

# iTravel - Frequently Asked Questions

## What is iTravel?

iTravel is an Indigo plugin that's designed to provide travel information in a form that can be used to trigger events & schedules and used as conditions for actions.

## How do I install iTravel?

There are step by step instructions in the user manual. You've got to install a standard Python module PIL, get an API key and install the plugin. Go on, don't be brave read the manual, please!



## What is Darwin?

It's the UK national database of LIVE train information maintained by National Rail as part of their contract with the UK government. It's exactly the same information that used to update all of the departure boards and platform signs across every station in the UK. It contains a wealth of information and we'll be looking through it to see what else we can use for Indigo in future releases.

## Why do I need a Darwin API key?

You need an API key due to license conditions. Darwin requires each user to have their own key and sharing isn't allowed. However, they are free and easy to obtain. I understand the National Rail position. They want to be able to show that they're sharing information with the widest user base as part of their government charter. It's easy enough, so please support them and get your own key. Without a personal key, you won't be able to run the plugin anyway!

## Can I read more about Darwin?

Sure. There's lots of information available on their site where you register. Just go to: <http://lite.realtime.nationalrail.co.uk/openldbws/> and become an expert now. Actually, you don't need to know this but you might find it interesting anyway.

## Isn't it just train information?

At the moment that's right. Functionality for car, bus and ferry travel will be added in future versions and will use the functionality already developed in iFindStuff.

## Will it be linked to NEST Home or iFindStuff?

In the near future, it will be. I already use its predictive algorithms as part of my set up for these plugins but I need to spend a little more time testing before a formal release. Probably once the traffic information triggering is in place.

## Will it work in countries other than the UK?

Not yet although it already contains localization code to include other country information in the US, Europe and Australia. In talking to Indigo developers in those countries to help me format the information and hope to provide local options soon

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## I keep getting the error **\*\* Couldn't find [NAME OF PACKAGE] ...**

Don't worry – you're not the only one. This error is caused by the way that Apple python libraries are installed by default. Your setup is automatically installing these special libraries as part of python 2.7. Unfortunately, Indigo uses python 2.6 at the moment so iTravel isn't able to find the special libraries you installed. However, it's easy to fix. If you read through the **Installing iTravel** section of the manual, you'll see instructions to install **pip2.6** and also the rest of the modules you need in the right place for Indigo. Pip2.6 will ensure that the right python 2.6 library is installed in the right place. If you still have a problem let me know.



## Why do I need PILLOW (Python Imaging Library)?

One of the limitations of control pages in Indigo is their ability to show multiple lines of text easily. However, Indigo does allow you to display a Refreshing PNG image that's stored in your folders. Normally this is used to display change camera images but it can be used for any image that's updated. In iTravel, we take the information gained from National Rail, create a text file and then convert it to a nicely formatted PNG image that can be displayed on a control page. Python doesn't do this out of the box so we install a very stable module called PIL or PILLOW to do all the heavy lifting for us. It's fast and very effective. You can even change the fonts and colours to match your specific needs.

The upshot is, if you want to see departure boards and use them on control pages you'll need PILLOW.

## Why do I need SUDS?

National Rail decided that using a special format called SOAP (Simple Object Access Protocol) was the best approach to provide train information. However, this XML format is difficult to extract information from easily unless you've got the right package to translate it. SUDS is a standard library that makes it easy to extract information from a SOAP file and it's very well known and stable. You need to install SUDS or iTravel won't work. Interestingly, nearly all travel APIs seem to use the same approach so once you've installed SUDS you'll be using it again and again in iTravel.

## What triggers/conditions does it provide?

If automatically identifies the status of a particular service and provides a special flag when there are problems. These problems could impact a particular route or a whole station. It also provides a delay or time to next train in minutes' statistic for each service on the route if a service is delayed or cancelled.

This information could be used to change specific scenes on your system. For example, my service is running 30 mins late so don't delay heating or cooling my house today. Personally, I get a briefing each morning on a control page that tells me if there's any weather, mobile

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phones, train service or alarm problem I should know about. Clicking on the train information displays a selection of departure boards so I can see if my journey is impacted and do I have to leave earlier than normal to get to work. If I want I can adjust heating times and other wake up activities accordingly.

## How accurate is the information?

The data is extracted from the National Rail Darwin service or Live Departure Boards Web Service (LDBWS / OpenLDBWS).

This is the exactly the same dataset that is used across the UK to update departure boards and platform displays automatically and so it's as accurate as your local train station. Of course, this data is updated immediately at the stations. You can set an update frequency in seconds as part of the Configuration. I would suggest that you have a minimum of 10 seconds although I find that 60 seconds is fine. In more remote locations you might find that a larger time between updates is perfectly acceptable. I suggest you see how it goes and use the largest possible time you can to minimise the impact on your overall network use. That said I haven't seen any drop in performance with shorter timeframes!



## Can I add extra information?

There are many datasets and this is just the start. If you want a specific field or piece of information let me know and I'll try to include it in the next release

## Can I track more than one route?

Of course. Just create a unique device for each route.

## There are a lot of results - can I filter it?

When you create a route you have the option of providing a destination station as part of the setup. If you don't enter a destination, then iTravel will extract every possible route from that station for device update and the departure board display. On the other hand, if you want to look at a specific journey (e.g. Farnborough to Winchester) make sure you select a destination station in the device configuration. If you forget to do this you can edit the device configuration later and add the destination then.

## Can I change the colours?

The next release will allow you to customize the departure board including colours, size and fonts. If you want to do that now you'll have to dive into the plugin code.

## Cool fonts on the departure board - are those system fonts?

No. Those fonts are special fonts just for this plugin. They are royalty free and can be used by anyone. In future versions, you'll be able to use your own fonts but they will always have to be monospaced to ensure the columns line up properly

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## Can I view the image files directly?

Yes. The file format is standard PNG so can be read and displayed by the most imaging software. If you've an application for the images outside of Indigo you can get Indigo to create and refresh them and simply access the files from elsewhere



## Where are the image files?

When you install iTravel you had to enter a valid location for it to store image files. It is probably something like `/Users/Mike/Trains`. The plugin checks to see if it can create a file in this location as part of the validation process. If you want to update the folder location, then change your plugin configuration. The folder **MUST** already exist and you must be able to save files into it.

## What are the image files called for each route?

The all have the same naming format that uses the Station code for the start and destination stations. If you don't specify a destination in the device configuration, then the code defaults to all destinations from this station.

In this example, **Farnborough (Main)** has the code **FNB** and **Winchester** has the code **WIN**.

Filename for *Farnborough (Main) to Winchester* would be:

**FNBWINTimetable.png**

Filename for *Farnborough only (all destinations)* would be:

**FNBALLtimetable.png**

So the general format for the filename is:

**[Start Code][End Code]timetable.png**

## What should I enter in the Refreshing URL field when creating a control page?

Using the Farnborough to Winchester example and the image directory shown above you would enter the following: <file:///users/mike/trains/fnbwintimetable.png>

You can see more examples in the manual

## Great plugin - what does it cost to purchase?

It's free of charge for non-commercial use. The use of PIL and the Departure Board fonts are free for non-commercial use but you'd have to pay a license fee if you wanted to sell it on. National Rail doesn't seem to care who access the information but they do have some guidelines on branding (or more accurately you can't use their branding anywhere without permission) which you can read on their site.

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From my point of view, I write plugins for the benefit of the community and don't expect or want a financial reward. However, a "well done" or a pat on the back would be nice from time to time as motivation!

## Will you support me if I have issues?

I certainly will but it will always be on a best endeavours basis. I already support five plugins, have a full-time job and have a family of five to provide for so my time is limited. Use the forum to post questions, feature requests or just to say hello. In normally pretty good unless I'm working on some remote spot that as I do from time to time. I'm keen you get the best from the plugin and so I want to see it succeed and give you some valuable functionality.



## Can you get the plugin to...?

If you've got a feature request then let me know and I'll try and include it in the next release, or at least give you a timescale when I might consider it. I normally ask for feature requests on a regular basis but am happy to accept them at any time. Most of the best functions in NEST Home and iFindStuff were suggested by users just like you.

## How did you develop this plugin? Why don't you publish a beginner's guide?

I think there's a need for a non-technical guide to developing plugins. In fact, I've already talked to a number of Indigo developers about collaboration. I'm going to be using this plugin as a plain English example of how you can develop your own site plugins over the coming weeks. Watch the forums for more information and the beginner's guide as it develops chapter by chapter.

## How can I contact you?

Just leave a post in the appropriate topic (or create your own) or private message me. I tend to keep a track on the forums so I'll probably get back to you fairly quickly.