



Maestro 6.0

What's new in version 6.0 (Compared to version 5.2)

About Maestro 6.0

Maestro is a complete set of tools providing an enterprise solution for all the graphic needs in the broadcast environment.

Maestro is modular and can be adapted to the specific needs of any broadcaster. Several modules are part of Maestro including: PageEditor, JStation, NLE plugins, NewProducer plugin, PageBrowserAx, GAM, but the main element of the suite is MaestroController, which is a generic graphics control application.

Maestro 6 is the biggest step forward in this product since its creation years ago. The user interface has been completely redesigned, and plenty of new functionalities with high added value have been added.

Key Benefits

- Full suite that can address all the graphic needs of a TV station
- Modular and flexible architecture
- Powerful and yet easy to use authoring and playout tools
- Advanced tools for expert users that open many new possibilities
- The biggest evolution in Maestro since its first version

New features

In addition to all the features inherited from over 5 years of development, many new features have been added to Maestro. They not only add plenty of new options for users, but also open a world of possible evolutions in the future. Some of the most important new features are detailed below.

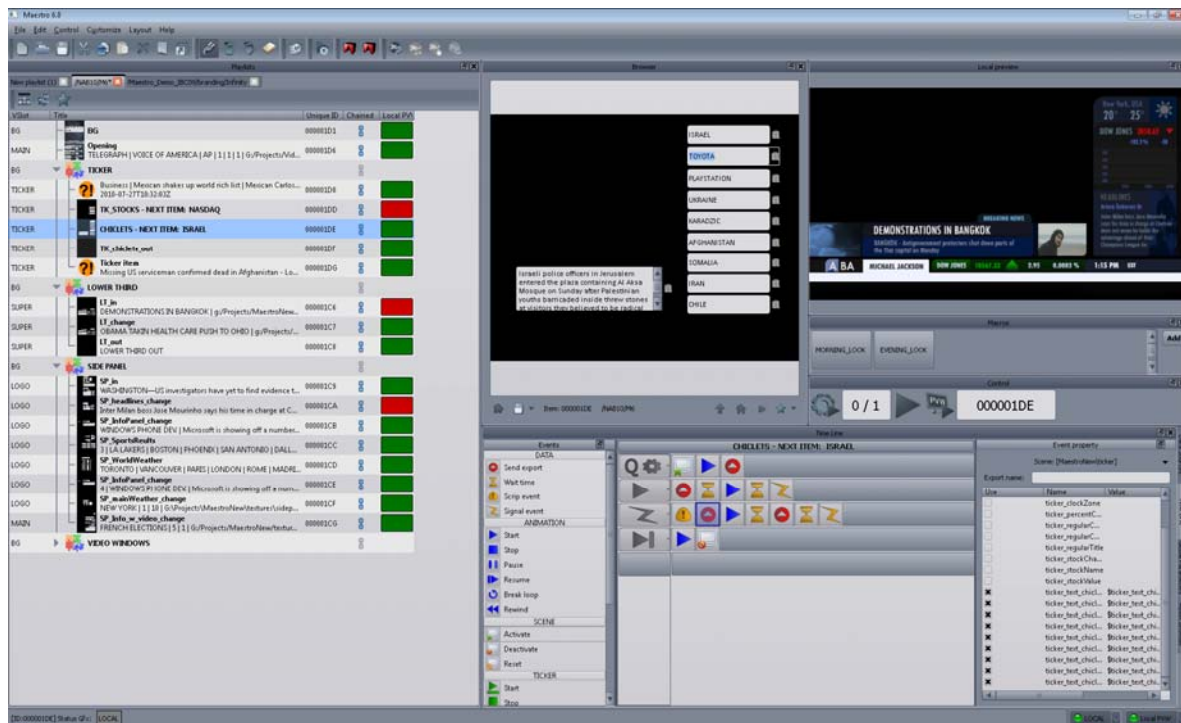
1. New user interface

The user interface has been redesigned and the look refreshed. The GUI has been optimized for high resolution screens that are easily available these days. The main advantages for the user are customization possibilities, so each user can create his own layouts with the desired location of each menu; and reactivity of the GUI, which is now much faster.

Another advantage is that the code is now easily portable to other OS, like MAC's OS, so for example, a plugin to Newsroom systems on MAC can be easily achieved.

Maestro's GUI can be customized: Font size and style, colors, layout... everything. For example, if a user considers that the standard text font and size renders Chinese texts illegible, the style can be changed by editing the style sheet.

Maestro's new interface:

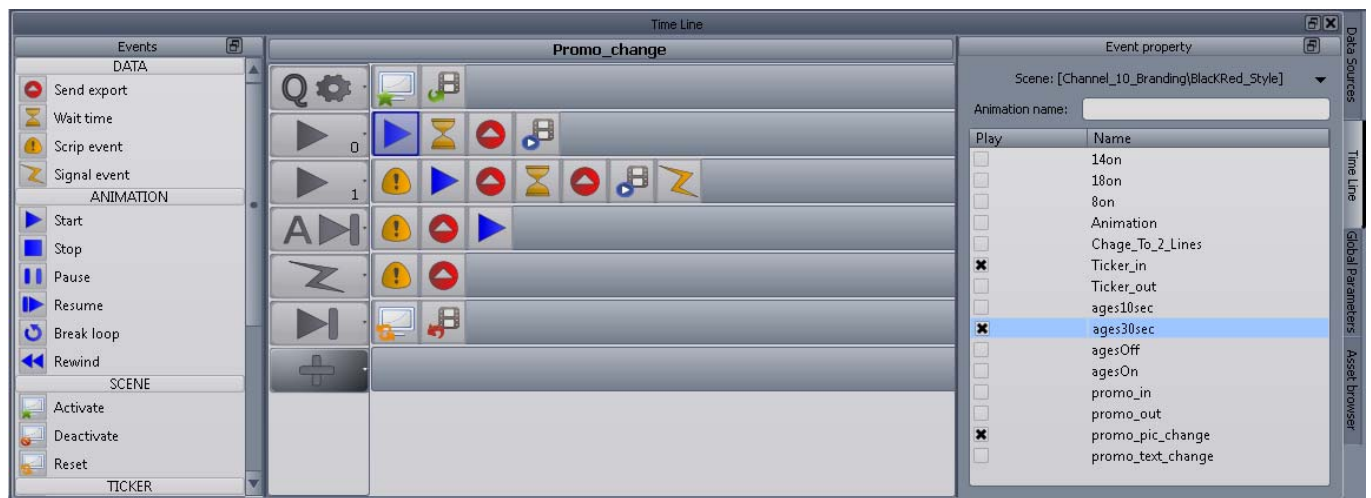


2. New Timeline

The most important new feature in Maestro 6.0 is its new timeline. It has been completely redesigned and it is the basis for many other new features. The old single timeline has been replaced by a multi-track timeline, where each track has a different trigger condition. Also timelines are displayed on an event basis rather than a time basis.

Timelines for “cue” and “out” have been added, to allow customization of Maestro’s behavior when a specific item is cued, and when it is taken out of the screen.

Maestro’s new timeline:



There are also more events that can be controlled from the timeline that could not be used in previous versions, among them activate/deactivate scene, load/unload/play/stop clips, ticker start/stop, as well as the partial sending of exports (it is not necessary any more to send all the exports simultaneously), and the control individual key frames.

The possibility to add scripts for custom functions as part of the timeline opens a lot of new possibilities for advanced users. It is important that scripting is not required for 95% of the most common use cases, including all the functions supported by Maestro 5.2

This allows addressing productions with more sophisticated needs that in the past could only be addressed with 3DPlay. For example, a page that displays some “chiclets” that contain a title, and a crawl that displays information about a given subject. On the same page, it will be specified that as soon as the information has left

the screen, another animation should be played to display the next subject. Also, in the same page it can be specified that if a breaking news arrives, the graphic should be bigger and red.

RenderEngine Callbacks

One of the most relevant addition to the timeline is the ability to trigger one timeline track using RenderEngine callbacks. Now the RenderEngine will send a callback to Maestro when a certain event has happened (i.e. animation has started/ finished, the ticker left the screen, etc), and Maestro will react by triggering a given track.

The timeline of one page in Maestro can now be designed to react to what is happening in RenderEngine. For example, the designer can create items that will send a data update as soon as the animation displaying the previous data finishes.

Signaling

Signaling is a new tool available in Maestro 6's timeline. It allows sending a signal to a specific item, playlist or to the whole application. This signal, when received by items or playlists, can trigger other actions. For example, it is used to animate out one graphic when a different item is played in the same location, or to trigger certain actions in a loop, like periodic updates of a graphic including animations.

Scripts in Timeline

A new script event can be added to tracks in the timeline. This script has to be written in Jscript. Scripts can be used to execute customized codes, and to control the timeline flow. One script can decide if one track is executed or not.

All the above opens many possibilities to create more intelligent and customized items, including playout logic, . without adding any complication to the playout process.

3. New plugin architecture

Maestro 6 has a new architecture that allows the addition of plugins (not to be confused with the plugins to 3rd party application like Newsroom or NLE that are part of the suite). These plugins can create new, special type of items that can be added to a timeline. Some plugins have been created for this version, but new plugins can be created at any time. Plugins are part of the browser window, and are available on all Maestro modules using this window, including integration to NRCS.

The most relevant ones follow:

Morpho Plugin

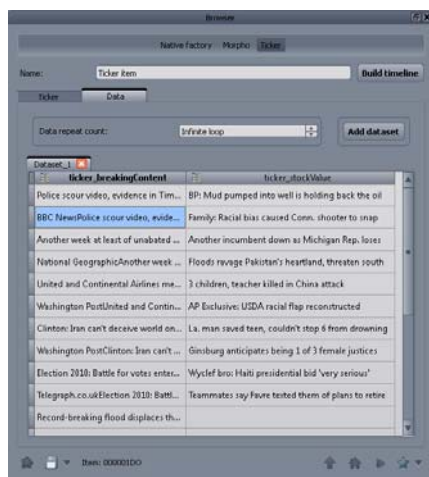
In order to improve integration between Maestro and Morpho, a plugin for Maestro has been created, this plugin searches for Morpho pages saved in a 3Designer format, and allows Maestro users to add any of these items to a Maestro rundown, where it can be played like any other item. This is a smooth way to allow Morpho created content to be used in Maestro without going through the template creation step in PageEditor. The most common use case for this plugin is when a new unplanned graphic needs to be created and quickly put on air.

Ticker plugin

Ticker support has been implemented as a plugin in Maestro 6. It includes long awaited features like triggering of an animation when data is updated.

The user can now review and modify the contents of the ticker at any moment, even if the ticker has been added to a rundown.

A snapshot of the ticker plugin in the browser window follows



4. Scripting and Macros

Access to scripts creation has been enabled in Maestro 6. The language used is Jscript, and there is a contextual help in Maestro to help the user create their own scripts

This is available both in timeline events and in the form of standalone Macros that can be executed at any moment. As support to scripts, variable views have been enabled, so if one script is reading or setting some variables, they can be checked and modified by the user in the GUI.

A script creator wizard has been added in order to create automatically the most common functions (like play item by ID) without any need to type the script itself. The resulting code can be modified by the user.

There is script contextual help that assists in the script creation and indicates to the user the available functions and the syntax required.

It is very important to understand that scripting is only required to access to some advanced features. A standard production can be created and played without any use of scripts. This is does add complication to the standard user, while it opens a door for advanced users to have deeper control of Maestro.

5. New data sources connection wizards

The tool that allows connections to external data sources has been redesigned to improve usability, and extended to support new data sources like XML files. Additionally, new connection methods have been added to several data source types, expanding the usage possibilities of queries to external data soruces.

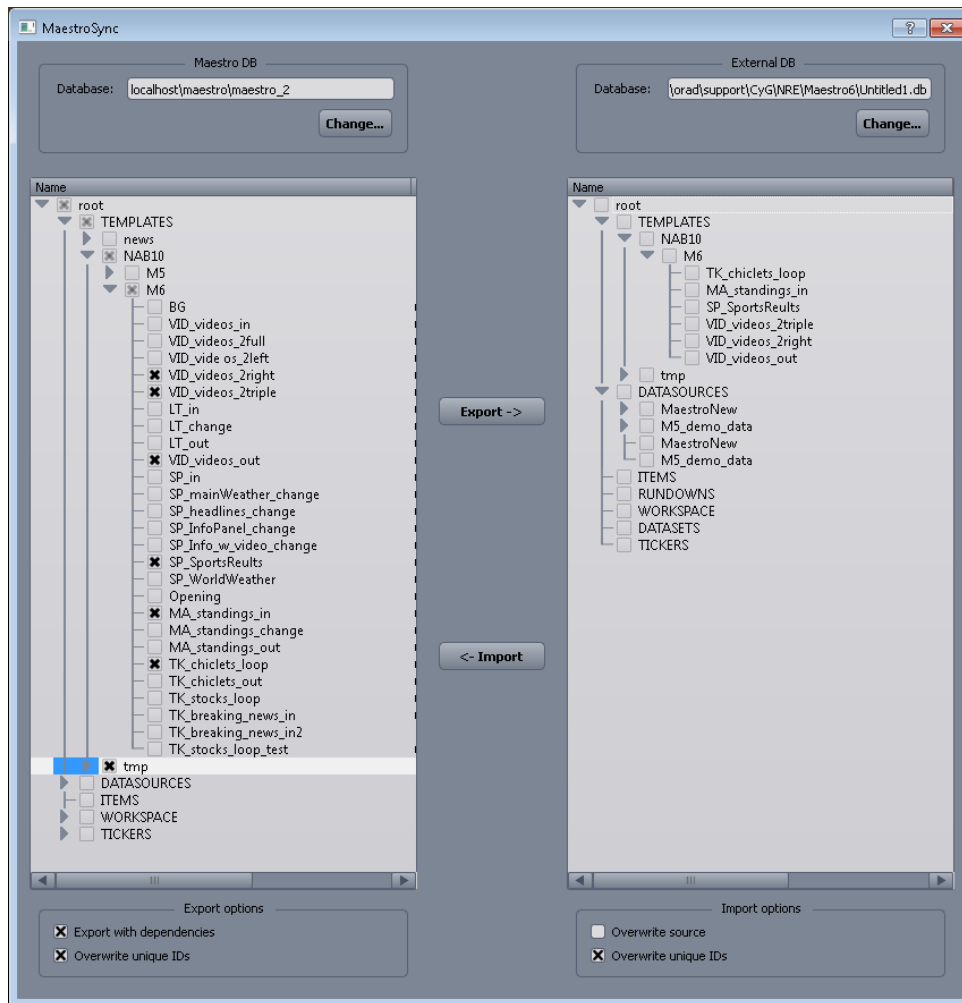
Different connection methods have some advantages in certain environments, for example store procedures can be called from MSSQL DB when using .NET connection method, while access Excel files will be possible from a MAC environment when using Maestro native connection method.

6. Maestro Sync: a new Export/Import tool

Sync is a new standalone export/import tool for Maestro. It allows moving assets directly between different databases or between one database and a file to be stored as backup or to be sent to a remote location.

Maestro Sync can be started on any computer, and connects to local or remote databases.

Maestro Sync screen shot:



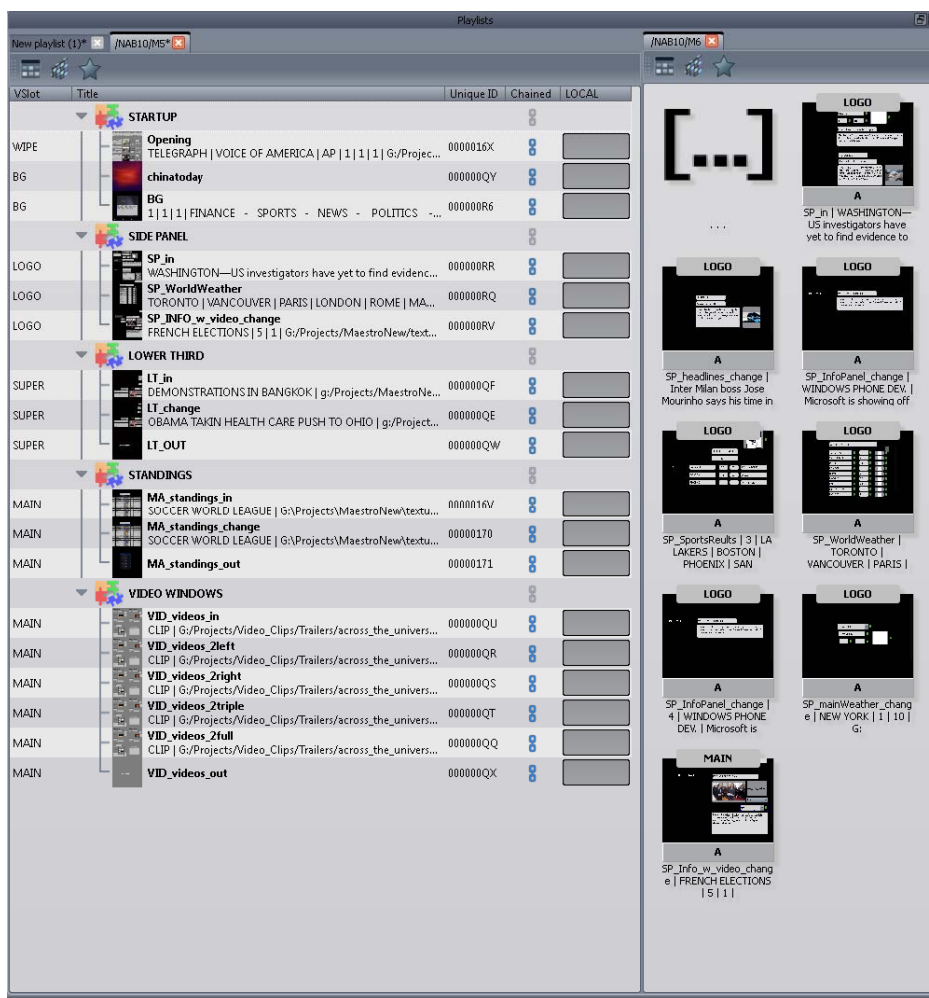
7. New playlist

Playlist display has been improved in Maestro 6. Multiple playlist view modes are possible, like list mode, or thumbnail mode, and several playlist can be opened simultaneously and be stacked as tabs, or displayed one next to each other.

Item parameters can be shown as part of the item title and change dynamically without moving focus to the Browser window.

The rundown operation is “shortcut friendly”, so a normal playout production can be executed without using the mouse.

The screenshot below shows several playlist view modes shown simultaneously:



8. Extended automation customization possibilities

As par of the general goal of making Maestro a flexible application that can fit any workflow, some changes have been performed in the implementation of Automation protocols in Maestro. The main change is the possibility to force commands incoming on a given port to be assigned to a given VirtualSlot in Maestro. This eliminates the possibility of collisions when different graphics are played by different automation ports, and greatly simplifies the production from the automation standpoint, that can consider each port as a different independent output channel, even if they are all connected to a single Maestro.

Additionally, it is now possible using a mixed manual/automated operation, because automation commands do not change application focus, and therefore do not disturb manual usage

9. Redesigned plugins for Newsroom

Maestro plugins for Newsroom systems have been redesigned to accommodate the requests of many customers world wide. The most relevant changes are the following:

- **RenderEngine is integrated in the plugin** and not shown in a separated window, it can be shown either next to it, or tabbed.
- Behavior of the **plugin can be customized** to fit the specificities of different Newsroom systems
- Communication architecture has been changed to allow a quicker way of working

10. Redesigned plugins for Non linear editing

Maestro plugin for Non Linear Editing suites has been redesigned, mostly to improve its performance. Some new features have been added:

- In addition to empty templates, items that are part of a rundown can now be used in Maestro NLE.
- Autoscale timeline function has been added, so now the user can choose to automatically scale the sequence of animations to fit the size of the effect in the NLE timeline. This option works only in Avid's NLE
- Integration with Apple Final Cut has been done natively, not using emulation.
- A programming interface is now made available for 3rd party NLE vendors interested in integrating our graphics in their NLE system.

11. New PageEditor

PageEditor is now integral part of Maestro's application (even though Maestro can be licensed to show only PageEditor tools). Among the most relevant improvements we can highlight the following:

- Different data can be sent to the same export at different times. Not all exports need to be sent at the same time
- Each timeline track can be previewed separately
- Animations can be directly dragged into the timeline
- More default parameters have been added to pages, like default color in the timeline
- More widgets are available in pages
- Multi-tab pages have now a different timeline per tab
- Undo is now possible
- Since now each page can behave differently depending on the playout environment, and sometimes pages needs to be tested in a rundown to verify and tweak their behavior, it is now possible to save rundown items as pages directly from Maestro, without having to move back from Maestro to PageEditor to do so.

12. Possibility to translate the GUI to different languages.

Maestro's user interface can now be translated into different languages. Currently available translations are Polish, Spanish and Chinese. New translations can be added at any moment

The application is tested to work on any language or script. Languages like Arabic or Chinese can be used in graphic content, in elements naming, etc.