



WiSense Source Code Installation Guide

The WiSense platform source code is hosted on bitbucket.org. You can download the latest snapshot at any time but you do not have permission to upload any changes to the repositories.

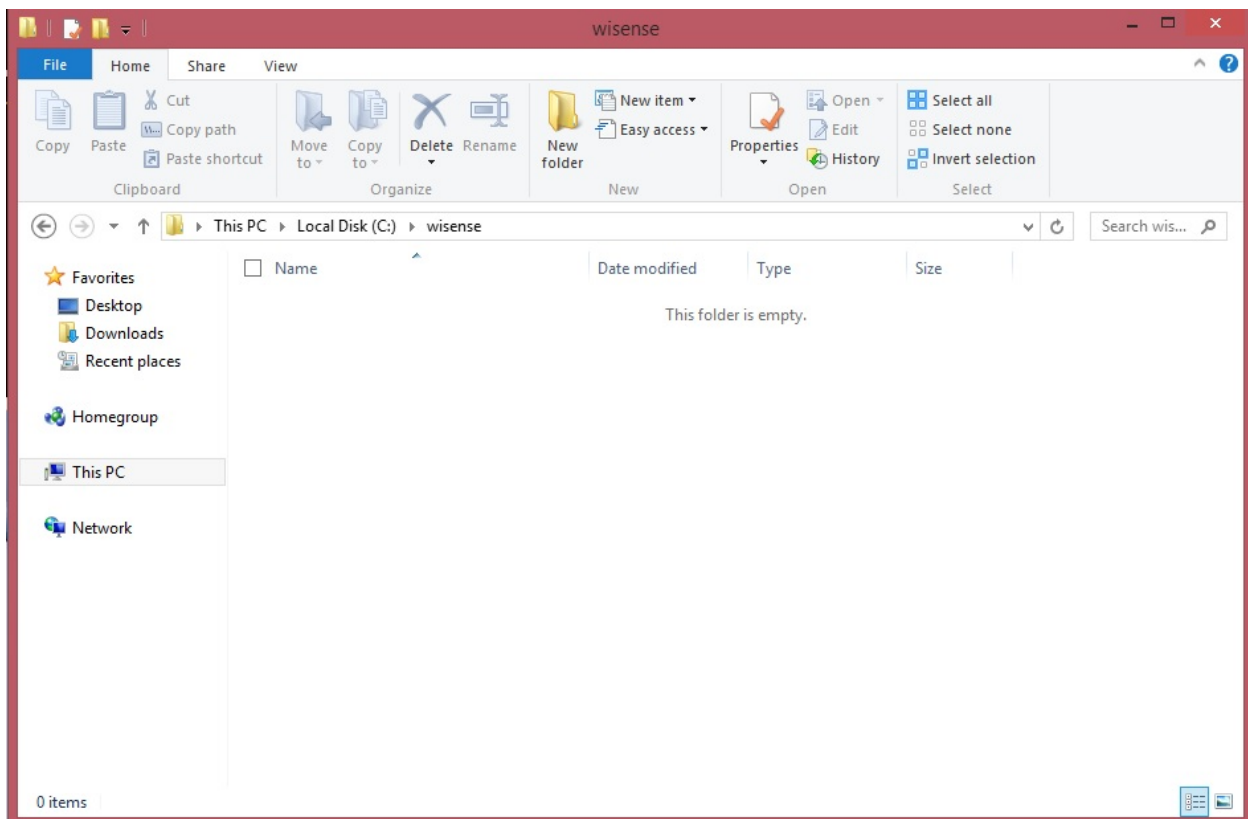
You need to download three different repositories.

- **lpwmn_code**
Location: https://bitbucket.org/rkriskros/lpwmn_code
This repository contains all the code (firmware) which will run on a WiSense node.
- **gateway**
Location: <https://bitbucket.org/rkriskros/gateway>
This repository contains the code for a “gateway” application which will run on a Linux system or under Cygwin/Windows. This app is used to communicate with a WiSense network coordinator node over a serial connection (including serial over USB).
- **sniffer_ui**
Location: https://bitbucket.org/rkriskros/sniffer_ui
This repository contains the user interface for a network sniffer. You can use this to monitor a WiSense network. You need to build a corresponding sniffer firmware image and load it on to a WiSense

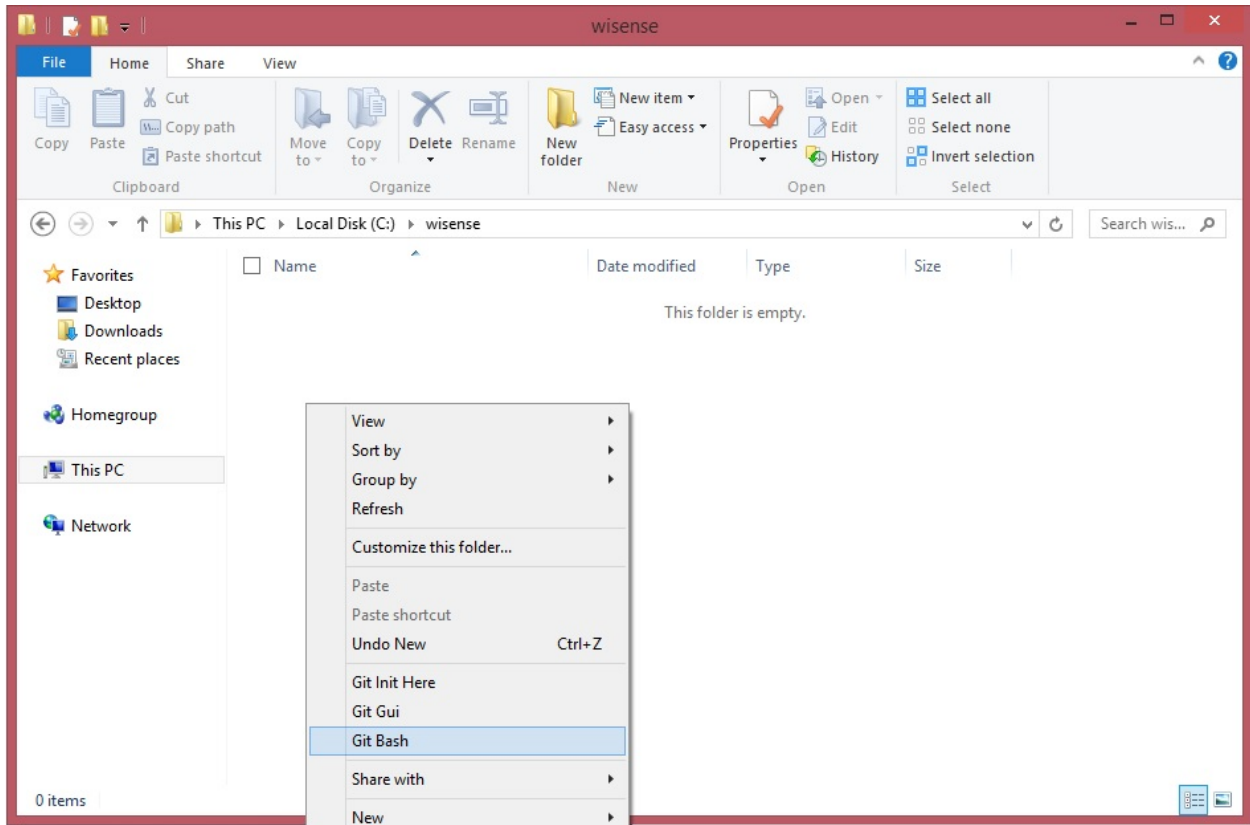
node. Connect this node to your system through USB and run this “sniffer_ui” application.

Please follow the steps listed below to install the node firmware source code on your Windows system.

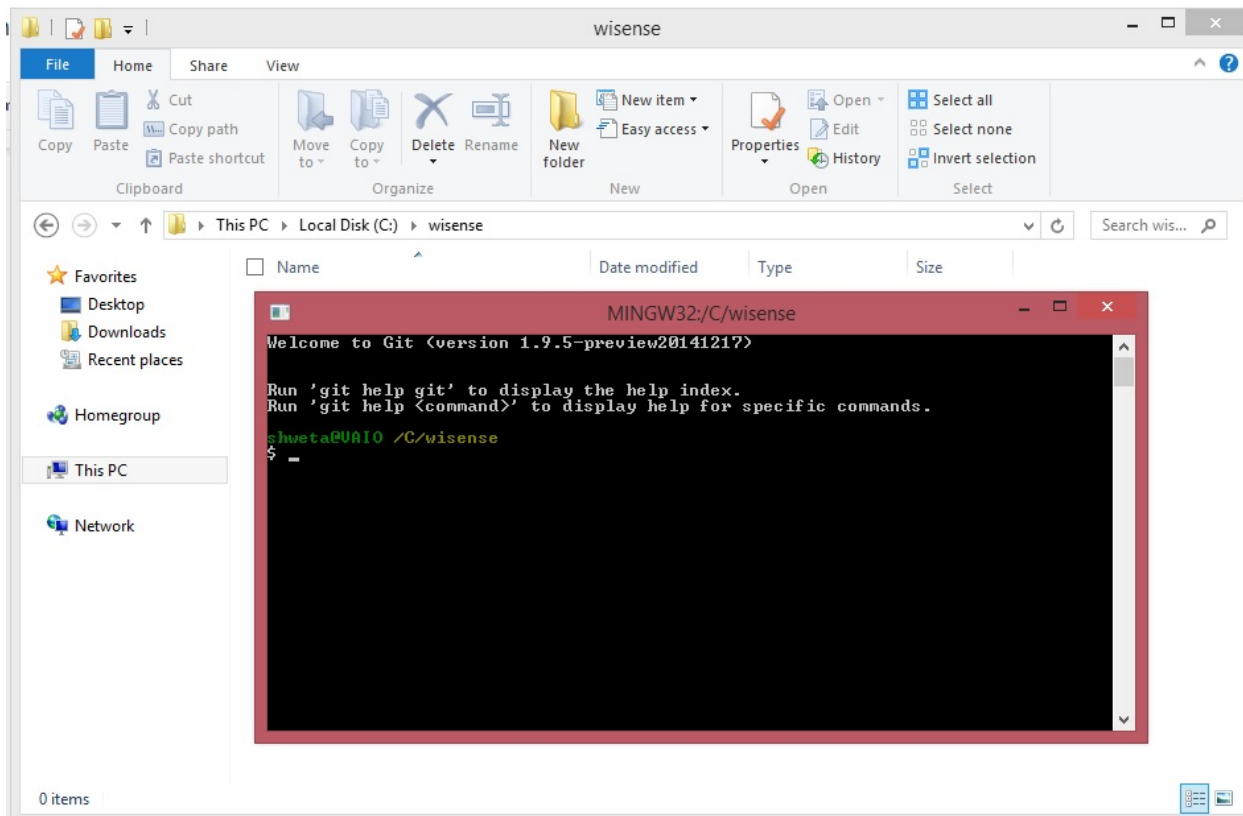
- Go to [“https://confluence.atlassian.com/display/BITBUCKET/Set+up+Git”](https://confluence.atlassian.com/display/BITBUCKET/Set+up+Git) and follow the steps listed there to install “Git”.
- Select a folder on your system where you would like to install the source code. For example, let us install the code in “c:\wisense”. Create this folder if it does not exist. Use windows explorer to open this directory.



- Right click within this folder and select “git bash” from the pull down menu.



This will open the Git Bash window (shown below).

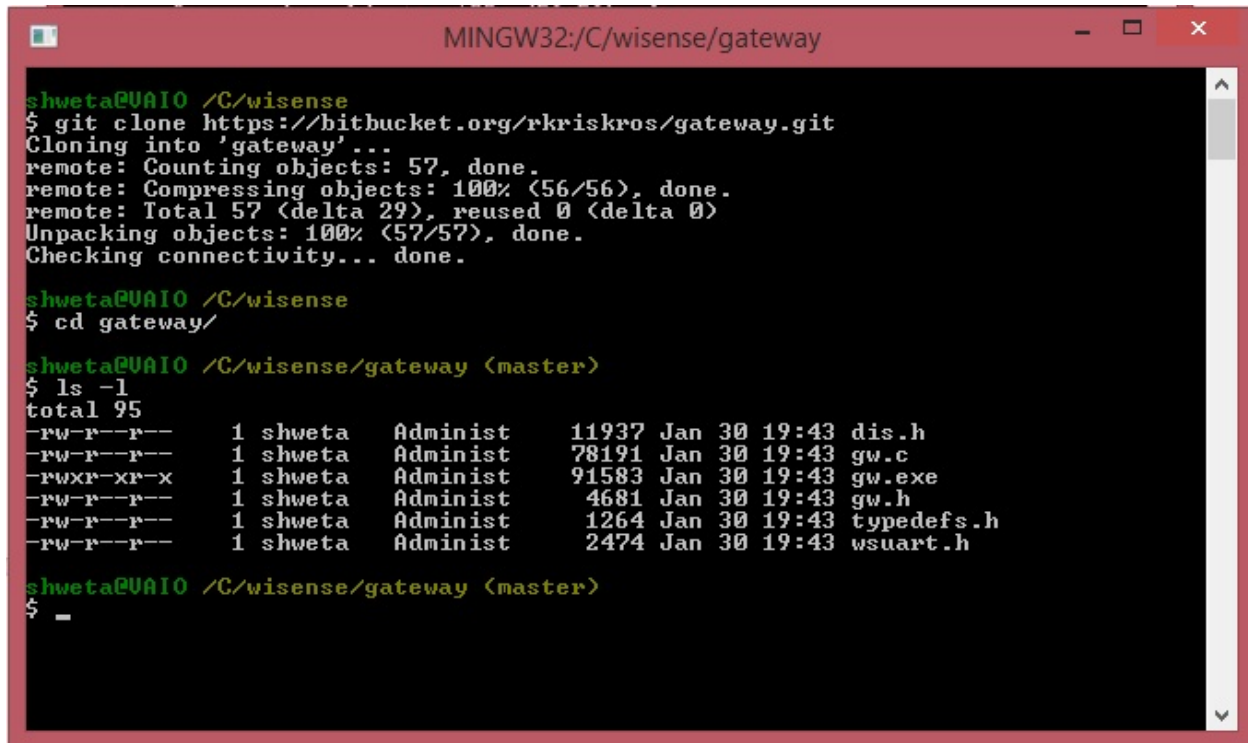


- Type the command (shown below) to download the source code from the repository at bitbucket.org.

```
$ git clone https://bitbucket.org/rkriskros/lpwmn_code.git
Cloning into 'lpwmn_code'...
remote: Counting objects: 8466, done.
remote: Compressing objects: 100% (3636/3636), done.
remote: Total 8466 (delta 4100), reused 6855 (delta 2917)
Receiving objects: 100% (8466/8466), 19.60 MiB | 634.00 KiB/s, done.
Resolving deltas: 100% (4100/4100), done.
Checking connectivity... done.
Checking out files: 100% (218/218), done.
```

The WiSense node firmware source code is now installed on your system under “c:\wisense\lpwmn_code”.

- To download the “gateway” repository code, run the command shown below (in the same directory).



```
MINGW32:/C/wisense/gateway

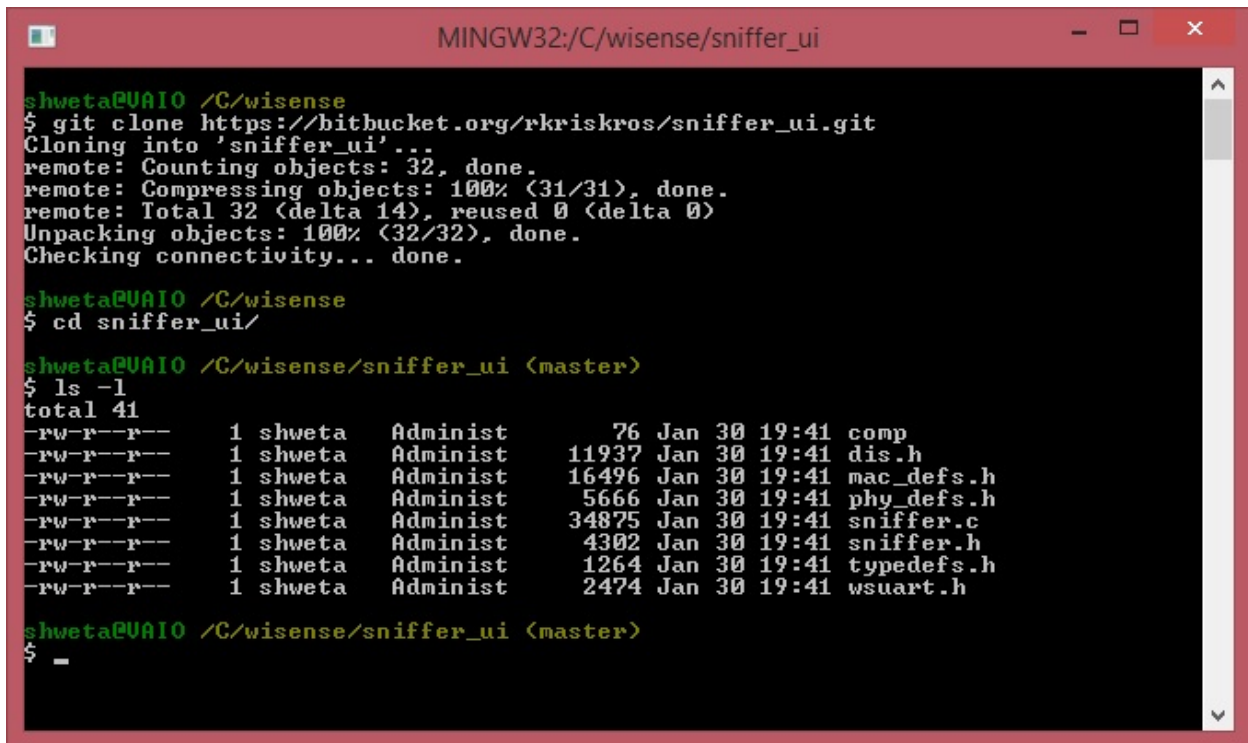
shweta@VAIO /C/wisense
$ git clone https://bitbucket.org/rkriskros/gateway.git
Cloning into 'gateway'...
remote: Counting objects: 57, done.
remote: Compressing objects: 100% (56/56), done.
remote: Total 57 (delta 29), reused 0 (delta 0)
Unpacking objects: 100% (57/57), done.
Checking connectivity... done.

shweta@VAIO /C/wisense
$ cd gateway/

shweta@VAIO /C/wisense/gateway (master)
$ ls -l
total 95
-rw-r--r--  1 shweta  Administ  11937 Jan 30 19:43 dis.h
-rw-r--r--  1 shweta  Administ  78191 Jan 30 19:43 gw.c
-rwxr-xr-x  1 shweta  Administ  91583 Jan 30 19:43 gw.exe
-rw-r--r--  1 shweta  Administ  4681  Jan 30 19:43 gw.h
-rw-r--r--  1 shweta  Administ  1264  Jan 30 19:43 typedefs.h
-rw-r--r--  1 shweta  Administ  2474  Jan 30 19:43 wsuart.h

shweta@VAIO /C/wisense/gateway (master)
$
```

- To download the “sniffer_ui” repository code, run the command shown below (in the same directory).



```
MINGW32:/C:/wisense/sniffer_ui

shweta@UAIO /C:/wisense
$ git clone https://bitbucket.org/rkriskros/sniffer_ui.git
Cloning into 'sniffer_ui'...
remote: Counting objects: 32, done.
remote: Compressing objects: 100% (31/31), done.
remote: Total 32 (delta 14), reused 0 (delta 0)
Unpacking objects: 100% (32/32), done.
Checking connectivity... done.

shweta@UAIO /C:/wisense
$ cd sniffer_ui/

shweta@UAIO /C:/wisense/sniffer_ui <master>
$ ls -l
total 41
-rw-r--r--  1 shweta  Administ  76 Jan 30 19:41 comp
-rw-r--r--  1 shweta  Administ 11937 Jan 30 19:41 dis.h
-rw-r--r--  1 shweta  Administ 16496 Jan 30 19:41 mac_defs.h
-rw-r--r--  1 shweta  Administ  5666 Jan 30 19:41 phy_defs.h
-rw-r--r--  1 shweta  Administ 34875 Jan 30 19:41 sniffer.c
-rw-r--r--  1 shweta  Administ  4302 Jan 30 19:41 sniffer.h
-rw-r--r--  1 shweta  Administ  1264 Jan 30 19:41 typedefs.h
-rw-r--r--  1 shweta  Administ  2474 Jan 30 19:41 wsuart.h

shweta@UAIO /C:/wisense/sniffer_ui <master>
$ =
```