

RIS Demo: Using the GitHub repository

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Abstract

This document is intended to serve as a guide for using the GitHub repository containing the codes for the RIS detection demo.

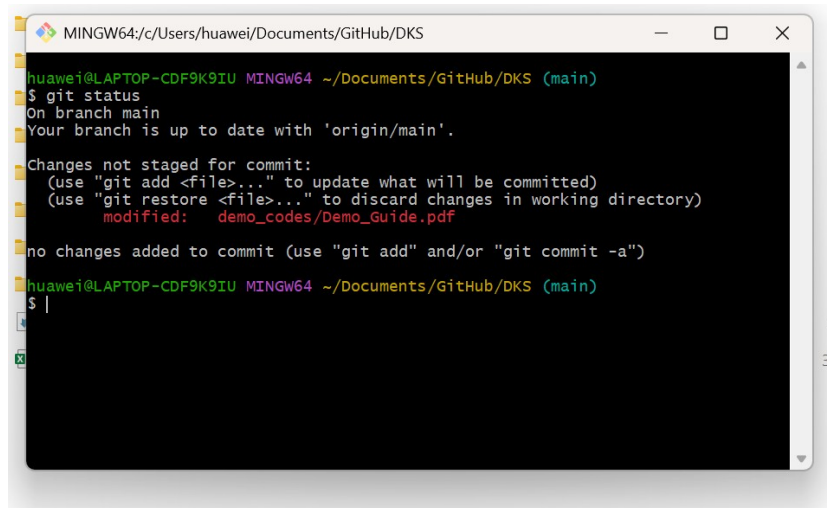
1 Step by step: How to use it

The first thing to do is to make sure that the repository is cloned in the device. If it's the desktop PC used at the office, that one already has a clone of the repository (you will find the DKS folder there). If another PC is intended to be used, and the repository was never cloned before, it has to be now. This is what to do in that one case:

- ◇ If the PC doesn't have Git installed, install it. You can do it [here](#), or simply google "git download" and open the first option.
- ◇ Open any folder (documents, desktop, etc), press the right click and search for "Open Git Bash here" and select it. If it doesn't appear immediately, look for "Show more options" and click on it. It might appear now. After that, a console window must have appeared.
- ◇ Write the command `git clone https://github.com/lauravmorenoc/DKS` and press enter. It might ask you to log in to your GitHub account, do so if needed.
- ◇ That's it. A folder named DKS has to have appeared, which contains all the repository files.

Once we know that the repository is there, we need to have the latest changes. To do so, open the DKS folder and open the Git Bash from there (right click → Open Git Bash here, or right click → Show more options → Open Git Bash here). Type the command `git status` and press enter. There will be two possible outcomes:

- ◇ You made local changes and will see some uncommitted changes like in figure 1. In case you want to keep this changes (you made some important work there that you don't wanna lose), I'd suggest you copy the whole DKS folder and paste it somewhere else to avoid merging problems. After that, write the command `git reset --hard`, which will delete the local changes.

A terminal window titled 'MINGW64:/c/Users/huawei/Documents/GitHub/DKS' showing the output of the 'git status' command. The output indicates that the branch 'main' is up to date with 'origin/main', but there are uncommitted changes to the file 'demo_codes/Demo_Guide.pdf'. The terminal text is as follows:

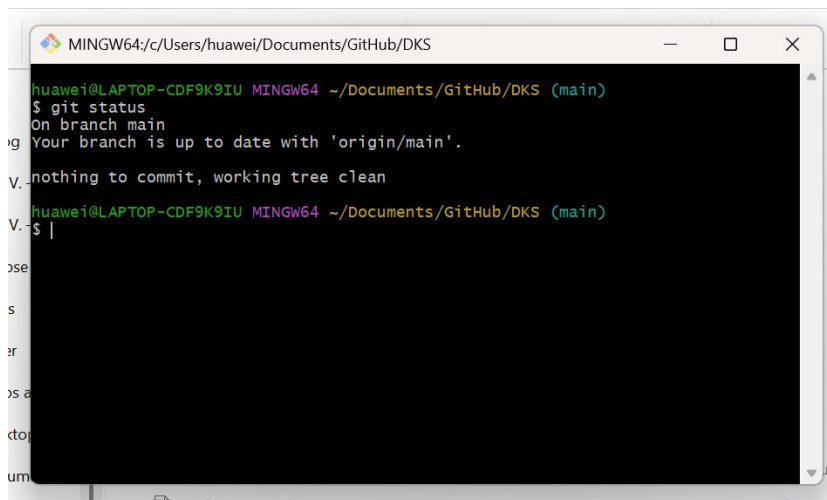
```
huawei@LAPTOP-CDF9K9IU MINGW64 ~/Documents/GitHub/DKS (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
    modified:   demo_codes/Demo_Guide.pdf

no changes added to commit (use "git add" and/or "git commit -a")
huawei@LAPTOP-CDF9K9IU MINGW64 ~/Documents/GitHub/DKS (main)
$ |
```

Figure 1: Uncommitted local changes

- ◇ There are no local changes so you will see something like in figure 2. In this case, nothing has to be done.

A terminal window titled 'MINGW64:/c/Users/huawei/Documents/GitHub/DKS' showing the output of the 'git status' command. The output indicates that the branch 'main' is up to date with 'origin/main' and that the working tree is clean, with nothing to commit. The terminal text is as follows:

```
huawei@LAPTOP-CDF9K9IU MINGW64 ~/Documents/GitHub/DKS (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean
huawei@LAPTOP-CDF9K9IU MINGW64 ~/Documents/GitHub/DKS (main)
$ |
```

Figure 2: No local changes

Once this was solved, the next step is to pull all changes to the local repository (local DKS folder). For this, write the command `git pull`. If the repo was already up to date, you'll see this message on the console. If not, it will start downloading and applying all changes to the local files. You'll notice when it stops. After that, you can close the Git Bash and use all files freely :D.

Final Hint

The codes needed for the demo are in the folder "demo_codes", which you will see as soon as you open the DKS folder like in fig. 3.

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| GNU_Radio | 5/10/2025 7:27 PM | Dateiordner | |
| Matlab_freq_offset | 3/31/2025 9:17 PM | Dateiordner | |
| Media | 5/11/2025 1:45 PM | Dateiordner | |
| phase_offset | 4/18/2025 10:03 AM | Dateiordner | |
| Python | 3/31/2025 9:17 PM | Dateiordner | |
| RIS | 5/10/2025 7:30 PM | Dateiordner | |
| README.md | 1/19/2025 6:43 PM | Markdown-Quelldatei | 3 KB |
| WorkingHours.xlsx | 5/11/2025 1:09 PM | Microsoft Excel-Arbei... | 37 KB |

Figure 3: Demo codes location