Standard Route Clearance Tool Manual

Version: 1.1

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Authority: Operations Director

1.   Contents

2. Document Control

2.1 Version Log

Standard Route Clearance Tool Manual		
Date	**Version**	**Description**
17 SEP 2021	0.1	Initial Document for Beta release.
17 SEP 2021	1.0	Standalone Installer section added. Minor formatting changes.
31 OCT 2021	1.1	Added information about the automatic update feature of the Standalone Client. Updated GitHub repository links to reflect the new main branch.

2.2 Change Process

2.2.1   This Document is owned by the Operations Director.

2.2.2   Changes to this document are made with approval from the Director Operations alongside technical review by the Operations Team.

2.3 Special Thanks

2.3.1   The VATNZ Operations Department wishes to make special thanks to Alex Cutforth, the original project lead. Without you, this project wouldn't have gotten off the ground. Thank you.

3.   Application Overview

3.1 Purpose

3.1.1   The Standard Route Tool provides both Controllers and Pilots with the ability to quickly and efficiently find any Standard Routes that exist within the New Zealand AIP[1].

3.1.2   The SRC Tool is included by default in the vatSys NZZC Dataset, and as a standalone application that can be used alongside EuroScope and Pilot clients.

3.2 Features

3.2.1   The Standard Route Clearance Tool:

a.   allows the user to enter the Route Designator (AAWN2), where the Tool then returns the standard routing;

b.   allows the user to enter the flight plan routing, where the Tool then returns the Route Designator; and

c.   allows the user to enter the departure and destination aerodromes, where the Tool returns all available standard routes; and

d.   includes route-specific instructions or restrictions, such as -

i   whether the route is restricted to jet or propellor aircraft;

ii   any applicable altitude restrictions; and

iii   any other pertinent operational information.

3.2.2   The Tool also allows for the quick copy and pasting of data from the Tool by clicking either the Route or Designator labels.

3.2.3   The Tool automatically updates the included Route database whenever the Tool is opened, should an update be published.

3.2.4   The Standalone Client can update remotely when a new update is pushed.

3.2.5   The Tool is also fully open source, with the source code available on the VATNZ GitHub page.

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[1] Aeronautical Information Publication

4.   Application Installation

4.1 vatSys Plugin

4.1.1   The latest version of the Standard Route Tool is included by default in the New Zealand Domestic Dataset. The Plugin's integration with vatSys is tested every AIRAC Cycle release, however there is a potential that a mid-cycle client update *could* break the plugin.

4.1.2   If a mid-cycle Client update breaks the Plugin, you can manually install the Plugin by:

a.   navigating to releases section of the GitHub repository,

b.   downloading and extracting the latest version of the release archive,

c.   dragging the *Plugins* directory into the *Documents/vatSys Files/Profiles/New Zealand/* folder, as illustrated in Figure 1.
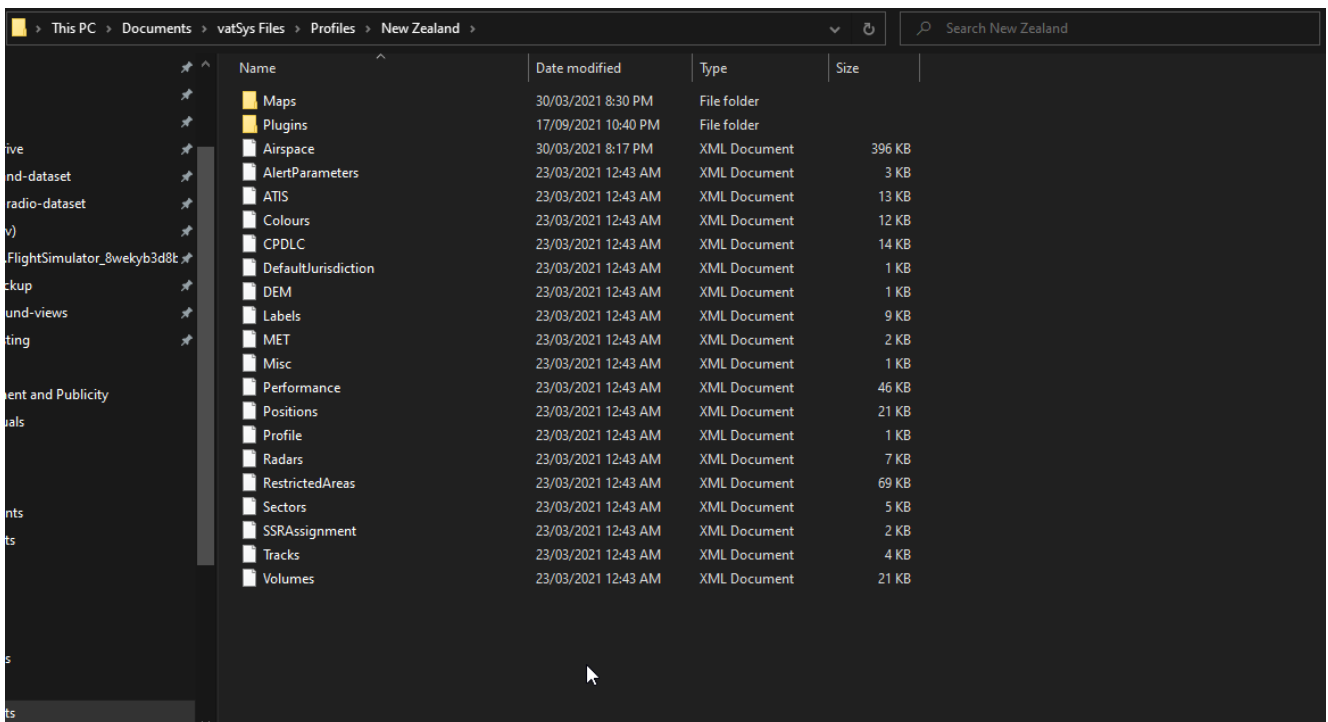

***Figure 1** – Location of the Plugins directory for the New Zealand Domestic Dataset*

4.1 Standalone Application

4.1.1   The standalone version of the Tool can be installed through a discrete installer for Windows.

a.   This installer is available on the GitHub repository for this project.

4.1.2   To install the Tool:

a.   follow the step(s) detailed at sub para 4.1.2 a and b,

b.   run the included *SRCToolInstaller.exe*,

c.   depending on your computer's security settings you may receive a Windows Security notification. This is due to the application being unsigned. This can be ignored by clicking *More info*, and then *Run anyway,*

d.   run the installer by following the prompts.

4.1.3   Once installed, the Tool can be found in your start menu under *VATNZ*.

4.2 Standalone Application Updating

4.2.1   The standalone application checks with a remote server for an application update each time the application is run.

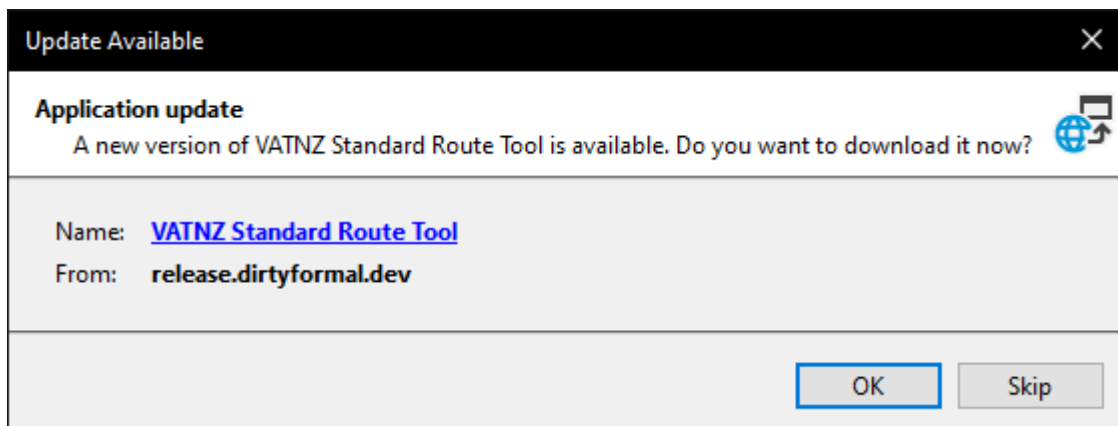4.2.2   If an update is available, you will be prompted with the following window:

Figure 2 – The update prompt.

4.2.3   Depending on your Windows Security settings, you may be given a prompt that "Windows protected your PC". This is normal and is due to the application not being signed by developers. This is the expected behaviour. Click 'Run Anyway'.

a.   If you are concerned about the content of the application, the code is open source, and available on the VATNZ Github page.

5. Using the Tool

5.1 Entering Data

5.1.1   The user can input data into the Route Designator, Routing, From or To boxes.

5.1.2   If the data in the Route Designator or Routing entry fields match an entry in the included data, the data for that Standard Route will be displayed.

  a.   For Route Designators, it **must** match the *XXYYZ* format. Where *XX* is the departure aerodrome, *YY* is the arrival aerodrome, and Z is the number of the route.

  b.   For the Routing Input, the Tool does not include the entry and exit points to the initial and final airways. However, you'll see that the first waypoint is *KARRL*, which is a common Auckland SID transition.

5.1.3   The Tool can also accept a departure and destination aerodrome, which will then display all standard routes between those two aerodromes. You can select white standard route to display by clicking the entry below the From/To input fields.

5.1.4   The Tool will also populate the Remarks box with any applicable comments for that route.

5.2 Copying Data

5.2.1   The output text underneath the Route Designator and Routing Input fields can be clicked on to copy the text to your computer's clipboard. Any remarks that are displayed can also be copied to the clipboard through the same method.
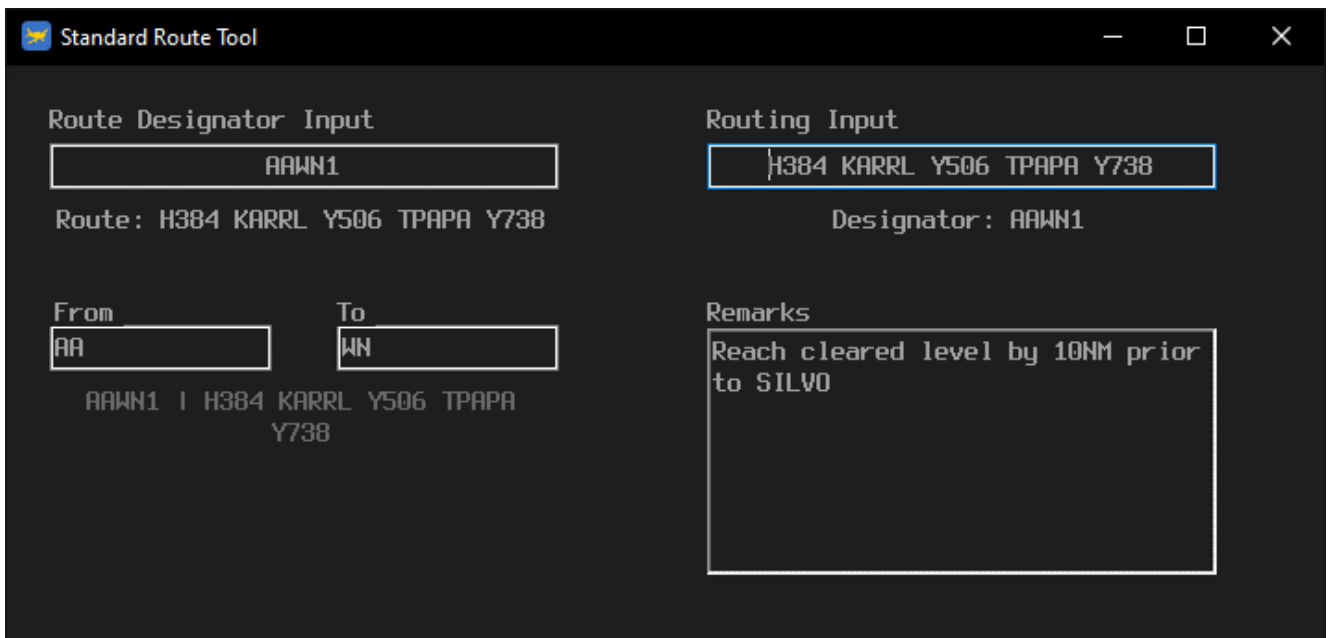

Figure 2 – The Standard Route Tool interface

6. Maintaining the Tool

6.1.1   The Operations Team is responsible for the ongoing maintenance and management of the Standard Route Tool.

6.1.2   All the source code can be found in the dev branch of the *vatSys-SRC-Reader* repository. Link.

6.1.3   On opening, the Tool makes a single call to the *Routes.xml* file found within the *Routes* folder of the development repository.

    a.   If the *CycleVersion* on the GitHub is higher than the locally stored data, the GitHub file is downloaded and saved into the local data directory of the Tool.

    b.   If the *CycleVersion* is the same, or lower than the locally stored data, then no action is taken.

6.1.4   Updates to Standard Routes are advertised in the AIP Bulletin released monthly by Airways.

    a.   When changes to *Routes.xml* are made, care should be taken to follow the pre-existing XML data structure.

    b.   Standard routes are not always found in the AD 2 – 61.1 (or .2) for that Aerodrome. Small aerodromes that are designated as IFR-VFR may have their routes in their Operational Data (AD 2 – 52.1) or other plates.

6.1.5   Any questions regarding the development of the application can be directed to the Operations Team.