THALES

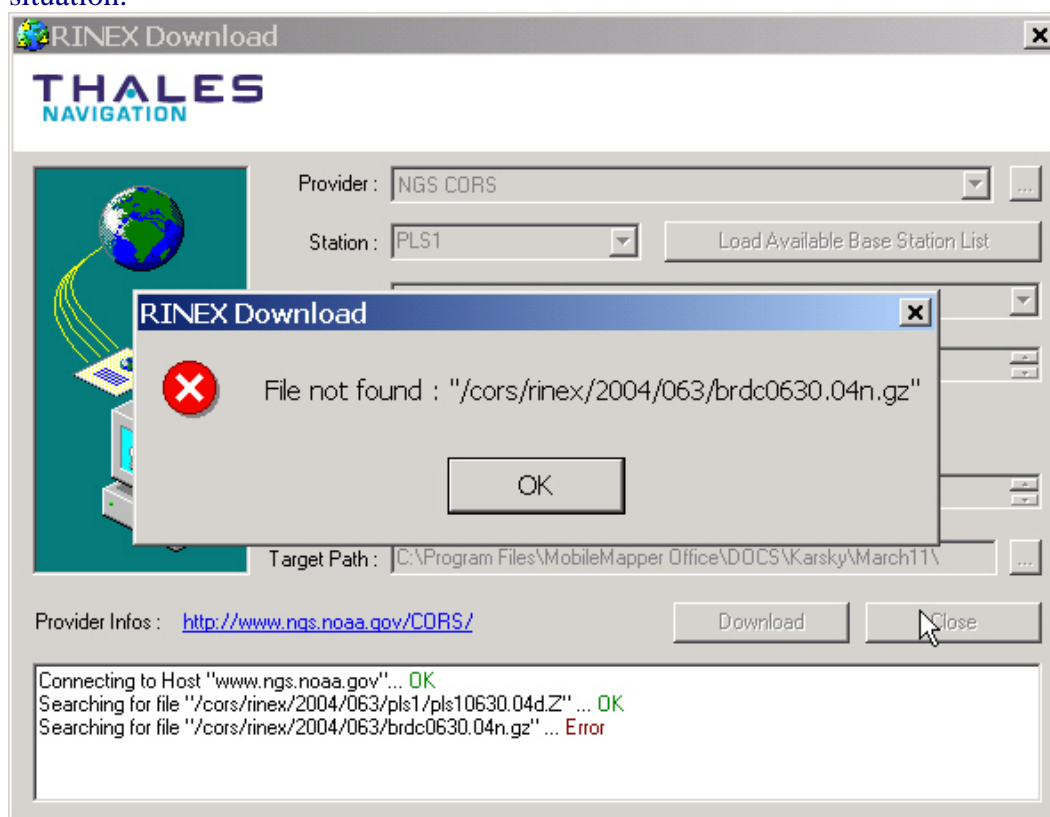
GNSS Studio Tech Note:
Editing the NGS CORS Download Parameters

If you attempt to automatically download NGS CORS data using GNSS Studio and see an error message saying the RINEX download module cannot find the navigation file, this tech note will tell you how you can edit the download parameters to correct the situation.
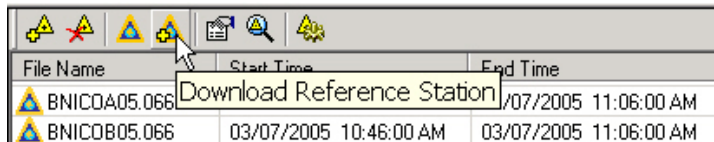

Background

GNSS Studio automatically downloads RINEX data for post-processed differential correction. There are two types of file that are required: observation, or "o" files and navigation, or "n" files. Continuously Operating Reference Station networks typically compress these files using one type of compression technology, but some, like the US National Geodetic Service (NGS), use two different types of file compression programs. The NGS publishes observation files with a .Z file extension and navigation files with a .gz file extension.

GNSS Studio can read and uncompress both types of files automatically by referring to a pre-set list of site and filename parameters. It looks on the NGS ftp site for observation files with the .Z extension and then downloads navigation files with the .gz extension. However, the NGS has recently recompressed some navigation files so that they also are listed on the CORS ftp site with a .Z extension. This prevents GNSS Studio from automatically downloading these files and so prevents automatic differential correction.
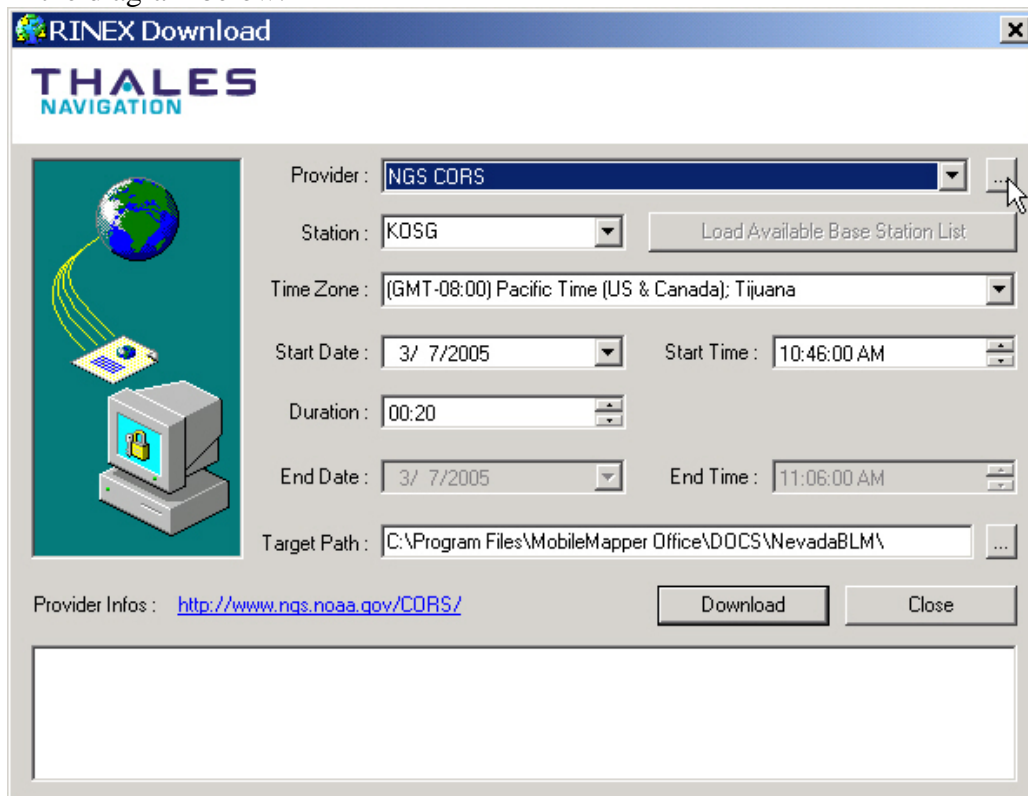
GNSS Studio's differential correction software allows you to edit the download parameters for the various supported providers of CORS data and to create new providers. This tech note tells you how to create a new CORS network called NGS CORS II so you can automatically download the newly recompressed navigation files.
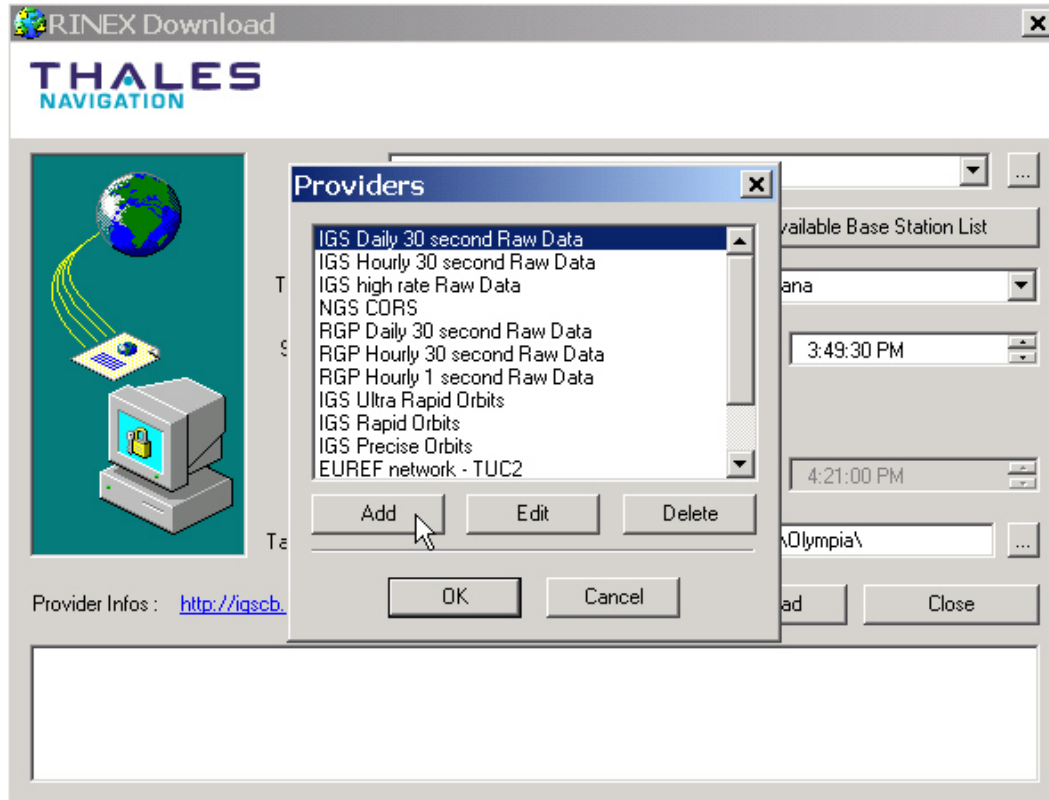
Creating a new CORS data provider
1. Click on the Download Reference Station icon on the Differential Correction tool bar.

2. On the RINEX Download window, click on the small tab with three dots in it as seen in the diagram below.

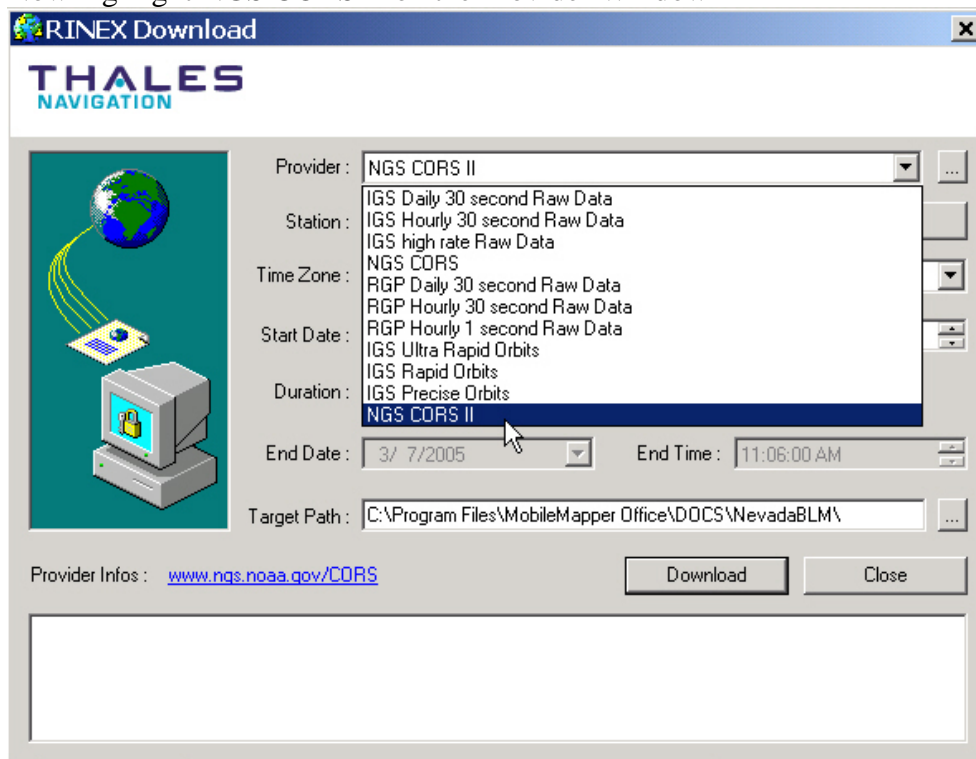3. On the Providers selection window click on the Add button.

4. Fill out the Provider Properties window with the information in the diagram below and click OK. *Note: the letters are case sensitive.* This information is nearly identical to that shown on the NGS CORS Provider Properties window. An alternative is to edit the NGS CORS parameters by replacing the .gz at the end of the NAV Files field with a .Z. When the window looks like the diagram below, click OK.
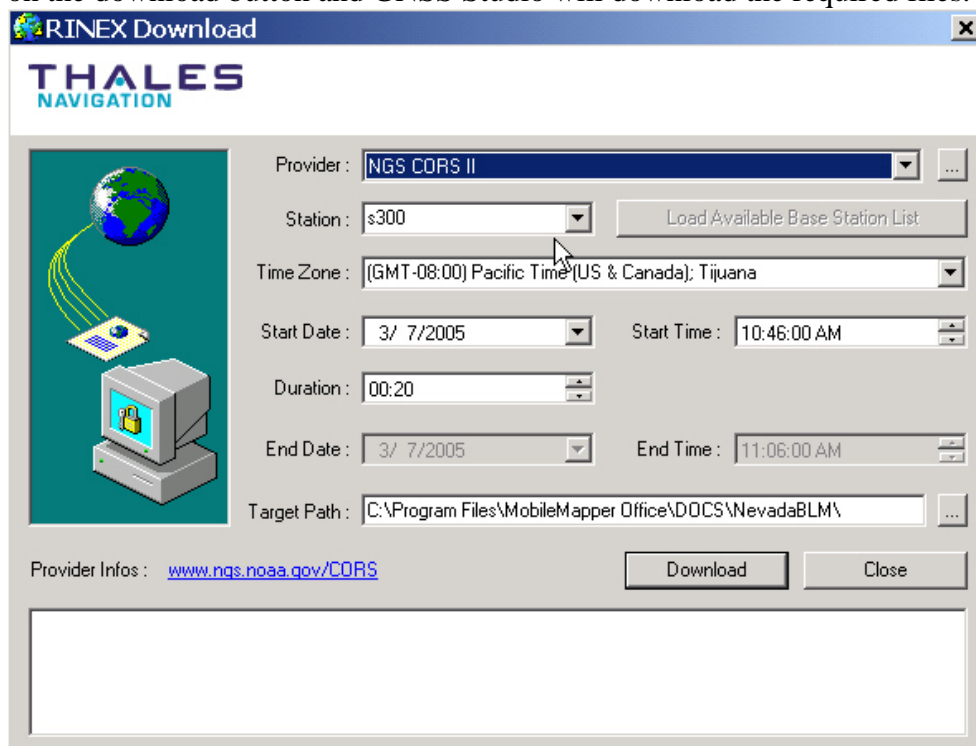
5. Now highlight NGS CORS II on the Provider Window

6. After you fill out the Provider info dialog box, click on OK. Then you must also type in the station name on the RINEX Download page (see below). You can then click on the download button and GNSS Studio will download the required files.

7. You can also click on the Show CORS icon and double-click on the name of the reference station you wish to use, as in this case S300.
8. In the future if you try using NGS CORS or NGS CORS II as the RINEX data "Provider" and it does not work, click on the other Provider and it should work

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