iLinX Configuration

for version 1.7 onwards

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Introduction

One of the key features of iLinX is that you can install it, run it for the first time and, generally, it will discover your DigiLinX system without any need for configuration. This remains the case, however with the introduction of version 1.7, iLinX offers a variety of ways in which its behavior can be expanded and customized to meet your needs. This guide should explain all the options in sufficient detail to meet most needs, however please feel free to contact iLinX Support (`support@ilinx.info`) if you need any further assistance.

Overview

Configuration falls into two broad areas: connection and customization.

Connection

The default behavior of iLinX is to send out a broadcast to discover DigiLinX devices on the local network. There are occasions when this might not work, for instance when iLinX is not on the same sub-net as the DigiLinX system or when connecting remotely via a virtual private network (VPN). In these circumstances iLinX can be configured to connect directly to a SpeakerLinX by address. From version 1.7 iLinX allows you to keep multiple connection settings (called profiles) and easily switch between them.

Customization

iLinX offers a number of customization options:

- Limiting the rooms visible to iLinX based on a static menu defined in DigiLinX Dealer Setup

- Defining a macro to run when the title bar is tapped on any iLinX screen (iLinX's equivalent of redefining the A/V button behavior on TouchLinX panels).

- Adding custom graphics for radio station logos and album cover art (for those media servers such as iPort that do not support it natively)

Each of these options can be configured on a per-profile basis, so each profile can have different custom behavior.
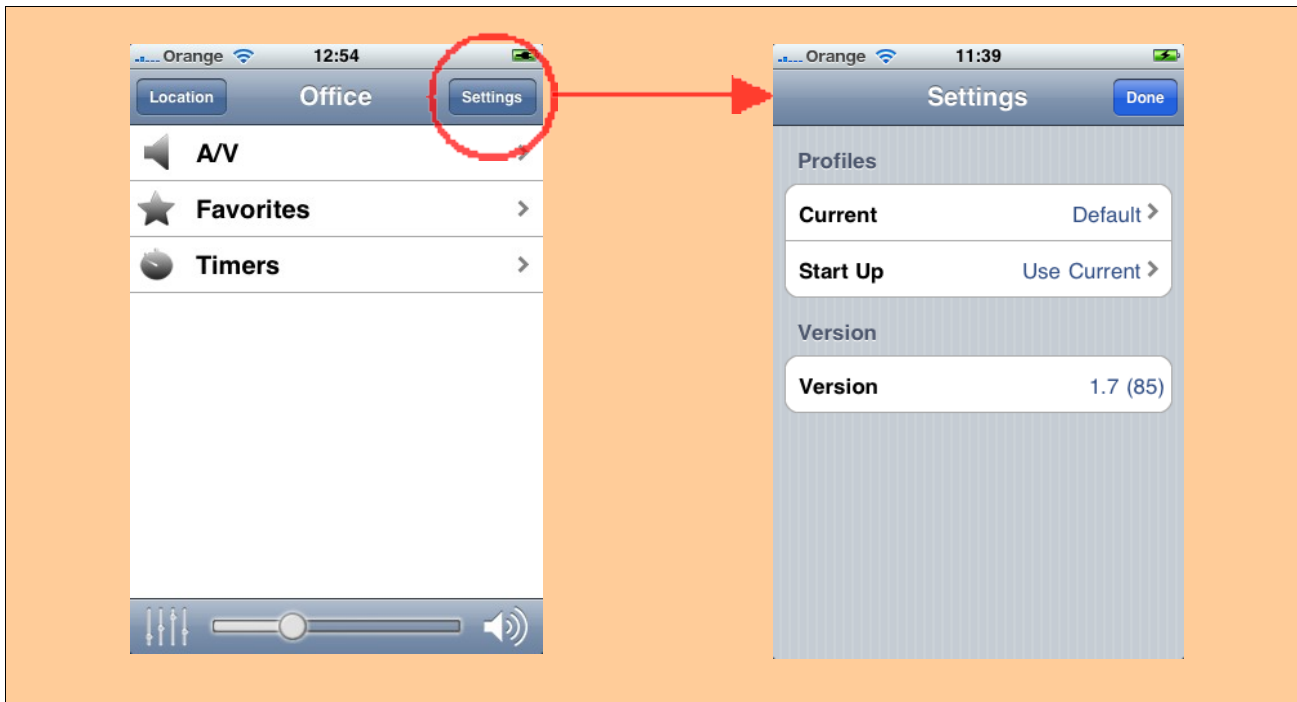
How to configure settings

In earlier versions of iLinX all settings were configured under the main iPhone Settings app. From 1.7 onwards, settings are now managed within the iLinX app itself. Any non-default settings you configured prior to upgrading to 1.7 will have been carried over into the in-app settings.

Access to the settings is hidden by default as they are usually set up once and then do not need to be changed. To reveal the in-app settings, go to the iLinX options under the main iPhone Settings app and choose Settings > Show All:

Next run the iLinX application and you will see a **Settings** button on the top right hand corner of the Home screen. Pressing this will bring you to the app's Settings screen:
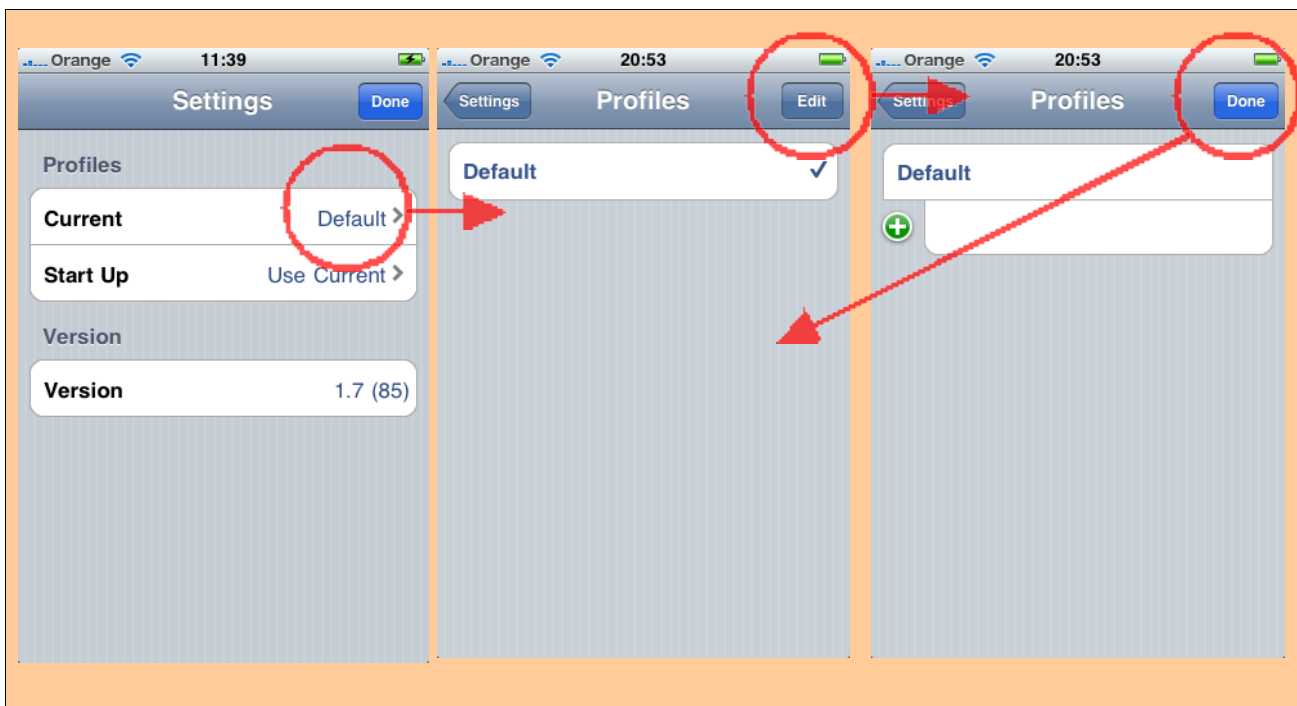

Note - if you start up in a room that has Favorites configured as its home screen in DigiLinX Dealer Setup, you will need to press the **Home** button at the top left to return to the Home screen.

Profiles

All iLinX settings are stored in profiles. You can create as many profiles as you wish. Each profile contains settings for how to connect to your DigiLinX system and for the customized features to use with that connection.

When you first start iLinX 1.7 there will be just one default profile. If you have upgraded from a previous version of iLinX, this profile will contain the settings that were configured for that older version. If you have just installed iLinX 1.7 then the default profile will contain simple settings that are usually sufficient to get you started with managing your DigiLinX system.

To view your profiles, go to the Settings screen and then tap the **Current** entry. This will list all available profiles and show which one is your currently selected profile. If you edit any profile settings (see below) then you can finish editing by either tapping the **Done** button or just going back to the main Settings screen.

Edit a profile

To change the details of a profile, including renaming it, tap the **Edit** button and then tap on the profile you wish to change. The options available in a profile are discussed in the following chapters.

Create a new profile

Tap the **Edit** button and then tap the **(+)** button at the bottom of the list; a new profile with default values will be created. Edit the new profile to configure your desired settings.

Delete a profile

Tap the **Edit** button and then tap on the **(-)** button next to the profile you wish to delete. Note that system will ensure that you cannot delete the last profile so you always have at least one profile to use.

Reorder your profiles

Tap the **Edit** button and then drag the entries around using the drag handles on the right of the entries.

Select your current profile

Just tap on the profile you want to set as the current profile (you will need to leave edit mode if you are editing).

Define behavior on start up

If you have multiple profiles you have a choice of behavior for iLinX when it starts. To select which option to use, go to the main Settings view and then select the **Start Up** entry. The possible options are:

- **Use Current**
  iLinX will attempt to connect according to the settings in the profile you have chosen as your current profile. If you are solely or mainly using iLinX in one location then this is the best option to choose.

- **Show Profiles**
  Each time iLinX starts it will show you the list of available profiles and you can select the right one to use. This is appropriate if you are frequently moving between different DigiLinX systems (for example: home and remote access via VPN; home and work, or multiple demo systems at a dealership). The chosen profile becomes your new current profile.

Disabling editing profiles

Once you have configured all the profiles you need, you can then totally or partially hide access to them. This feature is provided so that a dealer can configure iLinX for a client and then hide the configuration from the client to avoid it being accidentally changed.
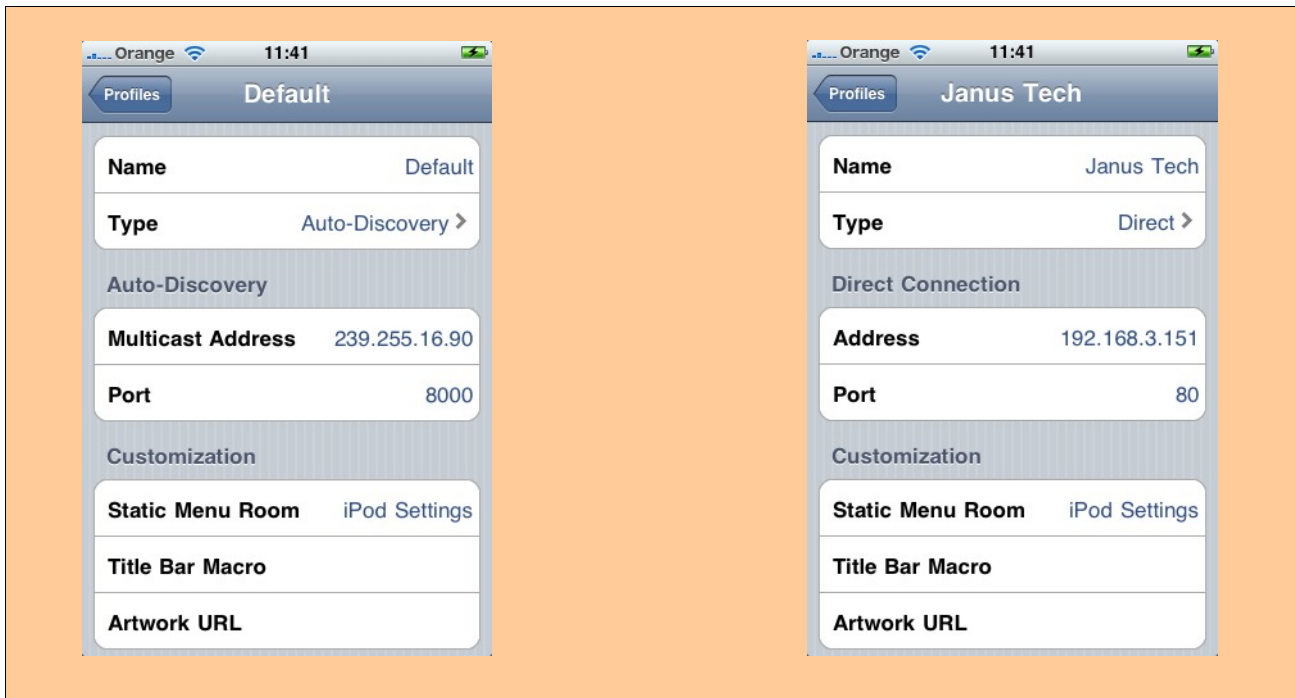
The options for hiding the in-app settings are within the iLinX options under the main iPhone Settings app. Choose Settings and then:

- **Hide All**
  The **Settings** button is completely hidden within iLinX and there is no way to configure profiles. Appropriate if you have only one profile or if you have configured the start up behavior to be **Show Profiles** or **Auto-Detect** (see above).

- **Profiles Only**
  The **Settings** button is replaced by a **Profiles** button. This allows the user to select their current profile but no option to edit the profiles or change start-up behavior is shown.

- **Show All**
  The **Settings** button is shown and profiles can be edited.

Connection

iLinX supports two methods for connecting to your DigiLinX system: Auto-Discovery and Direct Connection.

Auto-Discovery

Auto-Discovery uses the same multicast messaging as DigiLinX Dealer Setup to discover your DigiLinX system. So long as the route between your iPhone and your DigiLinX system (that is, the Wi-Fi access point and any further switches and routers) support multicast messages, iLinX will automatically detect your system, connect and download all necessary configuration details with no further intervention required.

Auto-Discovery has two configuration options: Multicast Address and Port. These should be set to the same values as those used in DigiLinX project created by Dealer Setup for the system. If you have not changed those values in the project (and they are very rarely changed) then you will not need to change the default values in iLinX either.

Direct Connection

Direct connection is used when Auto-Discovery is not appropriate. Common reasons are: that multicast doesn't work on the local network or that you are connecting remotely via a VPN. In this case, you provide the IP address of a SpeakerLinX to which iLinX will connect directly without using the discovery multicast. The port should usually be left as 80.

For remote access to your system, we recommend using a Virtual Private Network (VPN). To configure the iPhone for VPN usage, go to Settings > General > Network > VPN. To set up a VPN on your system's router, please consult the documentation for your particular router.

Customization

iLinX offers a number of options for customizing its appearance and behavior. These options are set for each profile and so if you wish to have different customization features for different occasions then create a new profile for each desired configuration.

Static Menu Room

By default, iLinX will see and allow to be selected all rooms within the DigiLinX system. You may wish to restrict this, for example to exclude dummy rooms such as the "Room 1" created by Naim media servers or to limit the rooms available for control by an iPod intended for the guest bedroom or your children.

To do this, create a dummy room in your DigiLinX project by configuring a non-existent SpeakerLinX. Next define a static Rooms menu for that room containing only the rooms you want iLinX to be able to see. Finally, enter the name of that dummy room in the Static Menu Room field of the profile settings.

Title Bar Macro

DigiLinX Dealer Setup allows an arbitrary macro to be assigned to the A/V button on a TouchLinX. The equivalent for iLinX is the Title Bar Macro. Enter the name of a macro here and then whenever you tap the middle of the title bar on any main view within iLinX (that is, not the pop-up views: settings, location, source and A/V settings) that macro will be executed.

Artwork URL

iLinX supports the configuration of extra artwork for tuner station logos and media player cover artwork. The configuration is held in an XML file; full details of how to use this file are covered in the chapter *Custom Artwork* (p17 below). The URL of the XML file is entered here. This is an absolute URL (for example, `http://192.168.1.25/art/index.xml`) referring to a file held elsewhere on a web server. Local caching of the artwork on the iPhone is a future feature but not fully supported at present.

Custom Artwork

Custom artwork can be used in two distinct situations. First, tuner station logos can be customized based on the attributes of the current channel; secondly, the artwork for media servers (both in the "Now Playing" background image and in the browse views that support artwork) can be customized based on the attributes of the track or album. All the customization information is held in a single configuration file.

Configuration file

The location of the configuration file is given by the Artwork URL parameter in the profile settings. See *Artwork URL* (p16 above). The file is XML with the suggested following format:

```xml
<?xml version="1.0" encoding="utf-8" ?>
<extraArtwork>
  <art>
    <check tag="sourceControlType">
      <value matchanyof="TUNER,ZTUNER" separator=",">
        <check tag="channel">
          <value matchany="yes">
            <image href="tuner/terrestrial/${channel}.png" />
          </value>
        </check>
      </value>
      <value match="XM TUNER">
        <check tag="channel">
          <value matchany="yes">
            <image href="tuner/satellite/${channel}.png" />
          </value>
        </check>
      </value>
      <value match="MediaServer">
        <check tag="subGenre">
          <value matchany="yes">
            <image href="media/${subGenre}.png" />
          </value>
        </check>
        <check tag="genre">
          <value matchany="yes">
            <image href="media/${genre}.png" />
          </value>
        </check>
        <image href="media/default.png" />
      </value>
    </check>
  </art>
</extraArtwork>
```

When it needs artwork and none is supplied by the tuner or media server, it works through this file to try to find an alternative. At each check tag, it reads the value of the given tag type and then checks it against the contained value tags until it finds a match. It then works through that value tag's contents and so on recursively until it reaches a matching image tag. The matching image URLs are then formed into a list in the order that they are found and then

iLinX attempts to fetch each image in order until one is successfully retrieved or nothing is found. It is not a problem for there to be no match; iLinX will just revert to its default behavior.

To give a worked example, if the current source is a media server and iLinX is looking for default cover art for a track that has no subGenre, and a genre of "Rock", then it will match `sourceControlType`: MediaServer, fail to match `subGenre`, will match `genre`, resulting in a URL of `media/Rock.png` and then finally pick up the `media/default.png` image. So it will first look for `media/Rock.png` and then `media/default.png`.

Relative URLs are resolved relative to the location of the configuration file itself.

Radio station logos

Radio station logos are positioned as shown in the example below and replace the default large station name display:

In order to fit neatly into the view, it is recommended that the logos should be 190 pixels wide by 119 pixels high, should allow a small amount of blank space around the edges to avoid directly abutting the edge of the view and should make use of transparency to merge seamlessly into the background. Although the JPEG image format is supported, due to the need for transparency, the recommended image format is PNG.

If you use the recommended configuration file shown above, create a folder called "tuner" under the folder containing the configuration file and then two folders in that one called "satellite" and "terrestrial". Put a PNG file named for each channel in the folders (satellite for the satellite channels and terrestrial for the terrestrial stations), for example the satellite channel "BBC Radio 1" would need a file called `tuner/satellite/BBC Radio 1.png` (remember to keep the spaces). For terrestrial stations, the name is the RDS/RDBS/DAB station id stripped of any leading and/or trailing spaces.

Default album art

Default album art is displayed as shown in the example below:

To fit correctly into the area, the artwork should be 320 pixels wide by 320 pixels high. Either PNG or JPG format images can be used. Transparency is not recommended as there is no underlying background.

If you use the recommended configuration file shown above, create a folder called "media" under the folder containing the configuration file and then put a PNG file named for each known genre and/or sub-genre in the folder, for example the genre "Alternative Rock" would need a file called `media/Alternative Rock.png` (remember to keep the spaces). If you want to override the standard default cover art for anything the doesn't match a defined genre, create a `default.png` file and put it in the media folder.

Other options

If you believe you have a requirement that isn't covered by the default configuration file shown above, there are other matching options available. Station logos can be looked for based on the following values (sent in status reports from a tuner source):

`channel`, `channelNum`, `preset`, `band`, `bitrate`, `format`, `stereo`, `song`, `artist`, `genre`, `artwork` (artwork URL), `caption`, `controlState` (STOP, PLAY, REFRESH etc.) and `artworkName` (the name of the Satellite channel logo flash file, excluding the .swf suffix).

Album artwork can be looked for based on the following values (sent in status reports from a media server source):

`song`, `album`, `artist`, `genre`, `subGenre` (more detailed genre information returned by some media servers). Note not all values are available from all servers and in all circumstances.