

For 24/7 scheduled operations, you can schedule playlists to be automatically played at any given time and date with OnTheAir Video. This is used by TV stations worldwide to output their programs.

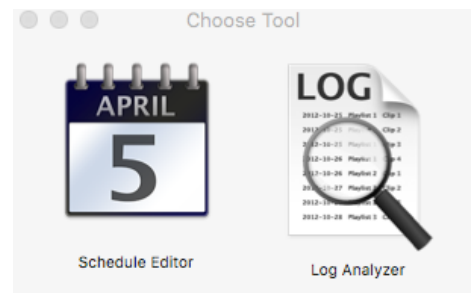
To do so, you must first create the Schedule files. There are two ways to create the schedules:

- via the “**Schedule Editor**” in OnTheAir Tools (a free application available on our Website at <http://softron.tv>)
- through a simple **text editor**.

Creating Schedules with the “Schedule Editor” of OnTheAir Tools

To access the Schedule Editor, open the application “OnTheAir Tools” that you will find in the same folder as your OnTheAir Video application.

OnTheAir Tools opens with a panel showing two icons, as shown to the right. Click on the calendar icon to open Schedule Editor.



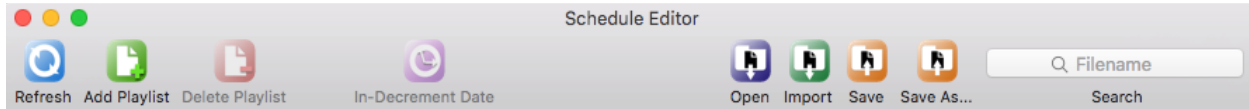
To use the Schedule Editor you must first create one or more playlists. When you have playlists ready, you can import them to the Schedule Editor, and you may do this in one of two ways:

- simply drag the playlist to the Schedule Editor Playlist Queue,
- use the green “**Add Playlist**” button (see below) to select the desired playlist from the appropriate folder.

Once the playlists are in the list, you can rearrange them by dragging them up or down the list. You may not move “**Timed**” playlists, though, but you may temporarily uncheck the **Timed** box while you rearrange your playlists.

A Quick Overview of the OnTheAir Tools Functions:

Shown below is a screenshot of the Schedule Editor Menu Bar; following that is a brief description of each function.



- **Refresh** refreshes the:
 - ▶ status of each playlist (including offline clips and playlists)
 - ▶ duration of each playlist (considering all online and offline clips)
 - ▶ Start and End Time (using the calculated durations of each playlist).
- **Add Playlist** allows you to add a playlist from your hard drive to the Schedule.
- **Delete Playlist** deletes the selected playlist from the Schedule.
- **In-Decrement Date** allows you to modify the Start Time of all the selected playlists at once (+ or - days, hours, minutes, seconds).
- **Open** opens a Schedule file from the hard disk; it will clear the current schedule and replace it with the one you are importing.
- **Import** imports a Schedule file from your hard drive into the current schedule; it will keep the same start times, so you should afterwards use the In-Decrement Date function to modify the Start Times.
- **Save** allows you to save the Schedule to the text file that will be read by OnTheAir Video. The first time you use this function, you will be asked to enter the location you would like the file to be saved.
- **Save As...** works just like the Save function, but allows you to select the location you would like the file to be saved.
- The **Search** area allows you to search the Schedule Editor for a specific Playlist.

Below the icons, there are 8 columns:

Tim...	?	Start time:	End time:	Playlist:	Time Diff.	Duration:	Loop:
--------	---	-------------	-----------	-----------	------------	-----------	-------

- **Timed:** This column contains boxes that are either checked or unchecked.
 - ▶ If checked, it is a **Timed Start Event** — the playlist will start at a precise time, cutting off whatever is playing.
 - ▶ If unchecked, it means it is a **Follow Start Event**, and it will only start playing when the previous playlist is finished playing.
- **?:** This is the Status column, and contains boxes that will have one of three indicators:
 - ✔ The Playlist is okay, there are no offline clips, and the playlist can be found on the hard disk.
 - ⚠ There are offline clips in the Playlist, or the Clip Folder (root) path is not correctly set in the preferences.
 - ✘ The Playlist cannot be found; it has been deleted from the disk or renamed, or it is invalid (for example, a playlist with a duration less than 30 seconds)
- **Start Time:**
 - ▶ When the **Timed box is checked**, this column represents the fixed start time at which the Playlist will commence, cutting whatever is playing at that time.
 - ▶ If the **Timed box is not checked**, the column represents the estimated start time of the playlist (immediately following the finish of the previous playlist).
 - ▶ Note that you can manually set the start time of a playlist by double-clicking on its date/ time in the **Start Time** column; if the box was not checked when a time is manually set, it will automatically be checked when a time is selected.
- **End Time:** This is the estimated time the playlist will complete its payout, based on the start time and the duration of the playlist.
- **Playlist:** This shows the name of the playlists that will play on the schedule. Double-clicking on the playlist's name opens it in OnTheAir Video, and the playlist can be modified as desired.
- **Time Diff.:** This column indicates whether or not there will be an UNDERRUN or an OVERRUN between concurrent playlists.
 - ▶ If the **Time Diff.** reads as 00:00:00, there is no UNDERRUN and no OVERRUN, or the previous playlist is in LOOP mode.
 - ▶ If the **Time Diff.** is preceded by a "+" and is red (i.e. +00:13:18), there is an UNDERRUN (of 13 minutes and 18 seconds, in the example); there will be a black between this playlist and the previous one.

OnTheAir Video - Scheduling

- ▶ If the **Time Diff.** is preceded by a “-“ (i.e. -00:15:41) there is an **OVERRUN** (of 15 minutes and 41 seconds, in the example); this playlist will cut the previous playlist before its intended end time.
- **Duration:** This column indicates the estimated duration of each playlist, and is computed when you open the schedule or click on the “Refresh” button.
- **Loop:** You may check a box in this column to set the playlist to run in LOOP mode; the playlist will continue to play over and over until the next timed event occurs. Unchecking the box takes the playlist out of LOOP mode.

A FEW IMPORTANT REMARKS:

- The **Start Time**, **End Time**, **Time Diff.**, and **Duration** are calculated to the precision of one second. Thus, even if the Time Diff. is stated as 00:00:00, the previous playlist may be cut by less than one second.
- **Playlists must have a minimum duration of 30 seconds.** This is because the scheduler will open the next playlist 30 seconds before the end of the current one.
- The Schedule logic is based on the Mac clock, and has a precision of one second, as well. A **Start Time** may not necessarily, therefore, begin instantaneously after the previous playlist’s final frame.
- A playlist that is not **Timed** (the box is not checked), however, will chain immediately after the final frame of the previous playlist.
- The playlist’s **Duration** takes into account both online and offline files. The offline file’s listed duration may differ with its real time, so to ensure a playlist begins when you desire, make sure that all files are online (as indicated by the checked green box in the **Status** column. If you would like to set OnTheAir Tools to compute the **Duration** without including the durations of the offline files you may do so by going to Preferences in the OnTheAir Tab, and then checking the “Ignore offline clips when computing the playlists durations” box.

Creating Schedules with a Text Editor

You may also create a schedule through a text editor program, such as TextEdit or TextWrangler. The advantage of that method is that you can create your schedule a long time in advance, even if you don't have the playlists ready. We have customers who have year-long schedules so on a daily basis they only have to create their playlists.

A schedule is a simple plain text file, with tab-delimited columns. It will look something like this:

```
2016-01-24    00:00:00    /Volumes/Video/Playlists/2008/Playlist/080101.vpls    0
              /Volumes/Video/Playlists/PlaylistLOOP.vpls    1
2016-01-24    01:00:00    /Volumes/Video/Playlists/2008/Playlist/080102.vpls    0
              /Volumes/Video/Playlists/PlaylistLOOP.vpls    1
```

You can see that it holds the **Start Date**, **Start Time**, the **Full Path of the Playlist**, and **Loop**, each separated by a Tab. It is *essential* that the schedule file is formatted precisely in that format.

- The **Start Date** is the date you would like the playlist to begin, and must be in a YYYY-MM-DD format.
- The **Start Time** is the time you would like the playlist to begin, and must be in an HH:MM:SS format.
- The **Full path of the Playlist** is the path of the playlist on your hard drive.
- The **Loop** column allows you to set a playlist to Loop (it will repeat itself until a **Timed** event is triggered). In this column, enter a "0" if you do NOT want the playlist to be looped, or a "1" if you DO want the playlist to be looped.

If the playlist is not **Timed** (the playlist is to begin immediately after the preceding playlist), no **Start Time** or **Start Date** is needed, and you must use the Tab key twice to reach the correct playlist path column.

See below for a screenshot of a schedule designed on a text editor. Note that playlists that are **Timed** have entries in the **Start Date** and **Start Time** columns, while those that are not **Timed** have no entries in those columns (though the playlist's path looks as though it spills over into the **Start Time** column).



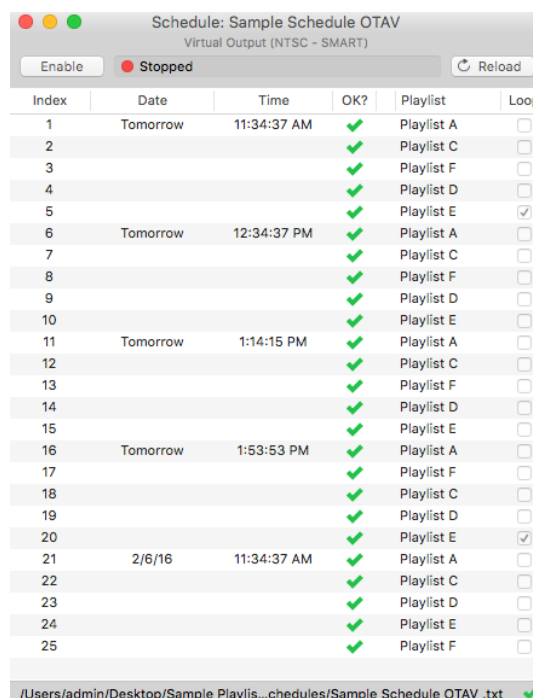
Using the Schedule feature in OnTheAir Video

Once you have created and saved your Schedule file, you can use your schedule in OnTheAir Video.

To open a schedule, select the menu “Schedule > **Open Schedule...**”. From there, locate the schedule file you would like to use, highlight it by clicking on it, and then click on the “**Open**” button. This will bring up a **Schedule** window.

The title of the schedule will be shown at the top of the window, and directly below that will be shown the OnTheAir Video playback settings.

On the bottom left of the Schedule menu bar is a button marked “**Enable**.” You can click on this to enable or disable the Schedule. Just to the right the status of the Schedule will be displayed: either **Stopped** or **Running**. While **Running**, a green bar will run across the row of the playlist currently playing. To the right of that is a **Reload** button — if you make changes to the Schedule file, click on the this button to refresh the schedule to take into account any changes made.



In the table are 6 columns: **Index**, **Date**, **Time**, **OK?**, **Playlist**, and **Loop**.

- The **Index** column indicates the order the playlists will play.
- The **Date** column indicates the date the playlist will begin. If the playlist is scheduled on the same day as the schedule is opened it will read “**Today**” instead of a date, and if the playlist is scheduled the day after the schedule is opened it will read “**Tomorrow**.”
- The **Time** column shows the time (HH:MM:SS) the playlist will begin playing. If a playlist does not have a **Date** or **Time** listed, the playlist will immediately follow the previous playlist. If an untimed playlist is still running at the time of a **Timed** event, the clip will be cut off and the **Timed** playlist will begin.
- The **OK?** column is the **Status** column, and it shows whether or not there are conflicts within the scheduled playlists. If there is a conflict with the playlist (for example, if there is an overlap or gap in the programming) a red “X” will be shown. If not, a green check mark will be shown.
- The **Playlist** column shows the playlists to be played on the schedule, and they are presented in the order they will play.
- The **Loop** column contains a box next to each playlist. If the box is checked, the playlist will repeat until the next **Timed** event. If the box is empty, it will automatically go to the next playlist.

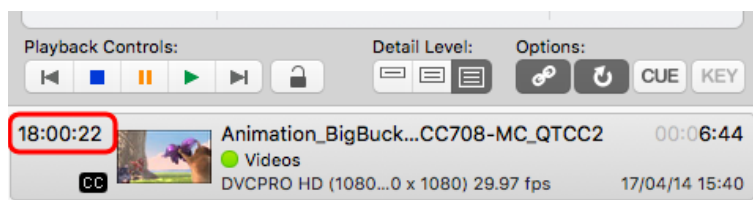
About the Start Time of playlists and clips

When you double-click on a playlist name from the schedule window in OnTheAir Video, it opens using the playlist start time as the start time of the first clip, so it is easy for you to check at what time the following clips will start.

For example a playlist with this start time in the schedule window...

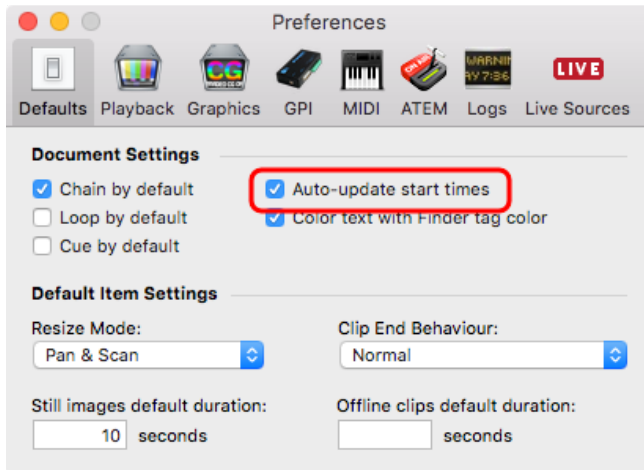
Date	Time	OK?	Playlist
Today	18:00:22	✓	OnTheAir Video

...will show the first clip with a start time of 18:00:22:



About the “auto-update start times” preferences

You may also want to automatically update those start times when a clip plays. You can enable that option in the OnTheAir Video preferences:



Once it is enabled, as soon as you start playing a clip its start time is changed to its real start time, and the next clip’s start time is also modified accordingly. So it will always be accurate, even if you skip a clip, either manually or because it is offline.

IMPORTANT THINGS TO KNOW

- When you enable the schedule AND a playlist is already playing, in the schedule window a playlist will be highlighted in green but it won’t start playing that playlist; it will continue playing the current playlist. The whole idea was to avoid, as much as possible, interrupting the playback of something that is already playing. We don’t want you to be alarmed when you enable the schedule, but the next time there is a timed event (or at the end of the current playlist if it’s a non-timed event), the playlist will indeed start playing. If you want the actual playlist to start when enabling the schedule, make sure to stop what is currently playing.
- It is always recommended to have at least 3 events in one schedule: one in the past, a current one, and one in the future.
- You can double-click on the schedule path at the bottom of the schedule window to reveal the schedule file in the Finder.
- A playlist will loop only if it is set to loop in the schedule. This supersedes what has been set in the document itself.