

NAVORI

WHAT'S NEW
IN VERSION 5

Navori is proud to announce it's latest release, version 5.

The following document goes over all the new functionalities so current users will be able to get up and running quickly once they upgrade to the latest version.

When appropriate, we also provided real-world scenarios to better explain how you can incorporate the new Navori v5 features in your projects.

This document covers all new Navori software products:

- Navori Player
- Navori Server Standard
- Navori Server Enterprise
- Navori Windows Manager
- Navori Web Manager v3

Navori Player

New supported media formats:

- Video: m2v, 3gp, 3g2 (QuickTime), flv (Flash video format, requires appropriate CODEC).
- Presentation: PowerPoint 2007.

Boost Media:

- Boost Media events are now schedulable. Users may select a specific day or daily and a time at which the Boost Media will be triggered automatically.
- Functionality is the same as if the event was triggered via the corresponding keyboard key combination.
- There are no limits to how many Boost Media events you can scheduled in a day but only one event can be scheduled at a time.

Real-world example:

You are deploying digital signage in a restaurant and you want to advertise a daily special. You then create a web page and you schedule it as a Boost Media event that will play every day at noon. Simply edit your web page before noon the next day and Navori will display the new daily special automatically.

New Digital TV Tuner add-on:

- A new Digital TV Tuner add-on is now available (license must be purchased separately).
- The new TV Tuner module supports analog and digital TV signal playback, including HD content.

New Proxy Server support:

- Navori Player now supports internet connectivity via Proxy Server. Users can configure their Proxy server settings in the Player Options window (F12). Once this step is completed all HTML and RSS feeds will be displayed in the Player.

Real-world example:

You are deploying digital signage on a secure network where all internet traffic is routed through a Proxy Server. You want to display web pages or RSS feeds in your Navori Player. You configure each Player and your Navori Server to use the Proxy Server otherwise no internet content would be displayed on your screens.

Enhanced Player engine:

- The Player's graphics engine has been totally re-written to enhance performance and increase reliability over previous versions.

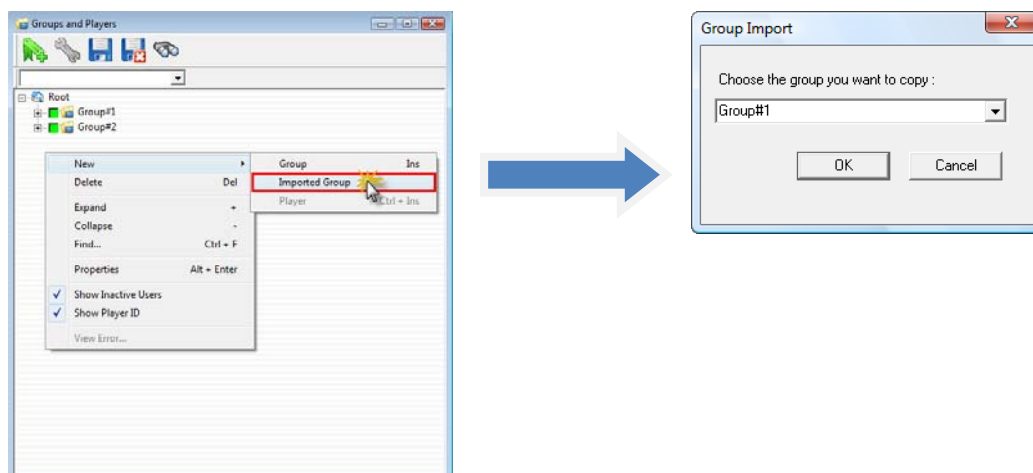
More operating systems supported:

- All versions of Windows Vista are now supported by the Player.

Navori Server Standard, Server Enterprise, Windows and Web Manager

New Group functionality:

- Users can now create a new Group and base it's profile it on an existing Group. To do so, simply right click in the Groups and Players window and then select **New > Imported Group**. You then select the Group you wish to replicate. All communication and working directory settings from the original Group will be retained. You only need to name the new Group and create new Players.



Real-world example:

You are deploying a large quantity of Players and plan to create several Groups to host them. It so happens all the Groups will be using the same communication settings (for example, Lan Anonymous and you don't want to keep re-entering the same data for every Group. Simply set up the first Group and use the New > Imported Group method then enter a unique name and save each additional Group. You can always go back later to edit the Error Settings or the Manager logins assigned to each Group.

Master and Group Media Libraries

- The Master Media Library is a new concept to version 5. This Library is shared with every Group you define in your Server. Every Media Clip you add to this Library will be available to all the Groups in your Server.
- The Group Library is only available to the currently selected Group. You use it as a local or private Library. If you add a new Media Clip to the Group Library, it will not be available to the other Groups.
- Media Clips taken from the Group Library are identified by an Asterisk (*) in your Playlists.
- Media Clips taken from the Master Library will not show an asterisk in your Playlists.

The system is powerful yet simple to use. If you want to share content, import it into the Master Library. If you don't want to share content and just have access to it in your local Group, import it into the Group Library.

Real-world example:

You are running a network of screens in a shopping mall and you resell advertising space to several mall tenants. You create a Group for each tenant with one or more Player depending on the number of screens deployed at each location. You let some tenants log in and manage their own content based on a Navori Manager login with Restricted User rights. These users will only be able to see and manage media within their own private Group Library.

Meanwhile you select a few other tenants who need to access a common set of media as well as their own Library. You give these users Full Rights so they may share Media Clips amongst themselves while retaining control over their own content.

Whenever you import new content into the Master Library, it will be available to every Manager with Full Rights. The Master Library will be shared between these users so all items imported inside it will be available to this group of tenants while others will only see their respective Group Libraries.

Tenants will only gain access to the Master Library (shared amongst all Groups) if you give them Full Rights but they will never see any Groups to which they have not been granted access.

You can even restrict the rights of Navori Manager users so they can perform all management function within their group except updating the Players. This is ideal if you want to exercise an additional level of control over your network of Players.

Master Library shares content among all Groups (Managers with Full Rights).

The screenshot shows the Navori Edit interface. On the left, the 'Master Library' is expanded, showing a tree structure with folders like 'Samples', 'TV & Video feeds', and 'Streaming'. A callout box points to the Master Library with the text: "All these Media Clips here are shared. They are in the Master Library. This library is only visible to Managers with **FULL RIGHTS**." The central 'Playlist' pane shows a 'Shared Playlist' containing items like 'Introduction HD (1m13) - No Banner', 'Introduction (1m14)', 'TV Channel 22 (5m)', 'Introduction (1m14)', 'Introduction HD (1m13)', and 'Mosaic Test (5m)'. The right pane shows a weekly schedule grid for the week of 30/03 to 05/04, with 'Shared Playlist' entries for most days.

Group Library is available to the current Group (Managers with Full and Restricted Rights).

The screenshot shows the Navori Edit interface. On the left, the 'Group#1 Library' is expanded, showing a tree structure with folders like 'Samples Group 1' and 'TV Tuner Group 1'. A callout box points to the Group Library with the text: "These Media Clips are not shared. They are in the Group Library. This library is visible to Managers with **FULL RIGHTS** or **RESTRICTED RIGHTS**." The central 'Playlist' pane shows a 'Group 1 Playlist' containing items like 'Specific to Group#1 (4s*)', 'World map (7s*)', and 'Shared Playlist (14m54)'. The right pane shows a weekly schedule grid for the week of 30/03 to 05/04, with 'Shared Playlist' entries for most days.

Dynamic Playlists

- Navori Playlists have always been non-shareable between Groups, until now. With the introduction of Master (shared) and Group (local) Libraries, Playlists adapt dynamically depending on the type of content that they contain.

If you build Playlists exclusively from Media Clips taken from the Group Library, your Playlists will only appear inside your currently selected Group.

Drop a single Media Clip from the Master Library into an existing Playlist and it becomes a Dynamic Playlist. This Playlist will now appear in every Group managed by your Server but only the shared Media Clip(s) inside this Playlist will be visible to each Group.

Users in other Groups will continue to be able to add local Media Clips from their Group Library to the Dynamic Playlist but only changes at the Master Library level will be reflected inside every Group.

- Dynamic Playlists can be used by everyone with the following exceptions for all Managers with Restricted Rights:
 - Can add Group Library Media Clips to the Dynamic Playlist.
 - Cannot delete any Media Clips from the Master Library (clips without an asterisk).
 - Can only move Group Library Media Clips in the Dynamic Playlist.
 - Master Library Media Clips cannot be moved in the Dynamic Playlist.

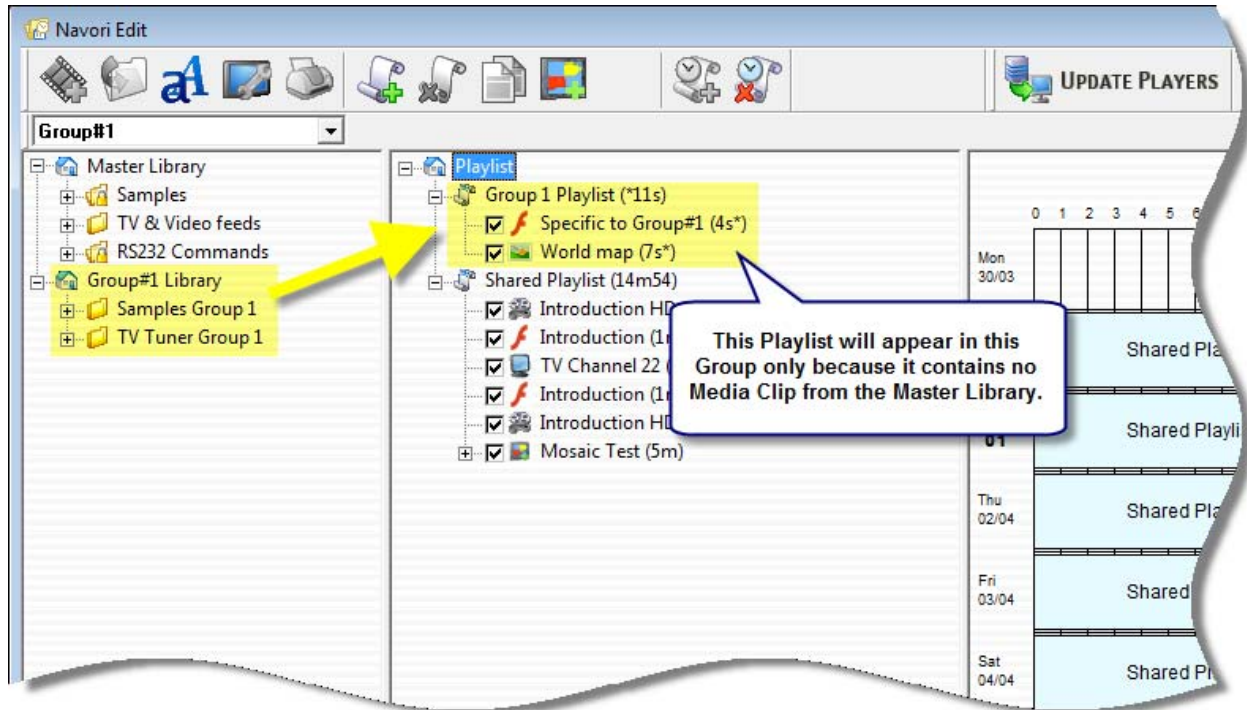
Real-world example:

If you consider the shopping mall example above, you can see where Dynamic Playlists can be quite useful. Lets say you give every tennant Full Rights. From this point forward every user will be able to see and use the shared content located in the Master Library.

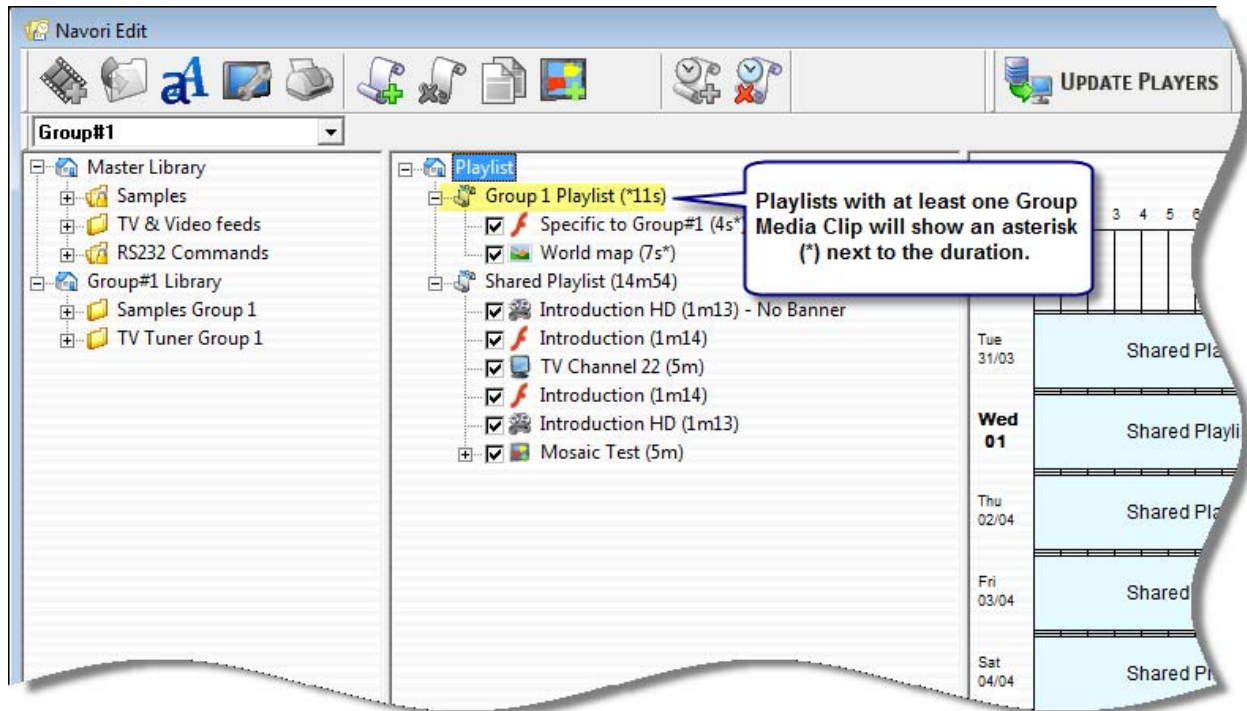
As Navori Server administrator, you can manage all shared content inside the Master Library and create one or more Dynamic Playlist which will make it available to every Group on your Server.

You could, for example, create a common set of generic ads and wayfinding signage for your mall and then make this available to every tennant. Each tennant will be able to add their own local media to the Dynamic Playlist without affecting what is playing in the other Groups. All shared content will play across all Groups while local content will play only on each specific tenant's Players.

Group Library Example:



An asterisk represents a Group Media Clip (meaning it is not shared).



Master Library Example:

The screenshot shows the Navori Edit interface. On the left, the 'Master Library' is expanded, showing folders for 'Samples', 'TV & Video feeds', 'RS232 Commands', 'Group#1 Library', 'Samples Group 1', and 'TV Tuner Group 1'. A yellow arrow points from the 'Master Library' to a 'Shared Playlist' in the center. The 'Shared Playlist' contains several items, including 'Introduction HD (1m13) - No Banner', 'Introduction (1m14)', 'TV Channel 22 (5m)', 'Introduction (1m14)', 'Introduction HD (1m13)', and 'Mosaic Test (5m)'. A speech bubble points to the 'Introduction HD (1m13) - No Banner' item, stating: "This Playlist will appear in every Group because it contains at least one Media Clip from the Master Library." The right side of the interface shows a calendar view with dates from Mon 30/03 to Sat 04/04.

Whenever there is no asterisk next to a Media Clip duration, the clip is from the Master Library (it is shared). Inserting this clip in a Playlist makes it Dynamic, meaning it will appear in every Group.

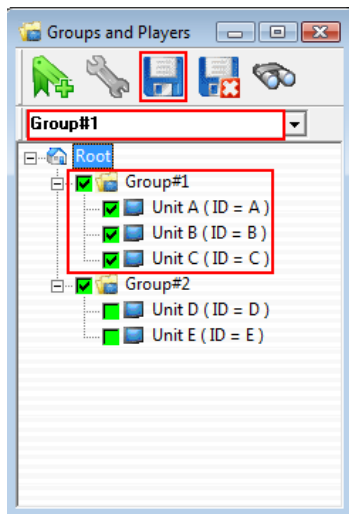
This screenshot is similar to the one above, showing the Navori Edit interface. The 'Shared Playlist' is highlighted in yellow. A speech bubble points to the 'Introduction HD (1m13)' item, stating: "No asterisk (*) means all the Media Clips in this Playlist are from the Master Library. This Playlist is Dynamic. It will appear in each Group on the Server." The right side of the interface shows a calendar view with dates from Tue 31/03 to Sat 04/04.

Simplified Group Updates

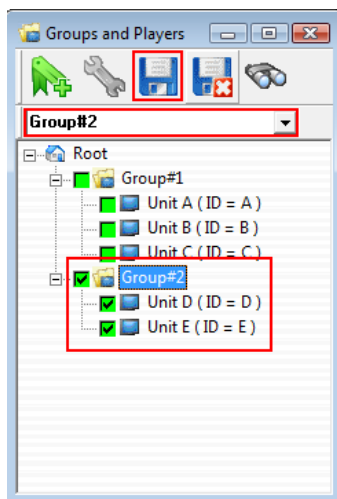
Navori v5 now lets users update Players in a few simple steps:

- Begin by saving Group and Player selections in the Groups and Players window.

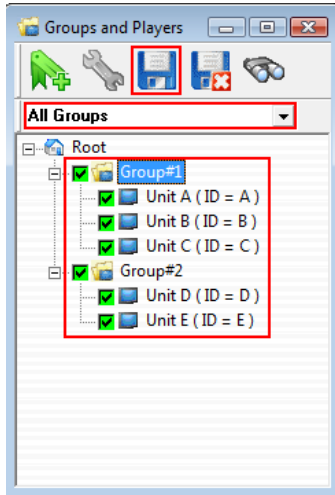
You select the Group and each Player then you give the selection a name which you enter in the drop down field. In this example we called the selection Group#1 but you can use any name you like. We then clicked the diskette icon above to save the selection.



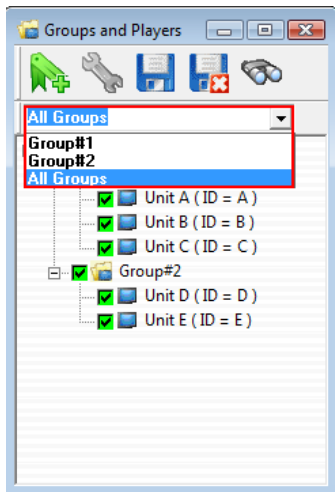
- You repeat this process for as many Groups and Players as you want, saving each selection. In these examples we selected all the Players in each Group but you can customize this as required (first and last Player in a Group for example or even specific Players across multiple Groups) .



- You can even select all the Players and every Group as we did in the example below. This will let you update your complete Player network later with a few clicks.

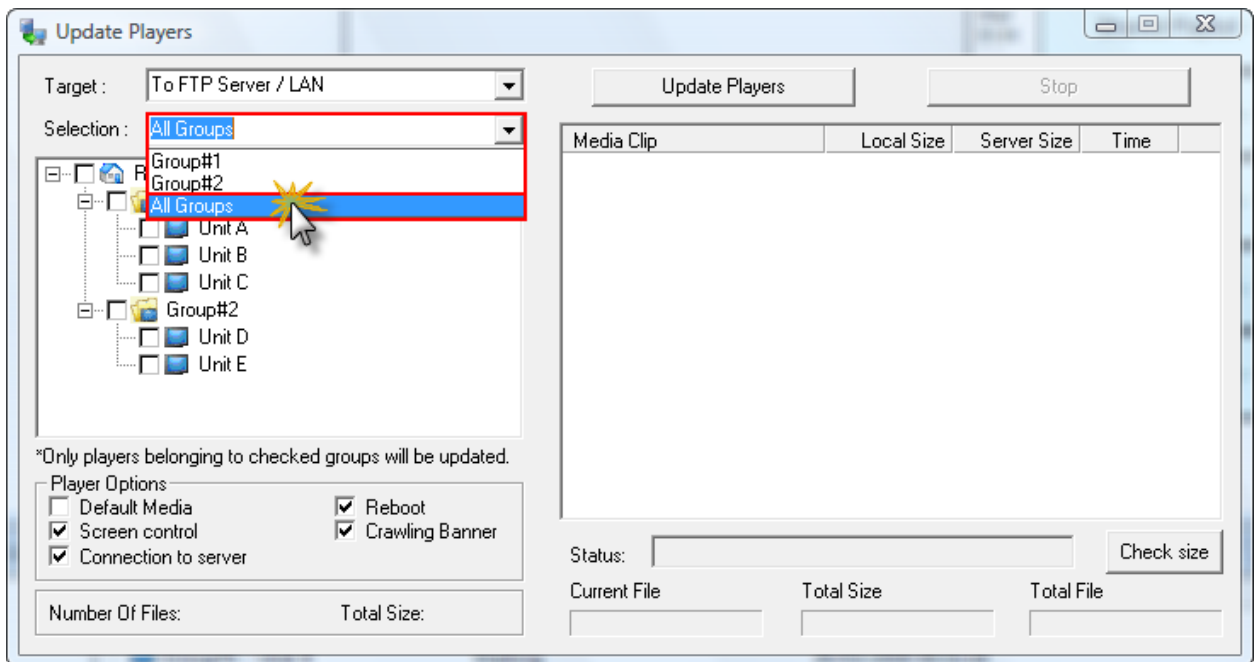


- When all your selections have been saved, you can recall them later in the drop down field. Selections can also be deleted by clicking on their name and clicking the delete icon (diskette with the "X" graphic).

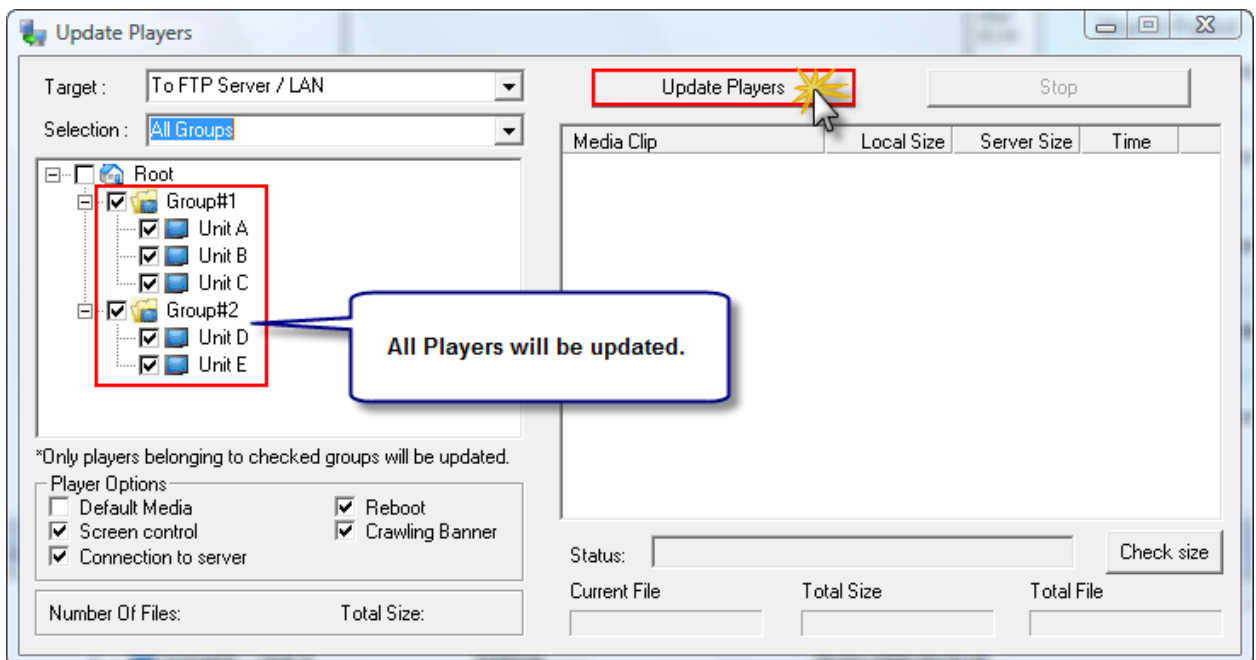


Once your selections have all been saved, you may recall them before you perform any Player updates.

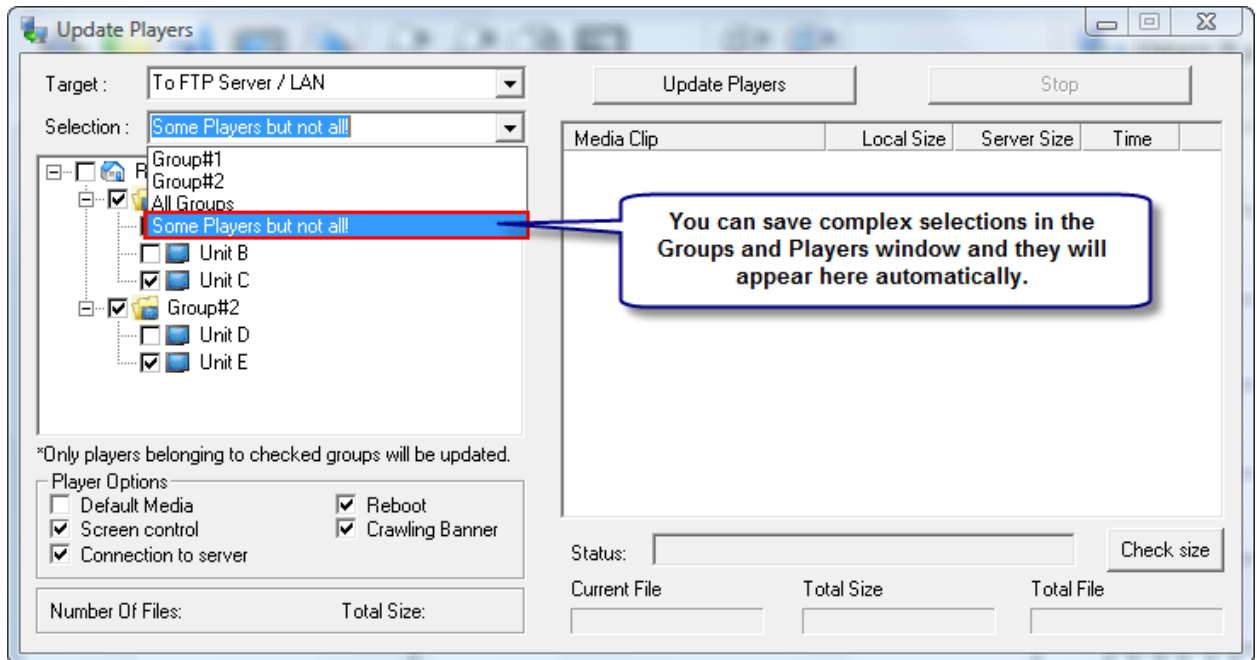
- You will notice your saved selections now appear in the Update Players window. Any selection saved in the Groups and Players window will be available here.



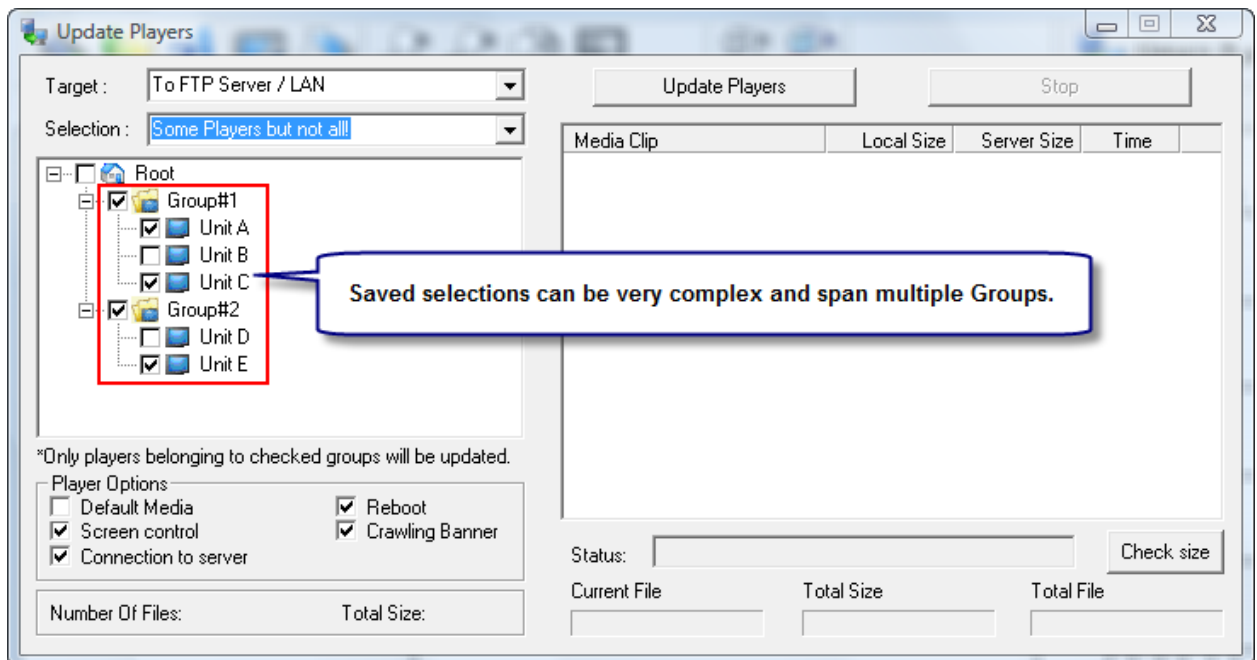
In this example, selecting All Groups in the Update Players window will make sure all the Players in every Group is updated as soon as you click the Update Players button.



- You can name use descriptive names for your selections...



...and create complex selections to update specific Players across multiple Groups.



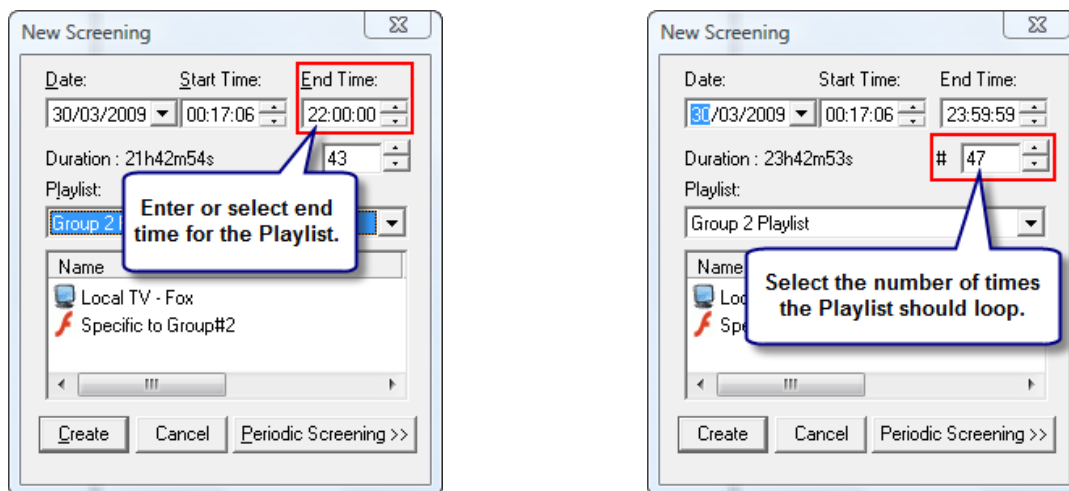
Real-world example:

Navori users with large deployments must often perform repetitive tasks such as update only certain Players at specific times. These Players may be in various Groups, further complicating the update process. By giving users the ability to store and retrieve Player selections across multiple Groups, Navori has created a highly efficient update process. Specific Players can be selected and updated in a few clicks rather than Group by Group.

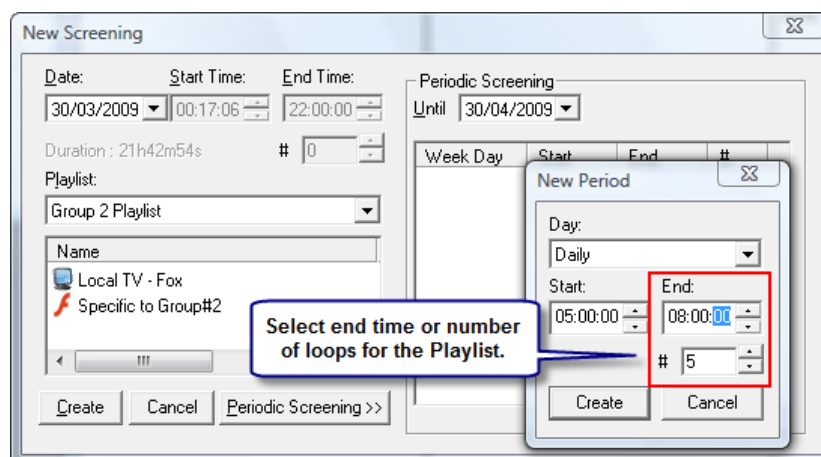
Scheduling using Playlist loops instead of timing

Navori has always enabled users to schedule Playlists by specifying the start and end time in the Scheduling Grid. New to version 5 is the ability to specify a start time and then tell the application how many times you wish the Playlist to loop before moving to the next Playlist or display the default media.

- Here are your options when scheduling a New Screening:



Here are your options when scheduling a Periodic Screening:



Advertising network operators will clearly benefit from this new feature as they can create complex Playlists quickly and simply since they can select the number of times the content should loop without having to go through a series of manual calculations.

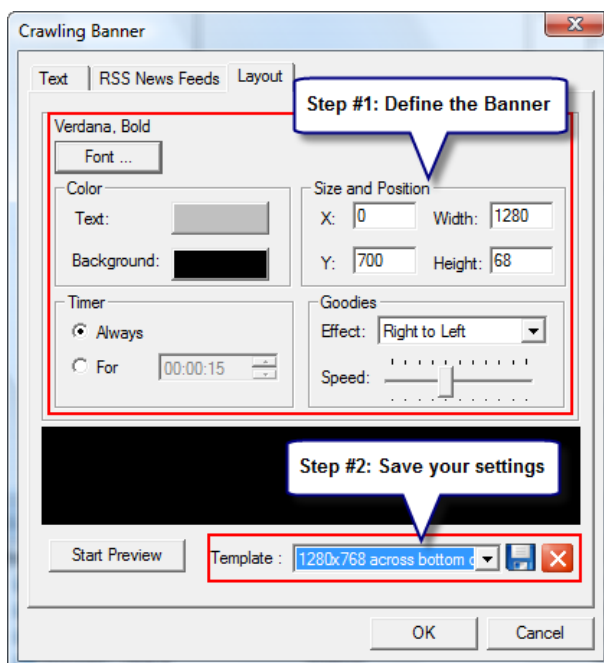
Real-world example:

Your company runs an Advertising based digital signage network and you resell advertising space on your screens. Your screens are installed in various public spaces and retail locations so you need precise control over your advertising content.

By scheduling your Playlists using looping rather than timing, you can specify exactly how many times an ad will be seen during a given period. This saves you time and you can meet your client's requirements with a high degree of precision.

Crawling Banner Profiles

The Navori Crawling Banner settings can now be saved and retrieved as needed. This means you don't have to continuously recreate the Banner settings for each Group. Simply set up your banner (top of screen, bottom of screen, set the width... height... etc...) and save your settings in a template. From this point forward, you will be able to retrieve the settings in any Group.



This feature will save you time and effort if you need to manage many types of screens in multiple Groups.

Server Enterprise Management Profiles

The Navori Manager Client comes in two versions, **Windows** or **Web**. Both types of clients can be used to manage one or more Groups of Players. Navori Server Enterprise v5 introduces the concept of Manager Client Rights to provide added flexibility to corporate and commercial signage users.

- The **Windows Manager Client** fully replicates the Navori Server dashboard except that access to Group and Player network settings is restricted. However, all other management functions are available to the user. The Windows Manager Client is used on LAN based signage networks.
- The **Web Manager Client** is a web based application that runs on the Navori Server PC to provide remote management capabilities via web browser (only Internet Explorer is supported). Web Managers can be assigned two levels of management rights: **Full Rights** or **Restricted Rights**. Web Manager user accounts with Full Rights can manage both Master and Group Libraries, and are able to view, add or delete content as needed.

Here is a table that illustrates the rights you can assign to each type of account:

Server Enterprise	Web Manager	Windows Manager	Web Manager	Windows Manager	Web Manager	Windows Manager	Web Manager	Windows Manager
Full Rights	Full Rights	Full Rights	Full Rights	Full Rights	Restricted Rights	Restricted Rights	Restricted Rights	Restricted Rights
Can manage Groups, Players, Managers	Can Update Players	Can Update Players	Cannot Update Players	Cannot Update Players	Can Update Players	Can Update Players	Cannot Update Players	Cannot Update Players

Both types of Web Manager accounts can be configured so they can perform all administrative duties (add/remove content, playlists and schedules) but not update Players.

This provides an additional level of security when sharing network management among multiple administrators. This is especially important to digital signage network operators and advertising based signage network users.

Real-world example:

You're a corporate user with a series of digital signage Players deployed across your enterprise. Some screens are located in a factory, others at various locations in your corporate office. Within each location, you have some screens used to perform specific duties such as corporate communications, employee training, factory production statistics, cafeteria menu selections, etc...

Digital signage duties have been given to select individuals who are authorized to perform all tasks within their area, excluding Player updating. These users will require Navori Manager accounts with Restricted Rights and will not be allowed to export.

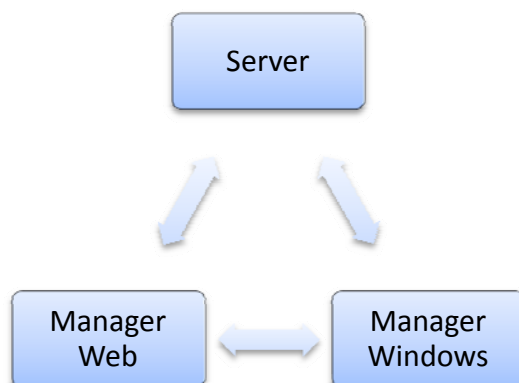
These users will be able to add new content, create and manage Playlists, prepare Screenings (all Group Specific) but a supervisor will need to review the material and send updates to the Players.

Any administrator in charge of overseeing the complete network would be given a Manager account with Full Rights, meaning they can access the Master Library and thus manage content for all the Groups. Here again, you can delegate Player update rights when appropriate.

Navori Enterprise Software Synchronization

Every Navori Manager application is in constant communication with the Navori Enterprise Server. Each module sends and receives updates in real time.

When a Windows Client Manager user adds a new Media Clip to a Group Library, the Navori Server dashboard is updated. Same goes for every Navori Manager (Windows or Web) user, according to their account rights. Users with Restricted Rights will see Dynamic Playlists created with Media Clips from the Master Library (by the Server Enterprise administrator or by a Manager with Full Rights). If the Server user or a Manager with Full Rights modifies the content or the Media Clip order in the Master Playlist, all Navori Manager users will automatically see the change in real-time.



Web-based Help System

The help files for all Navori v5 applications are now distributed online via HTML. All content updates and corrections will be available to users each time they consult the software help via F1 key or via the application menu.

The screenshot displays the 'Navori Server Enterprise Online Web Help' interface. The browser window title is 'Navori Server Enterprise Online Web Help'. The page is titled 'Introduction' and contains the following text:

Navori Server Enterprise Edition is a content management and scheduling software package that allows you to manage, broadcast and monitor a network of screens running Navori Player via a LAN, FTP server(s) or CD/DVD. Each screen must be connected to an individual PC running the Navori Player application to receive individual content.

Based on SQL database technology, Navori Server Enterprise can manage thousands of Navori Players across a LAN or via the internet. The Main Server application is delivered with a Socket Server .NET module to communicate with Windows or Web Manager Client application across your LAN (Manager is optional). When used with multiple Navori Manager clients, the Enterprise Edition becomes a powerful, multi-administrator digital signage solution. Furthermore, Navori Managers can now be assigned full (access to shared content across all Groups) or restricted rights (access to assigned Group content only). Navori Server Enterprise administrators can also restrict Player update rights for each Manager access level so only authorized personnel can send updates to Players.

It is important to note there is no direct communication between Navori Server and the Navori Players. All communication is done through either a shared LAN folder (by default on the Navori Server's local hard drive) or via an external FTP server (for remote Player update via the internet). The shared LAN folder may also be located on any file server assuming it is reachable by each Navori Player PC on the LAN. Because of this architecture Navori Server and Navori Players run autonomously, exchanging data only when required with Navori Servers storing all necessary data on their local hard drives.

The diagram shows a central 'LAN/Internet' cloud connected to 'Navori Web Manager Client', 'Navori Windows Manager Client', and 'Navori Server (Windows server application)'. The 'Navori Server' is connected to 'Navori Player' devices.

Multi-administrator functionality can be extended to the Internet with the addition of the Navori Web Manager module. This application interfaces with Microsoft's IIS server to provide remote administration via the web.

It is important to note that Navori Server is an administration application that does not operate on the Client/Server model. This means you don't need to keep Navori Server running all the time for your Players to communicate with the shared LAN folder or FTP server.

Navori Server Enterprise Edition is used to:

- Define and manage [Groups and Players](#)
- Assign and manage Navori Manager [logins](#) and rights for Tycoon Manager users (Windows and Web clients)
- Create and organize Shared and Group specific Media Clip [Libraries](#)
- Create [Playlists](#) using Media Clips stored in the Libraries
- Schedule [Screenings](#) for your Playlists
- Run [playback simulations](#) of your Media Clips, Playlists
- [Update Players](#) via LAN, FTP or CD/DVD
- Monitor Player activities and status in real-time
- [Receive alerts](#) via email or dashboard