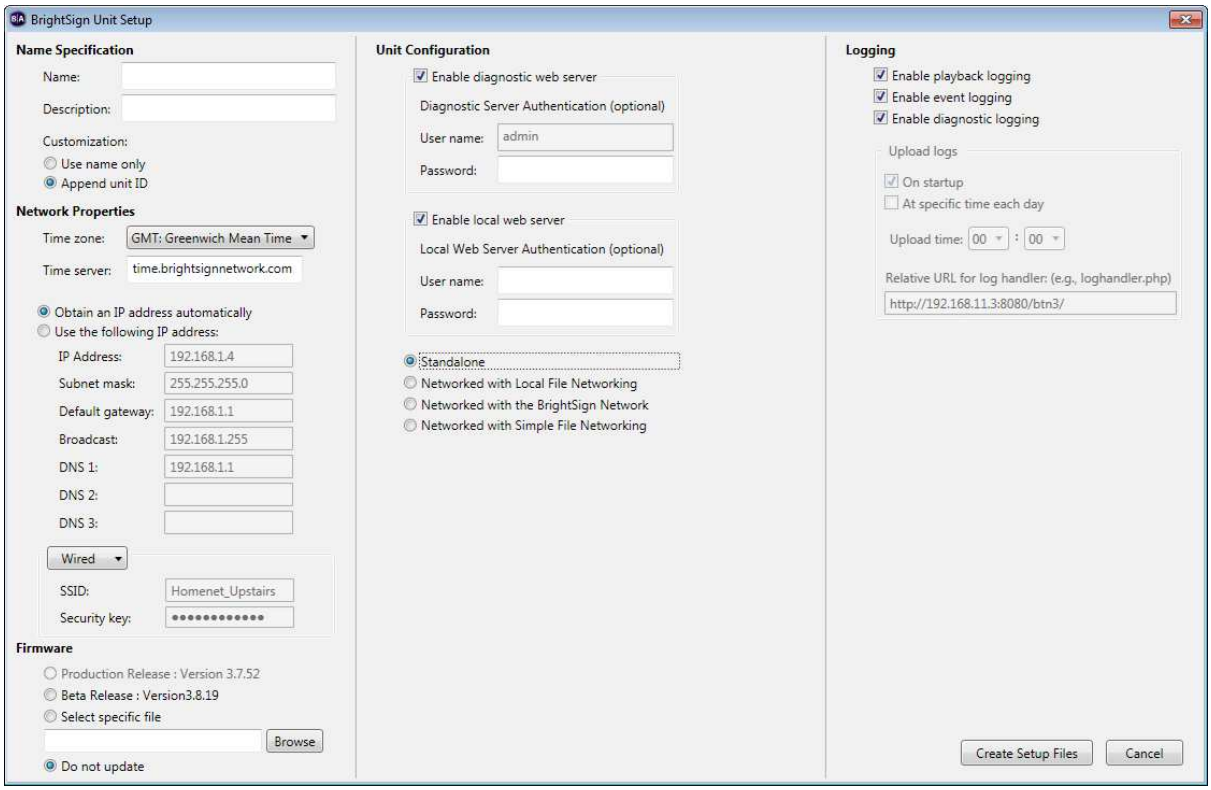


Using the latest version of BrightAuthor (BA) Configure the network settings on all the players (Tools > Setup BrightSign Unit).

Under Network Properties, select “Obtain an IP address automatically” if running the device on a DHCP enabled network. If you’re using static IP addresses make sure to set IP Address, Subnet Mask, Default Gateway, Broadcast, DNS1 after selecting “Use the following IP address”.

NOTE: You can ignore IP address assignment for your units. See 'Set UDP port parameters' paragraph for more details.

Under Unit configuration select “Standalone”



Click on “Create setup Files” to generate the network configuration files.

Insert the SD card in the BrightSign player and power the player ON

Remove the SD card as soon as the network setting completed message is displayed.

Power OFF the player (remember to repeat the above steps to configure the network settings for each player).

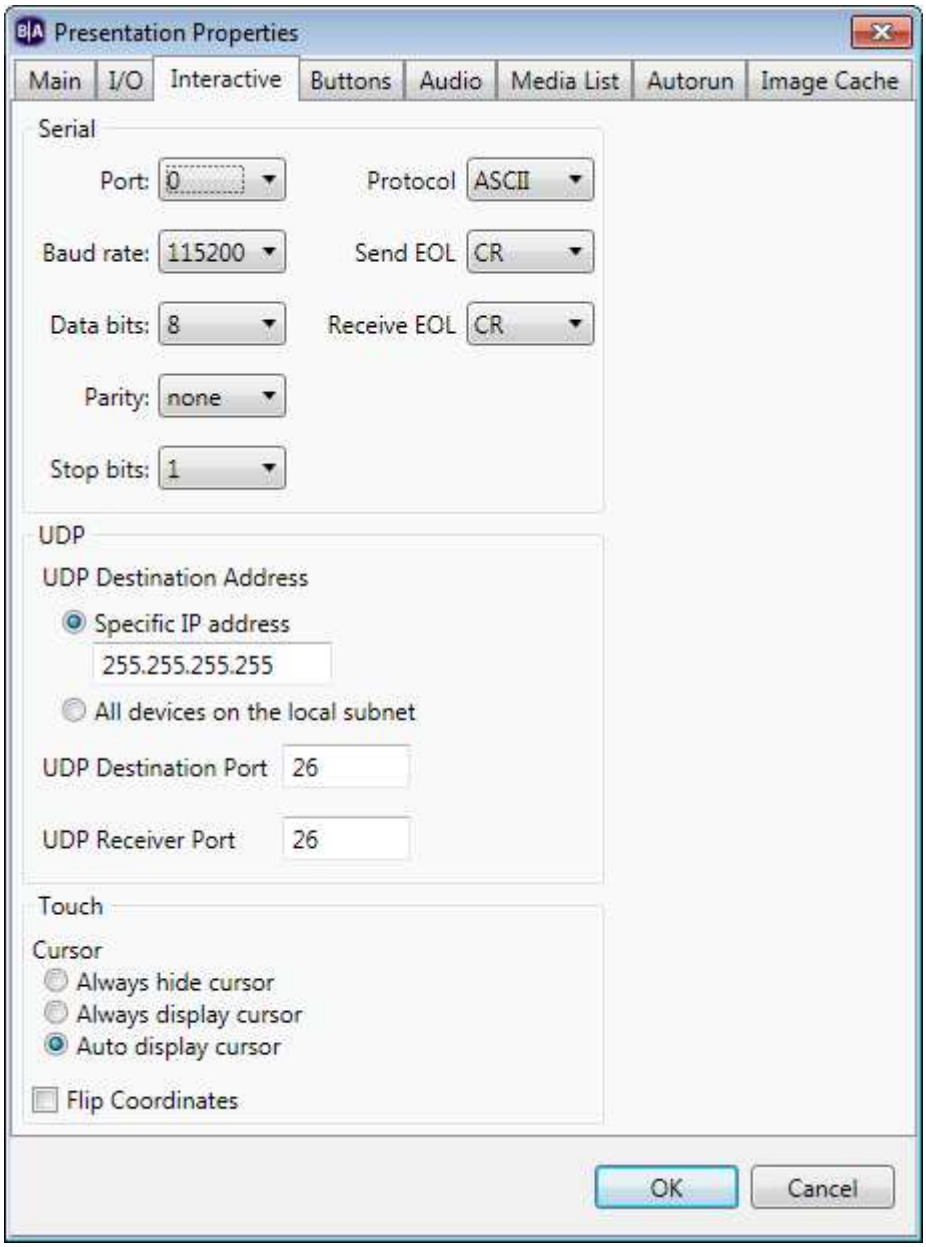
Create a new presentation in BA (Master_project.bpf)

Set UDP port parameters

File > Presentation properties > Interactive Tab

Starting with BrightAuthor 2.3 there is a setting for the ports, and an all subnets setting. If you check 'All devices on the local subnet' radio button to broadcast on all subnets, you don't need to manually set any IP addresses for any players. The synchronization will work with the autoip address, the units will assign themselves.

Enter 26 (or any other unused port on your network) for both “UDP Destination Port” and “UDP Receiver Port”



Create Master project

Add a jpeg and the relevant video file to an interactive project (in the following example the video file for the Master project).

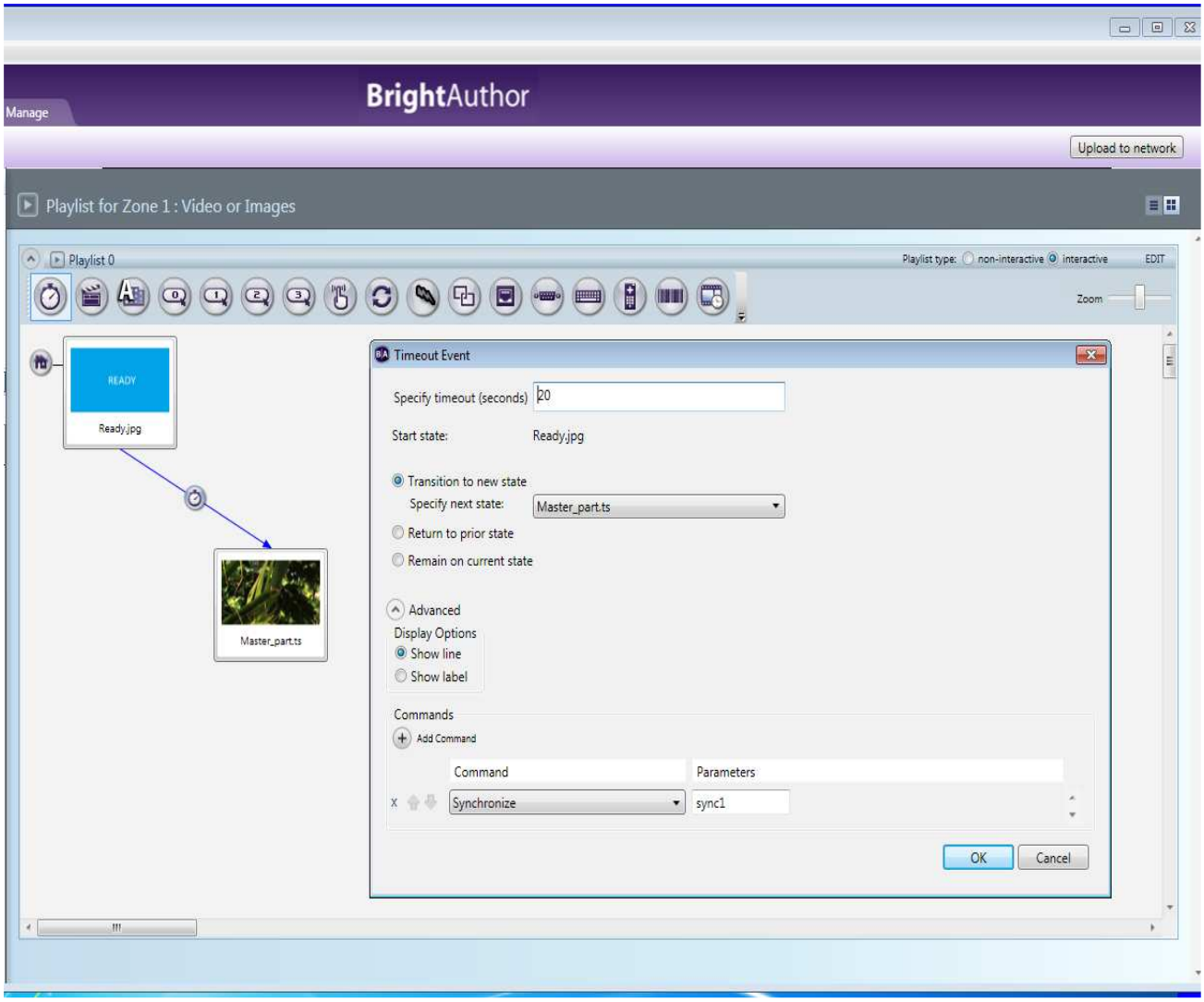
The Jpeg should be set as the initial state.

Select the Timeout  event then make a connection between the jpeg and the video file.

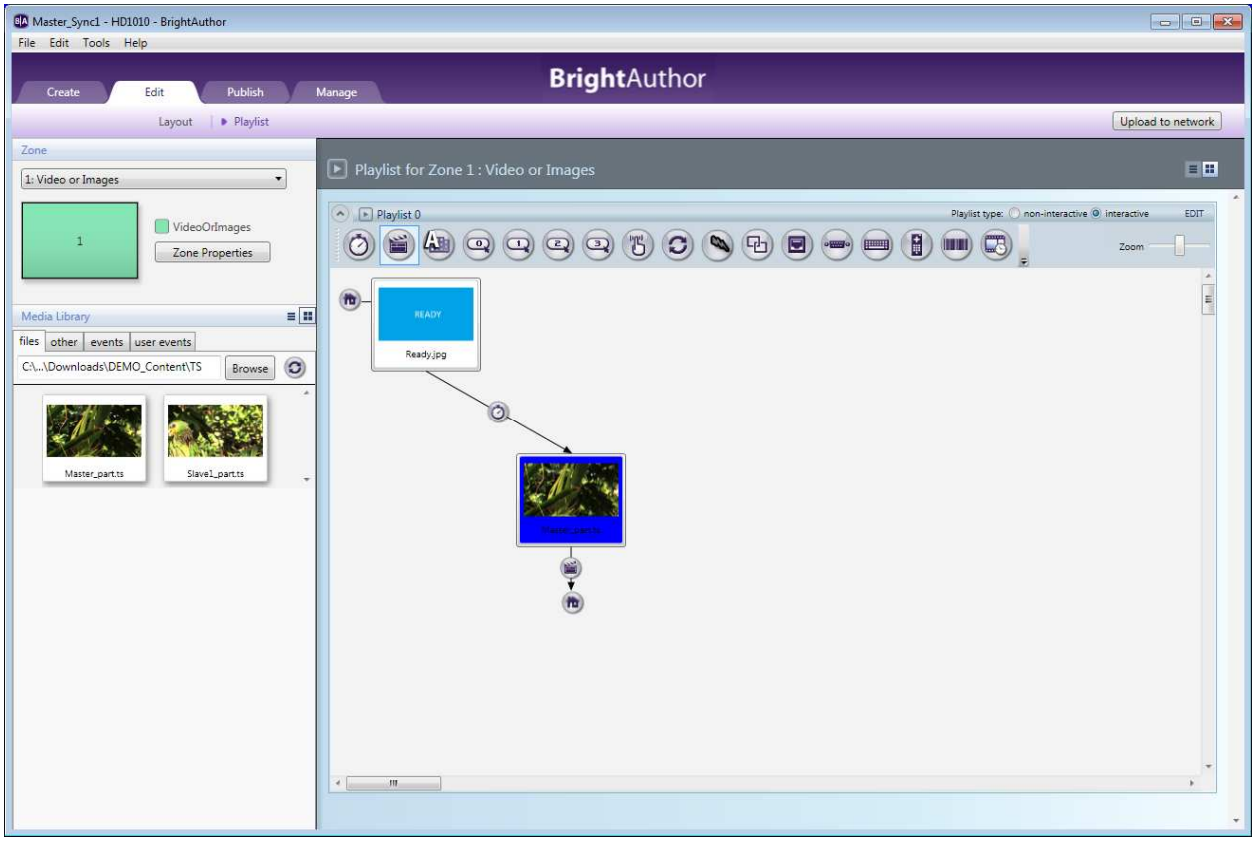
Enter 20 seconds in the “Specify timeout (seconds). This should allow enough time for all players to be fully booted and ready to receive the synchronisation command.

Click on the “Advanced” down arrow to expand the advanced section.

At the bottom of the Timeout Event panel, click on the “+” sign to “add Command”. Use the drop down menu to select a “Synchronize” command. Once the synchronize command is selected, type a parameter of your choice (in this example we’ll use “sync1”).



Select the Media End Event  and create a conection between the video file and the Jpeg (see the example below)

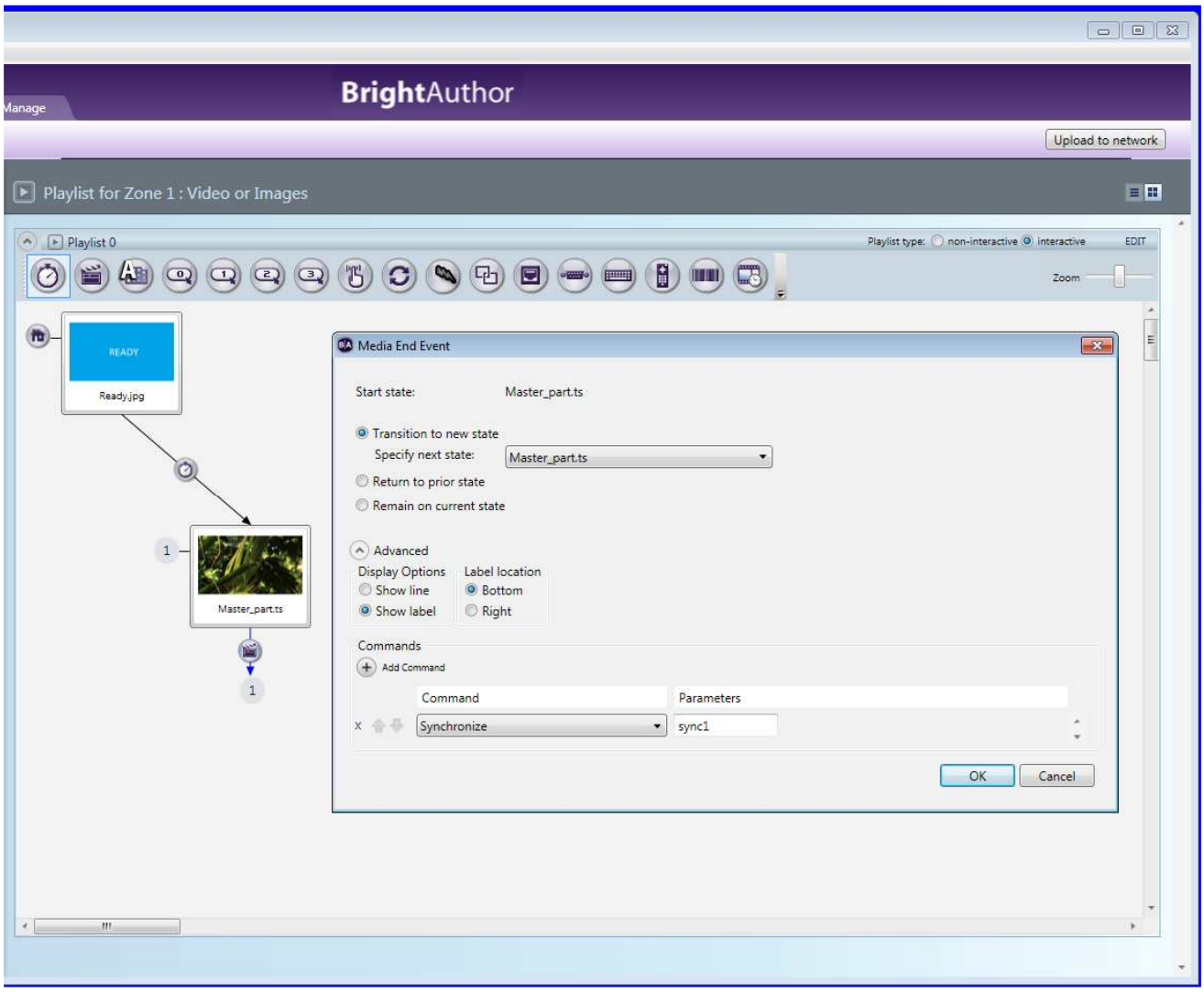


Then Double click on the Media End Event to open the Media End Event panel

Click on the drop down menu next to Specify next state and change the next state from the jpeg file to the video file (Master_part.ts in this example. This allow us to create a video loop where the sync command is sent for the first time 20 seconds after the jpeg is displayed, then at the end of the video file on each iteration of the loop)

Click on the “Advanced” down arrow to expand the advanced section

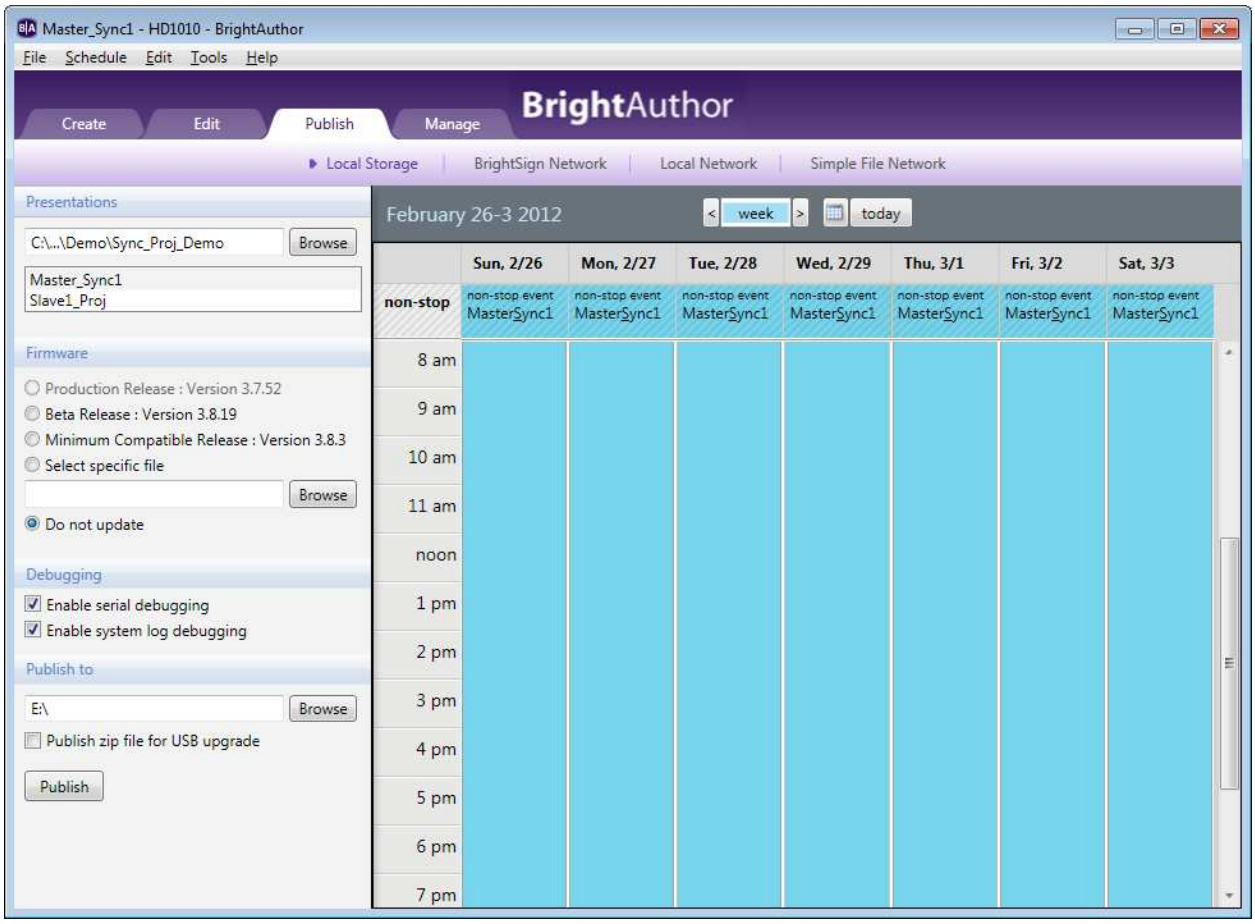
At the bottom of the Media End Event panel, click on the “+” sign to “add Command”. Use the drop down menu to select the “Synchronize” command. Once the synchronize command is selected, type a parameter of your choice (in this example we’ll use “sync1” – same as before). After those changes your project should look like the example below



Note that you can replace a video file (also referred to as a state in BA) by selecting a new file from the drop down menu. To change video or images that are used in specific states ensure that your media files are visible under the “files” tab under the Media Library section.

Publish Master presentation

Publish your presentation to a BLANK SD card (Publish tab > Local Storage > Publish button)

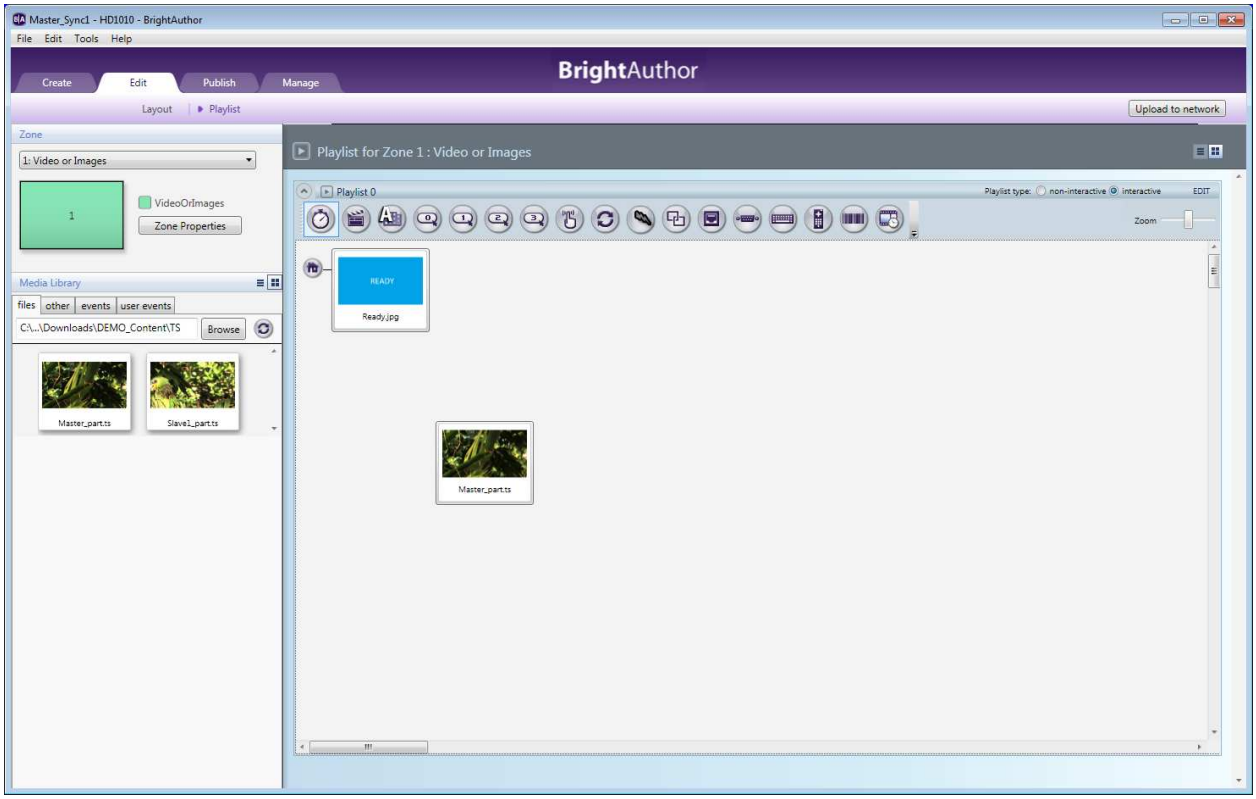


Create Slave1 project

Whilst the Master project is still opened, go to File > Save Master_proj as, and then save the Master_proj as Slave1_proj.bpf

Check that your UDP settings match those used in your Master project (it should still be the same if you have not changed them since working on the Master project - File > Presentation properties > Interactive Tab).

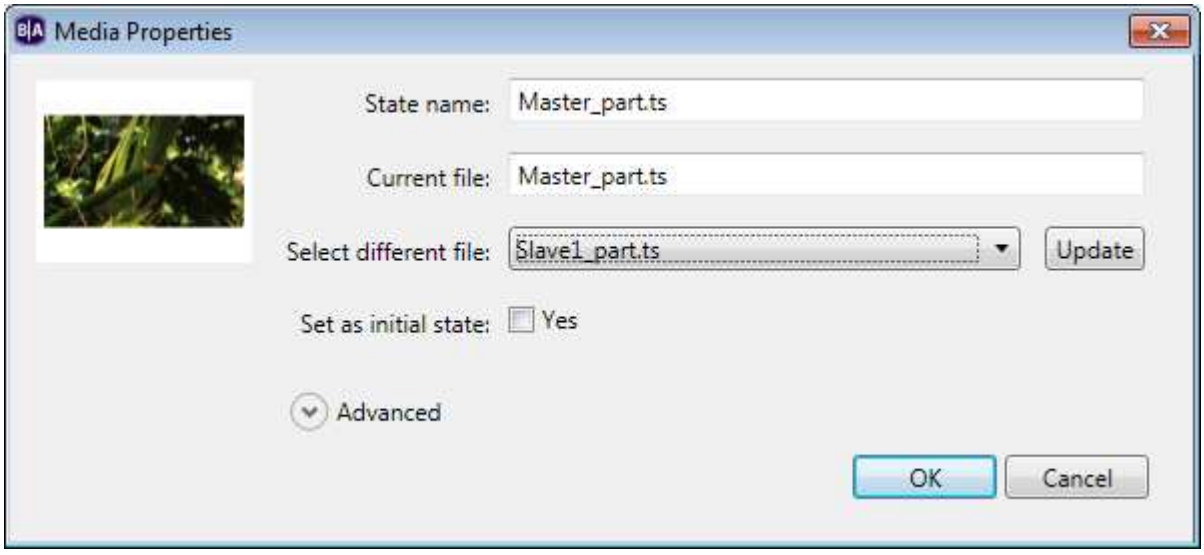
Delete both the Timeout Event and the Media End Event from the project (select each event with your mouse then press delete using your keyboard). Your project should look as per the example below:



Then double click on the video file in the playlist to open the Media Properties panel.

From the Media Properties panel select the relevant video file for the Slave1_Proj and click on the "Update button" to change the video file used in the Master project to a different video file.

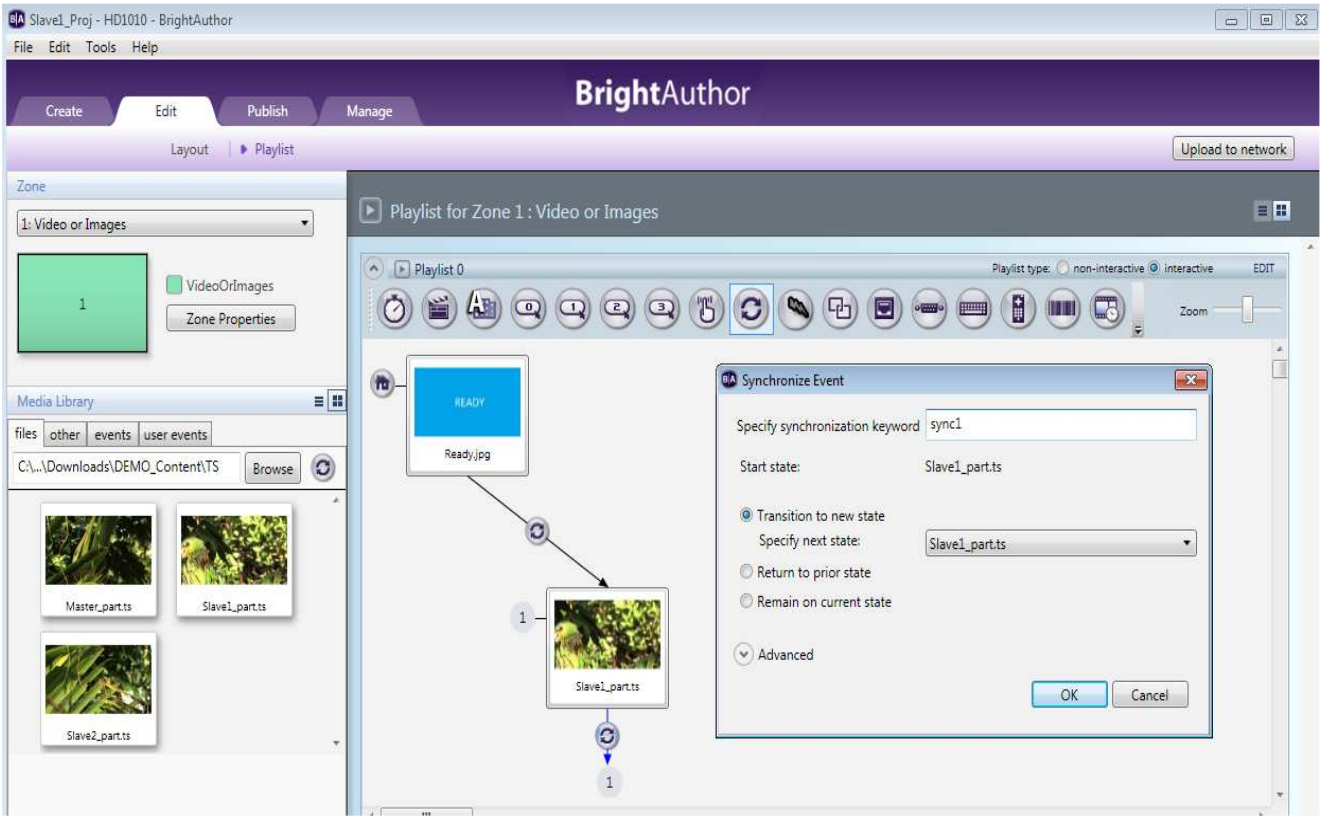
Click OK



Click on the Synchronize icon  from the playlist button bar and create a connection between the Jpeg and the video file.

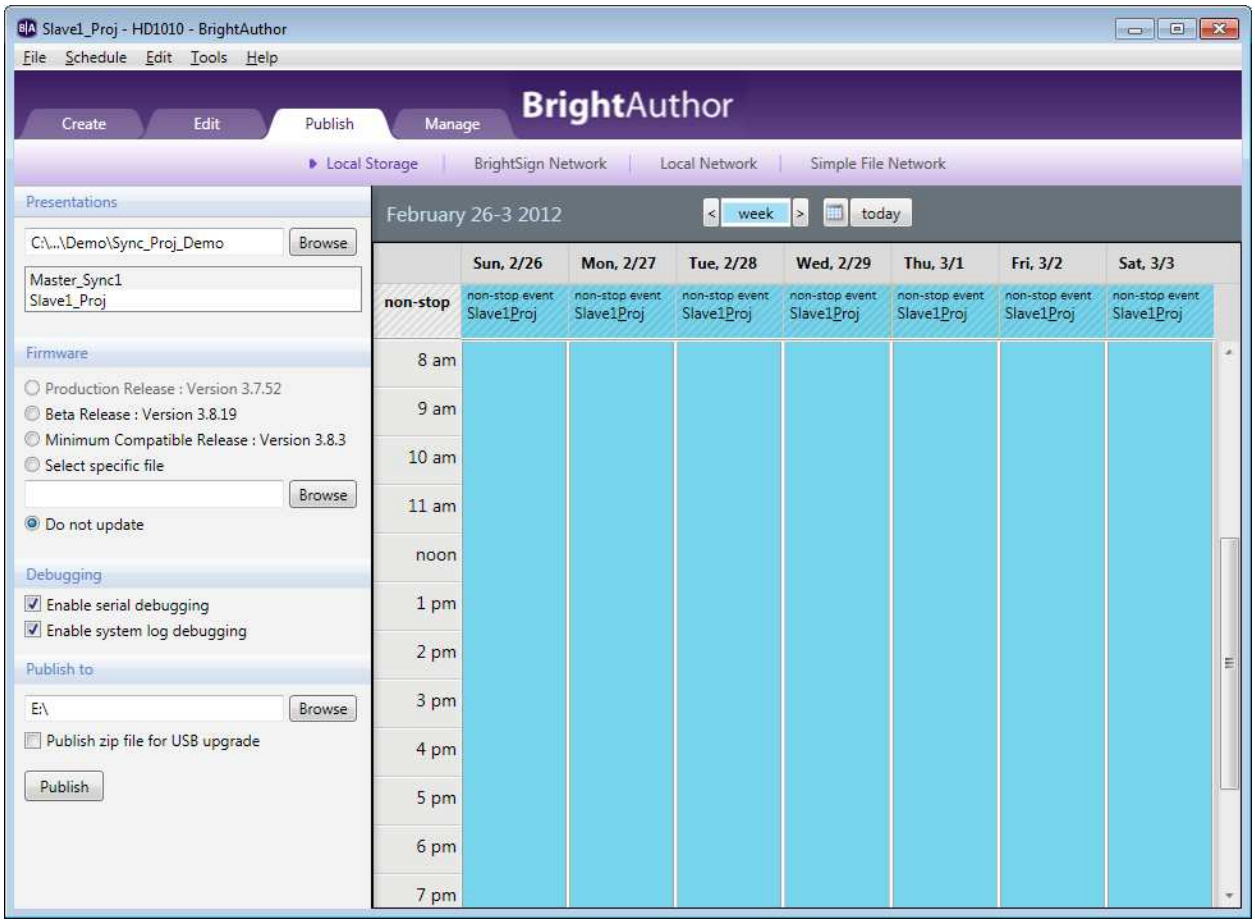
Enter the same keyword that you have entered in the Master_proj (“sync1” in this example – in the “Specify synchronization keyword” field)

Create another connection between the video file and the Jpeg, again enter “sync1” as a synchronization keyword. On this event make sure to select the relevant video file – Slave1_part.ts in the below example, from the drop down menu next to “specify next state”. This will allow the unit to listen for the sync command at the end of each video
loop.



Publish Slave1 Presentation

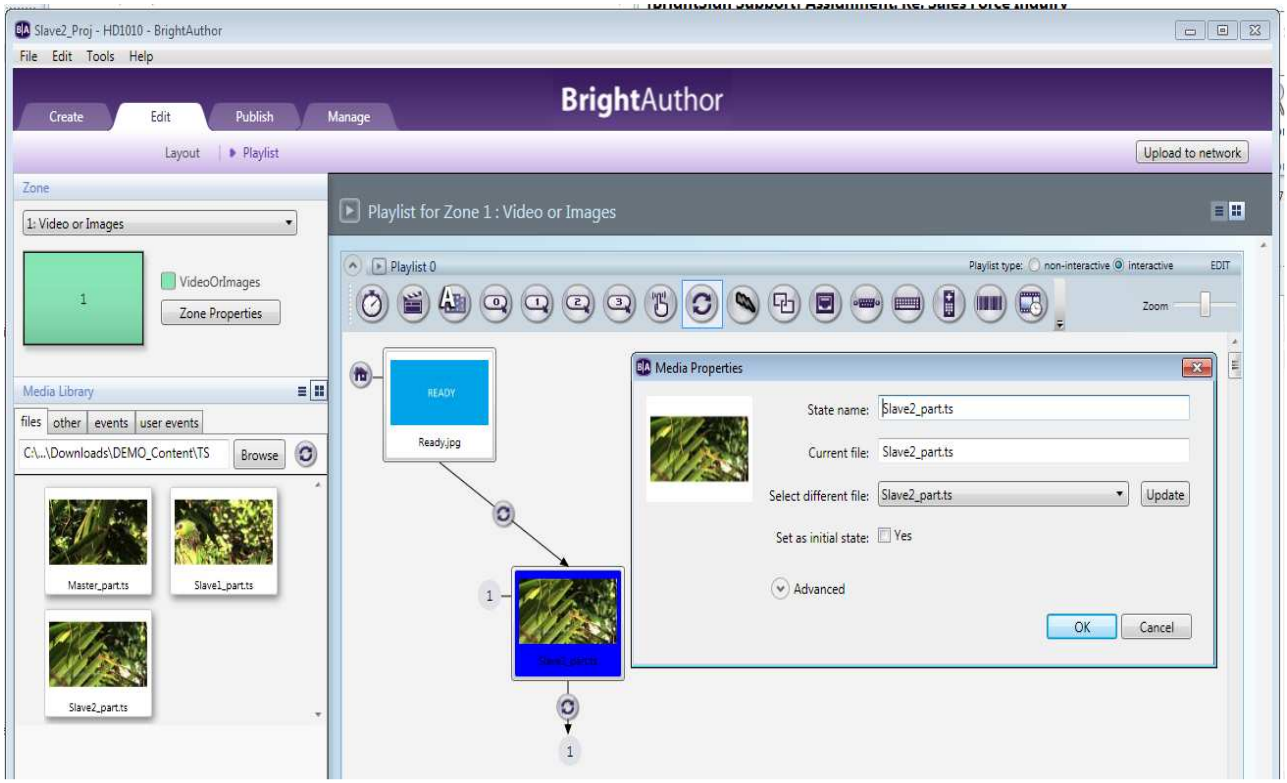
Publish your presentation to a BLANK SD card (Publish tab > Local Storage > Publish button)



Create Slave2_proj Presentation

Save the “slave1_proj” as “slave2_proj.bpf”.

Double click on the video file to launch the Media Properties panel and select a different video file (Slave2_part.ts)



Publish Slave2 Presentation

Publish your presentation to a BLANK SD card (Publish tab > Local Storage > Publish button).

Repeat all the steps for **Create Slave2_proj Presentation** and **Publish Slave2 Presentation** for all the remaining Slave projects.

Insert all the SD cards that you have created in the relevant BrightSign players, then power all the units at the same time from the wall socket switch or multi-plug switch.

After all the units have booted you should see all the unit displaying a Jpeg and then playback the video file in a loop.