

Publishing and Subscribing

Centralised Management

The Publisher and Subscriber functionality of the Net Top Box allows the management of a complete Digital Signage network from a single Player.

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Publishing and Subscribing Overview

Excluding the Subscriber only players all NTB can be configured as Standalone, Publisher or Subscriber. In simple terms one of the NTB in the network is configured as a Publisher (master) and the rest of the NTB are configured as Subscribers (slaves). The Publisher publishes the Schedule and all associated Layouts and corresponding content into a directory (on its self on an FTP server) that we will hence refer to as a Channel. The Subscriber is given the location of the Channel and is configured to check for changes in the data at a user definable interval. It is important to know that the Subscriber pulls the data from the Channel rather than the Publisher pushing the data to the Subscribers. It is also worth noting that the Publisher and Subscriber have no knowledge of each other and there is no communication between them.

Terminology

To allow you to fully understand this document we need to cover some basic terminology. The descriptions in this section have been simplified. For more in-depth information please refer to the Help section on your Net Top Box.

NTB

Stands for Net Top Box this is a ONELAN Digital Signage Player.

Layout

A Layout is a configurable package that contains all the information/files controlling what is displayed on the screen including the size and position of Zones and the items that are in the Zone Playlists and all the content that is associated.

Zone

A Zone is a content holder which you can be moved to any position on the screen. Each Zone has an associated Playlist of content and items.

Playlist

A Playlist is the list of content and items that are listed to play in a particular Zone.

Content

Content is an all encompassing phrase that is used to describe media displayed on a Net Top Box. This media can be any of the supported file types such as video files, image files, text files to name a few. A Publisher can create and manage multiple channels and multiple Subscribers can subscribe into a channel.

Publisher

A Publisher is a Net Top Box that has been configured as a Master. This unit publishes all information on the layouts and schedules and deposits this information into a specific directory (called a channel). This information is then picked up by the Subscribers.

Channel

A Channel is a directory created by a Publisher this directory is used to store all the information relating to the currently playing Layout, Schedules (associated Layouts) and all required content.

Subscriber

A Subscriber is a Net Top Box that has been configured to be a Slave. The Subscriber is told the location where layout and schedule information has been deposited by a publisher. The Subscriber will then check the location periodically (user configurable) and will download any new data to display.

Setting up Publishing and Subscribing

Publisher configuration – Changing Role

Path: Channels – Manage Channels – Role – Select “NTB Publishes content to a Channel” – Change Role

Role

Change Role

Role:

- NTB is stand alone - create and manage content locally
- NTB Publishes content to a Channel
- NTB Subscribes to a Channel to get content

Publisher configuration - Settings

Path: Channels – Manage Channels – Publishing

If you want the Publisher to create and publish to a Channel on its self all these settings can be left as default. You do have the option to set the Publisher to automatically publish but this may be inadvisable as there is no guarantee that the Schedules and Layouts are ready to be published at the defined interval.

Publishing Channels Role

Apply

Channel Name: NTB21026

Publishing Mode:

- Manual
- Automatic, everyday at: 00 : 00 : 00

Note: The channel must be active to allow automatic publishing.

Channel Server:

- The NTB's /channel/1 folder
- The USB Flash Memory's /channel folder
- FTP Site

Publishing Root URL:

Authentication:

- Login using anonymous FTP access
- Login with: Username: Password:

Error Retry Interval: 0 Days 00 : 01 : 00

Layout Zone Limit:

- Unlimited number of zones
- Limit To:

Publisher configuration - Channels

Path: Channels – Manage Channels – Channels

You also have the option of creating and managing multiple Channels but this is not necessarily required as multiple Subscribers can subscribe into a single Channel.

Publishing Channels Role


Add Channel

Actions	State	Number	Name	Channel Id	Transfer Status	Publish to
<input type="checkbox"/> <input type="button" value="Activate"/>	Active	1	NTB21026	2010-05-18 11:03:23	100% complete	The NTB's /channel/1 folder

Publisher configuration - Publishing

Path: Channels – Publish Channel – Publish

None of the changes you have made will preiterate to the Subscribers unless you publish.

 Status		 Publish	
<input type="button" value="Publish Channel Now"/>			
Channel Name:	NTB21026		
Activation:	<input checked="" type="radio"/> Activate as soon as possible <input type="radio"/> Activate after: Date: <input type="text" value="2010"/> - <input type="text" value="05"/> - <input type="text" value="19"/> Time: <input type="text" value="00"/> : <input type="text" value="00"/> : <input type="text" value="00"/>		
Last Published:	2010-05-18 11:03:23		

Subscriber configuration – Changing Role

Path: Channels – Manage Channels – Role – Select “NTB Subscribes to a Channel to get content” – Change Role

 Role	
<input type="button" value="Change Role"/>	
Role:	<input checked="" type="radio"/> NTB is stand alone - create and manage content locally <input type="radio"/> NTB Publishes content to a Channel <input type="radio"/> NTB Subscribes to a Channel to get content

Subscriber configuration – Settings



Path: Channels – Manage Channels – Subscribing

1) Set the “Subscription Poll Interval” this is how often the Subscriber checks the Channel for new data.

2) Add “Channel Subscription URL” this is the route to the Channel. An example route would be:

http://<IP Address>/data/channel/<channel number> (this will only work with a Publisher)

3) Add your login credentials to “Authentication” these are the login credentials of the Publisher or FTP server

 Subscribing		 Role	
<input type="button" value="Apply"/> Note: All existing Layouts on the NTB will be replaced with Layouts from the Channel			
Subscription Poll Interval:	<input type="text" value="0"/> Days <input type="text" value="01"/> : <input type="text" value="00"/> : <input type="text" value="00"/>		
Update From Centre Poll Interval:	<input type="text" value="0"/> Days <input type="text" value="00"/> : <input type="text" value="20"/> : <input type="text" value="00"/>		
Channel Server:	<input type="radio"/> The USB Flash Memory's /channel folder <input checked="" type="radio"/> Remote Web site or FTP server		
Channel Subscription URL:	<input type="text"/> See the Help for details of the URL format used to access a Channel.		
Authentication:	<input checked="" type="radio"/> No authentication required <input type="radio"/> Login with: Username: <input type="text"/> Password: <input type="text"/>		
Proxy:	<input type="radio"/> No Proxy required (Direct connection to the Internet) <input checked="" type="radio"/> Use Proxy if configured (No Channel Subscription proxy has been configured)		
Error Retry Interval:	<input type="text" value="0"/> Days <input type="text" value="00"/> : <input type="text" value="01"/> : <input type="text" value="00"/>		
File Transfer Allowed:	From: <input type="text" value="00"/> : <input type="text" value="00"/> Until: <input type="text" value="00"/> : <input type="text" value="00"/>		

Subscriber configuration – Force Subscription

Path: Channels – Subscribe Channel – Subscribe

This can be used to test that subscribing is functioning correctly

