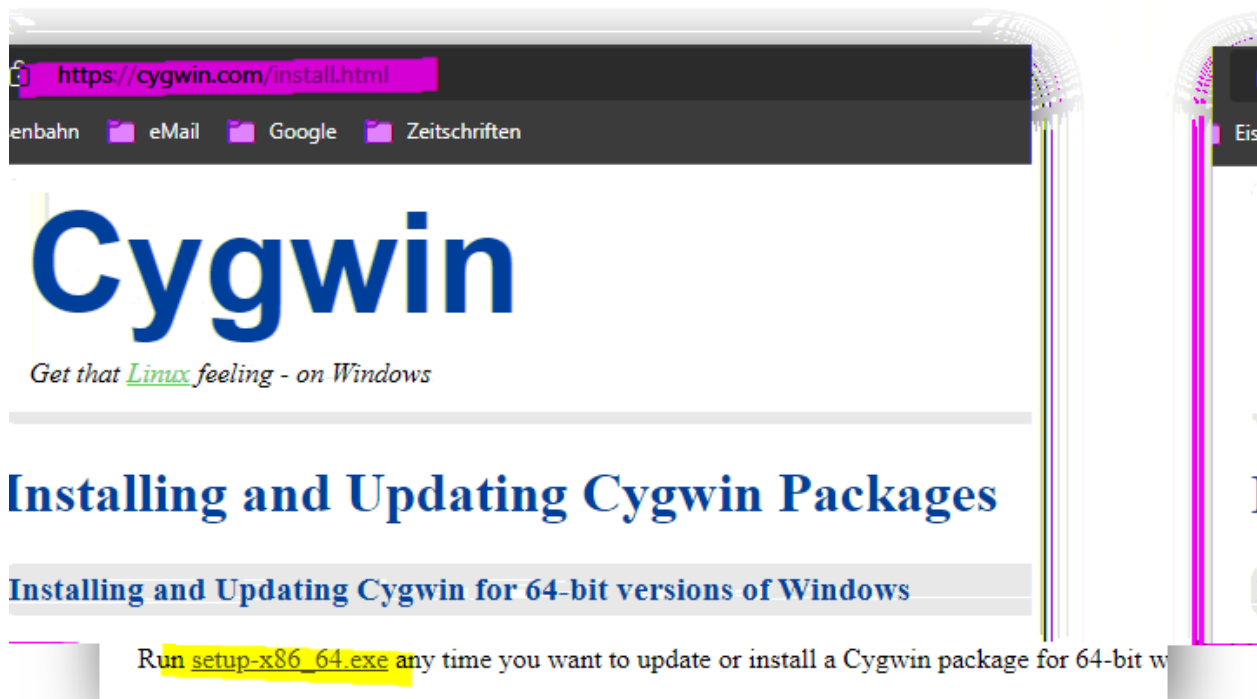


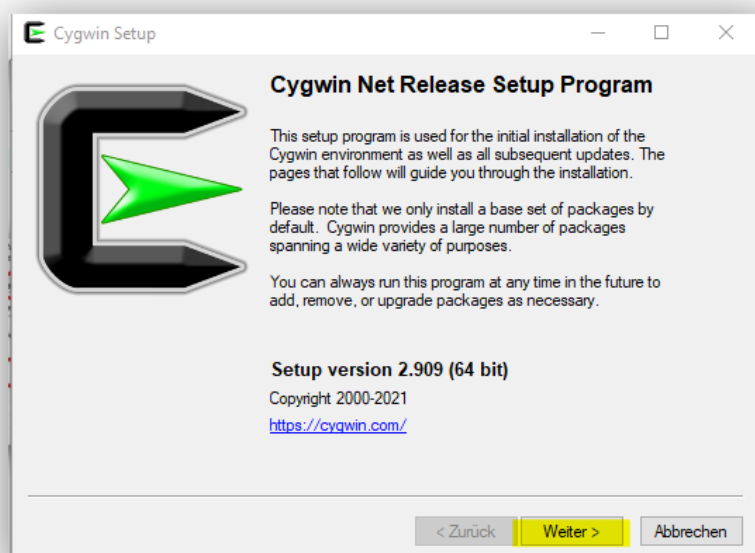
.....	2
.....	2
.....	
.....	
.....	

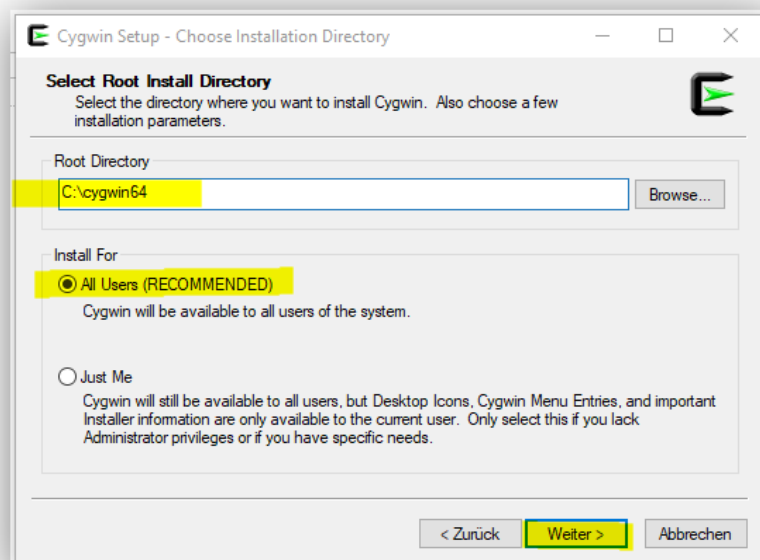
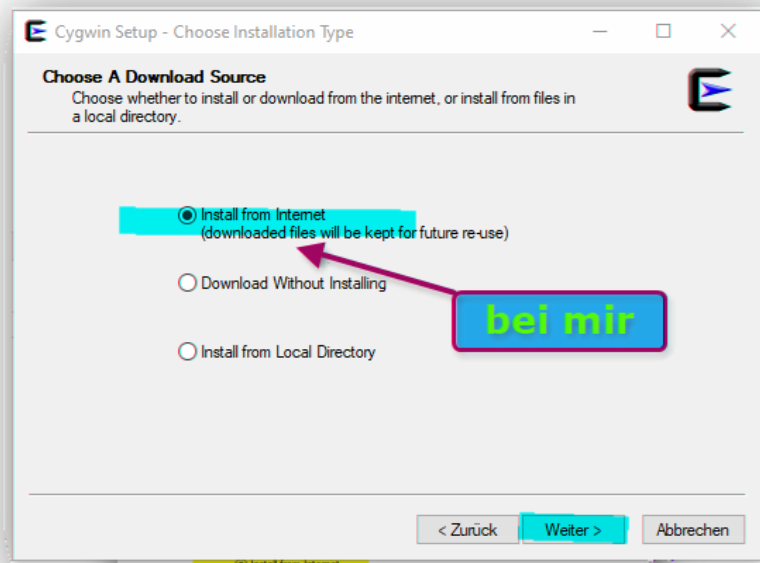
## Cygwin laden

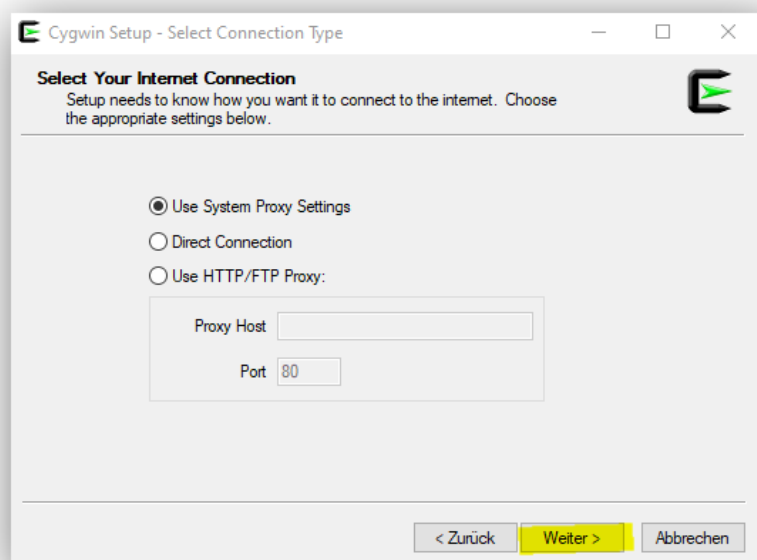
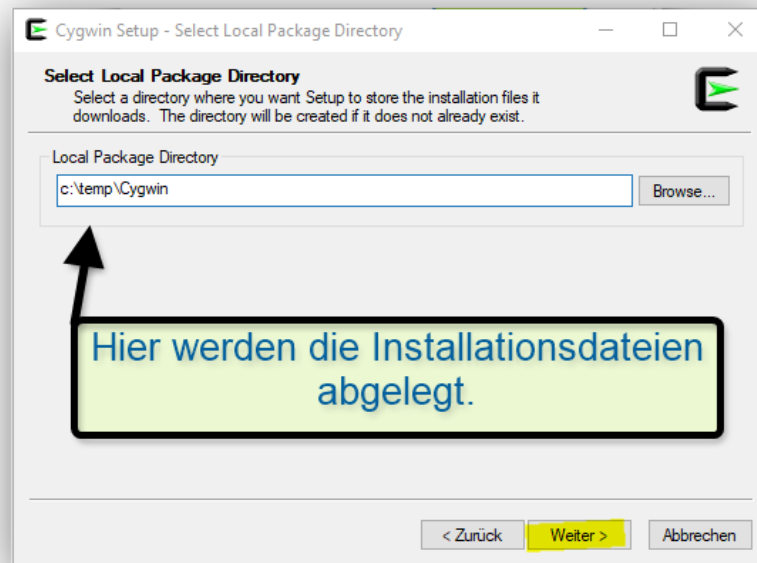
- 

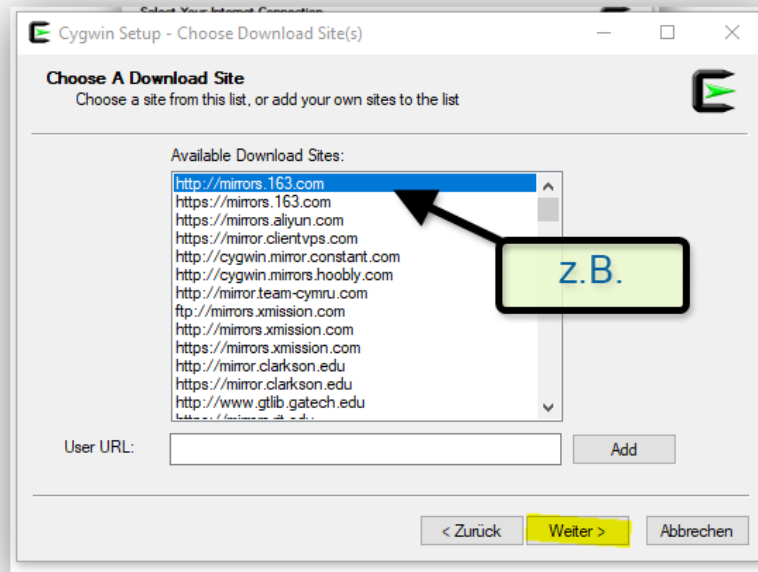


## Cygwin installieren

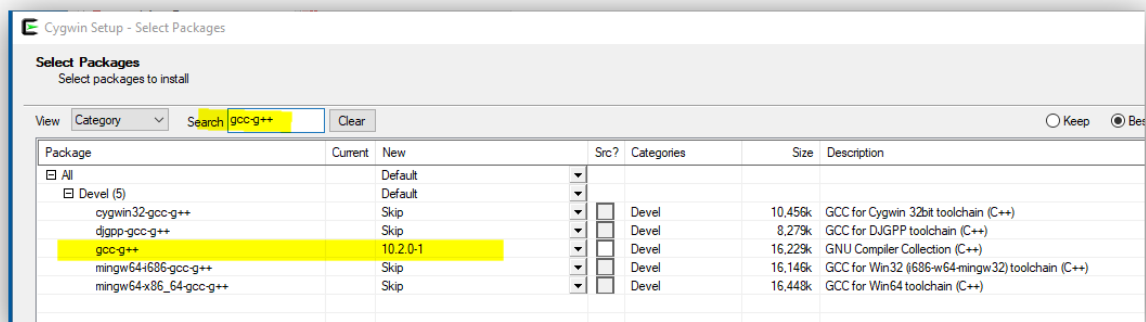
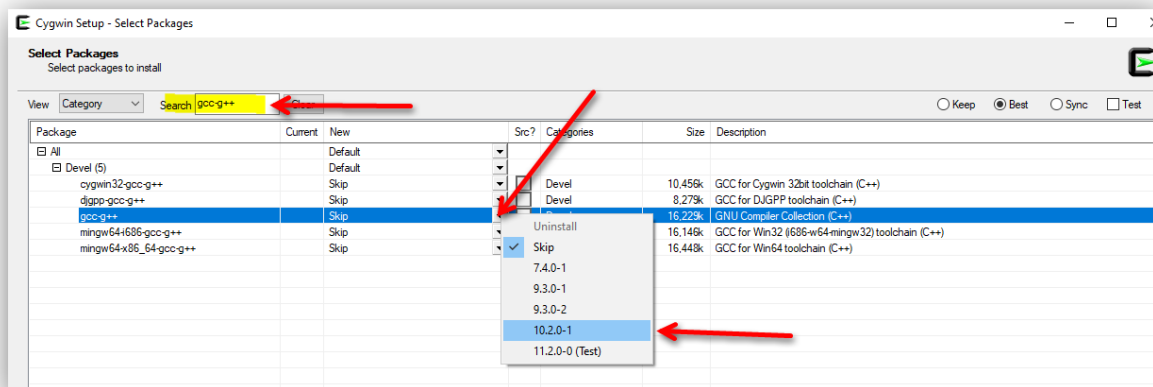




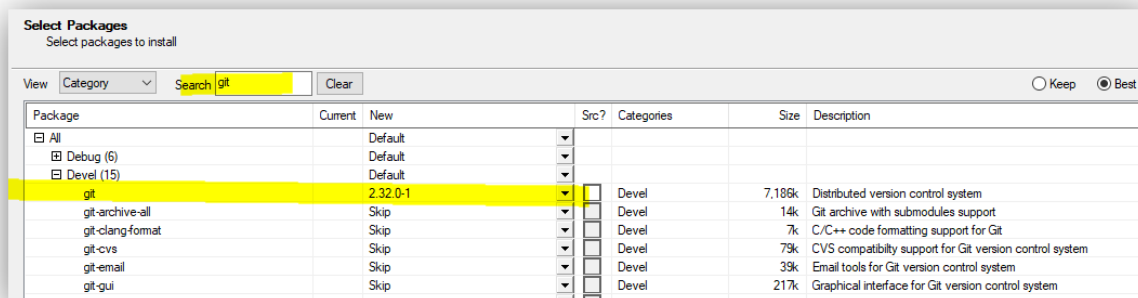
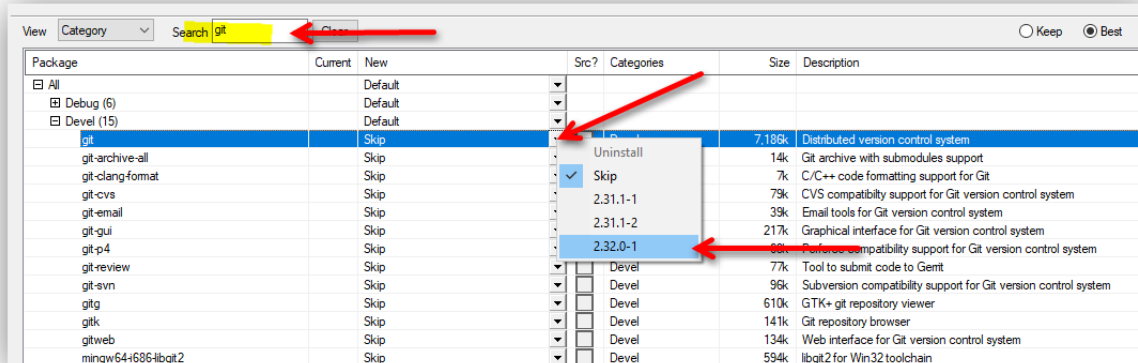




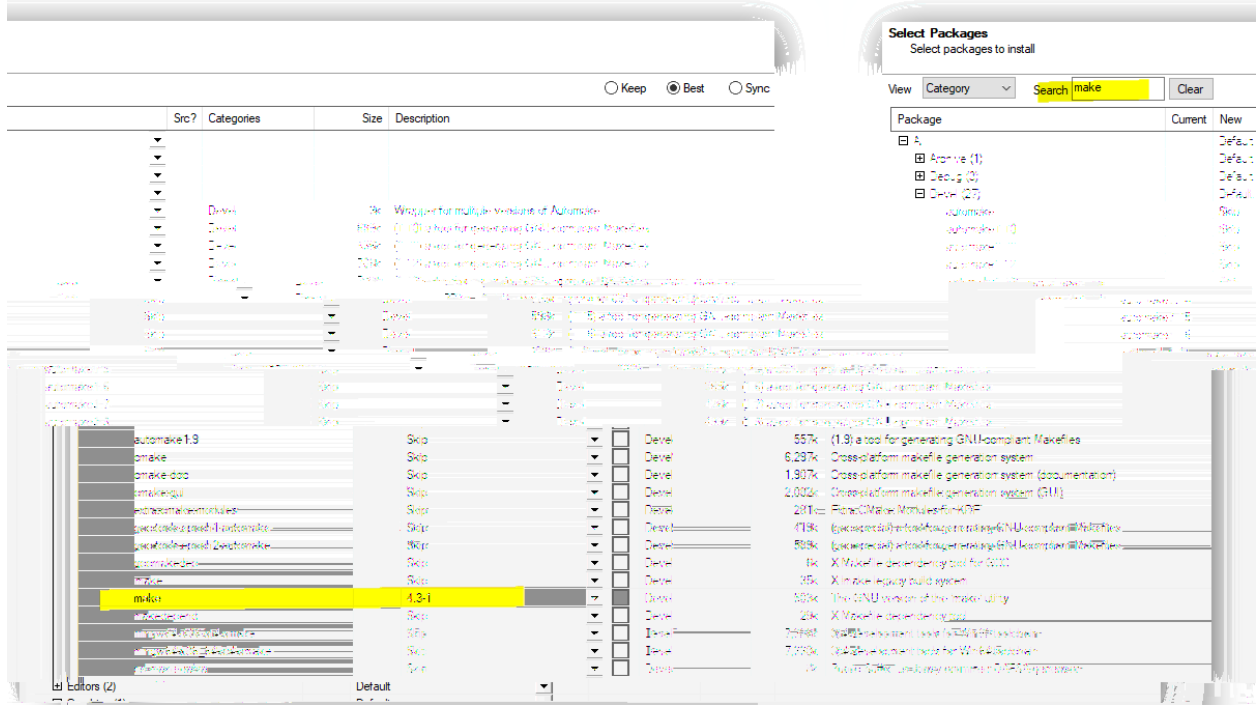
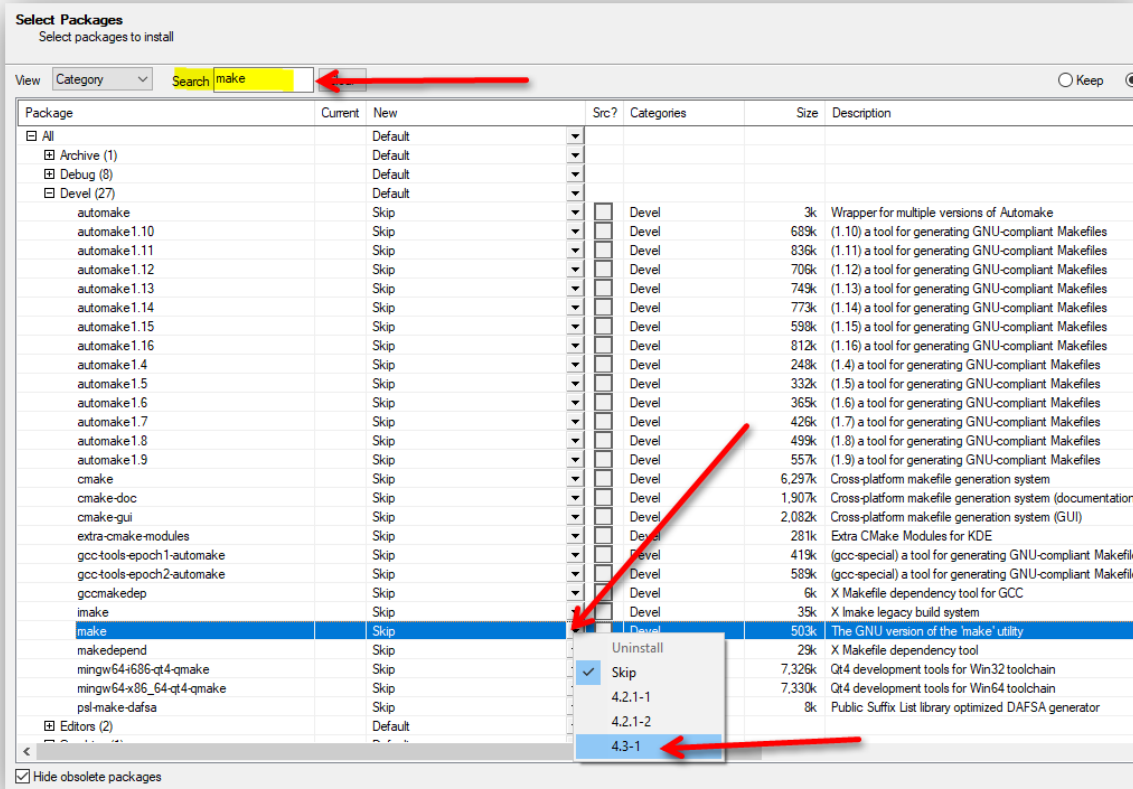
**WICHTIG:** Bei den nächsten Einstellungen nicht die Taste „WEITER“ betätigen. Erst nach dem alles eingestellt wurde.



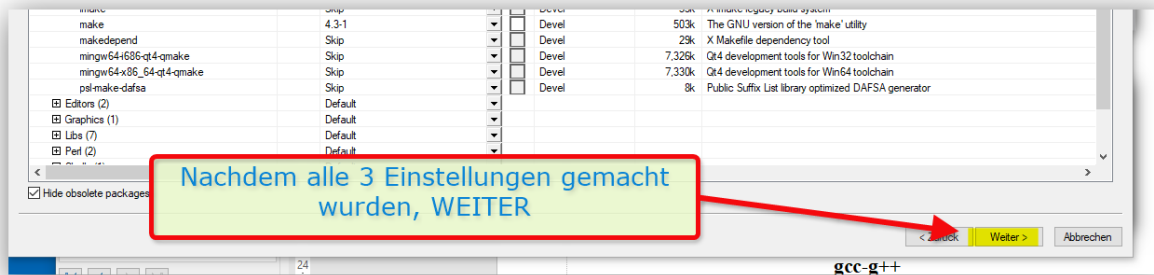
**gcc-g++**



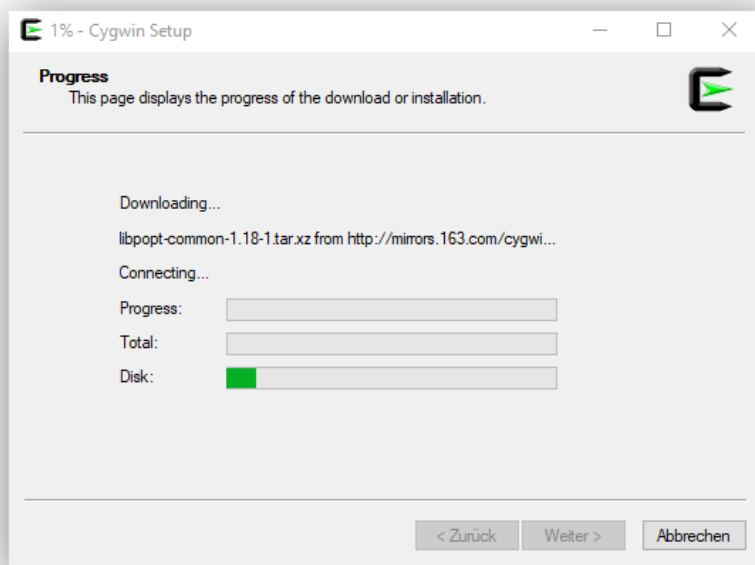
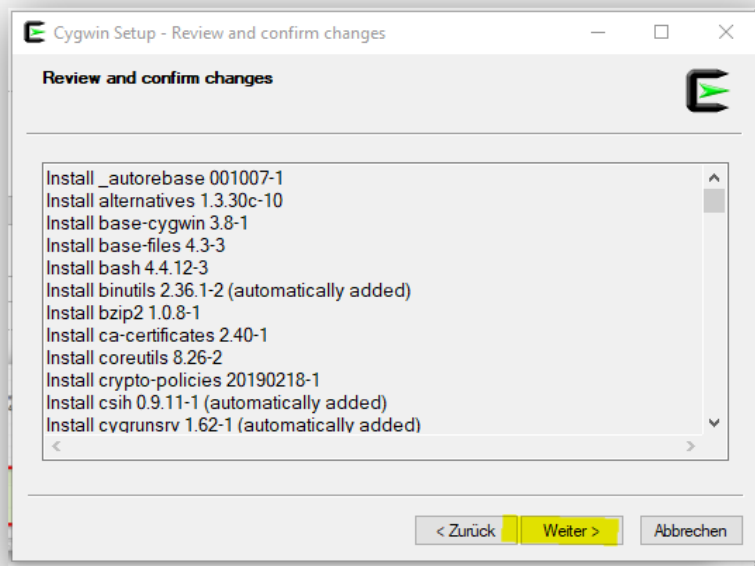
git



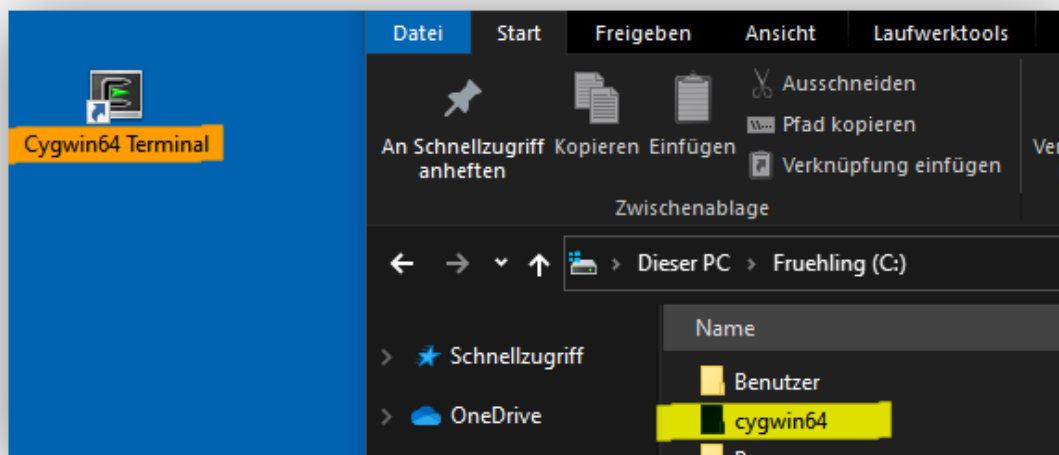
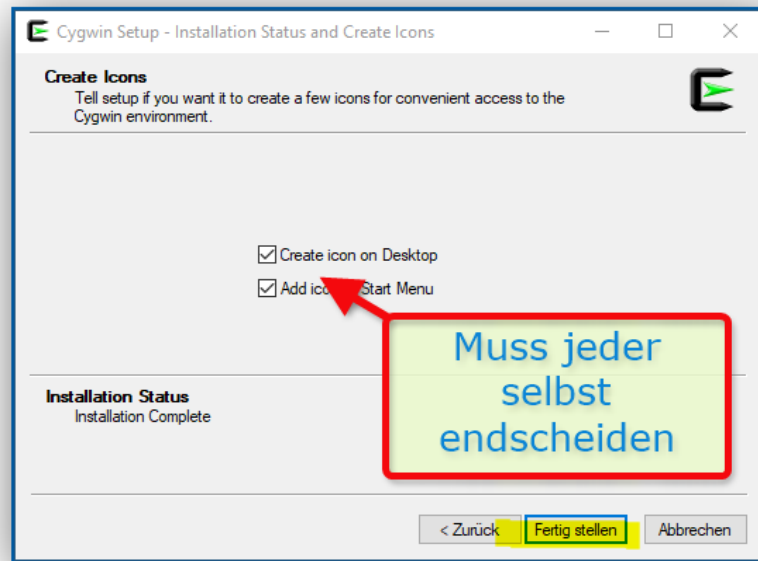
make



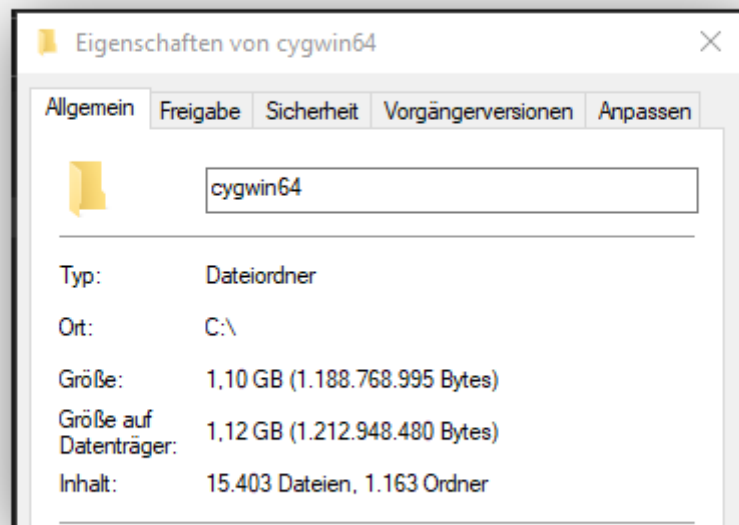
**Jetzt erst mit „WEITER“ die Installation beginnen**





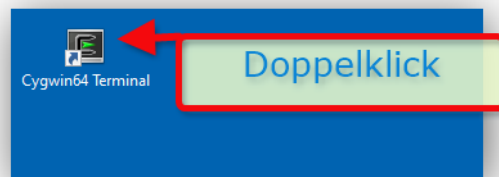


Ergebnis bei mir



### Größe des Installationsverzeichnis

## RailControl installieren und kompilieren



```
~  
Copying skeleton files.  
These files are for the users to personalise their cygwin experience.  
  
They will never be overwritten nor automatically updated.  
  
'./bashrc' -> '/home/Dieter Demessieur//.bashrc'  
'./bash_profile' -> '/home/Dieter Demessieur//.bash_profile'  
'./inputrc' -> '/home/Dieter Demessieur//.inputrc'  
'./profile' -> '/home/Dieter Demessieur//.profile'  
  
Dieter Demessieur@Fruehling ~  
$ |
```

```
files.  
or the users to personalise their cygwin experience.  
  
e overwritten nor automatically updated.  
  
home/Dieter Demessieur//.bashrc'  
-> '/home/Dieter Demessieur//.bash_profile'  
/home/Dieter Demessieur//.inputrc'  
/home/Dieter Demessieur//.profile'  
  
@Fruehling ~  
: //github.com/teddych/railcontrol.git  
  
Copying skeleton  
These files are f  
  
They will never b  
  
'./bashrc' -> '/  
'./bash_profile'  
'./inputrc' -> '  
'./profile' -> '  
  
Dieter Demessieur  
$ git clone https
```

```
git clone https://github.com/teddych/railcontrol.git
```

```
Copying skeleton files.
These files are for the users to personalise their cygwin experience.

They will never be overwritten nor automatically updated.

'./bashrc' -> '/home/Dieter Demessieur//.bashrc'
'./bash_profile' -> '/home/Dieter Demessieur//.bash_profile'
'./inputrc' -> '/home/Dieter Demessieur//.inputrc'
'./profile' -> '/home/Dieter Demessieur//.profile'

Dieter Demessieur@Fruehling ~
$ git clone https://github.com/teddych/railcontrol.git
Cloning into 'railcontrol'...
remote: Enumerating objects: 12880, done.
remote: Counting objects: 100% (1385/1385), done.
remote: Compressing objects: 100% (932/932), done.
remote: Total 12880 (delta 1072), reused 732 (delta 453), pack-reused 11495
Receiving objects: 100% (12880/12880), 13.85 MiB | 2.91 MiB/s, done.
Resolving deltas: 100% (10419/10419), done.

Dieter Demessieur@Fruehling ~
$
```

```
They will never be overwritten nor automatically updated.

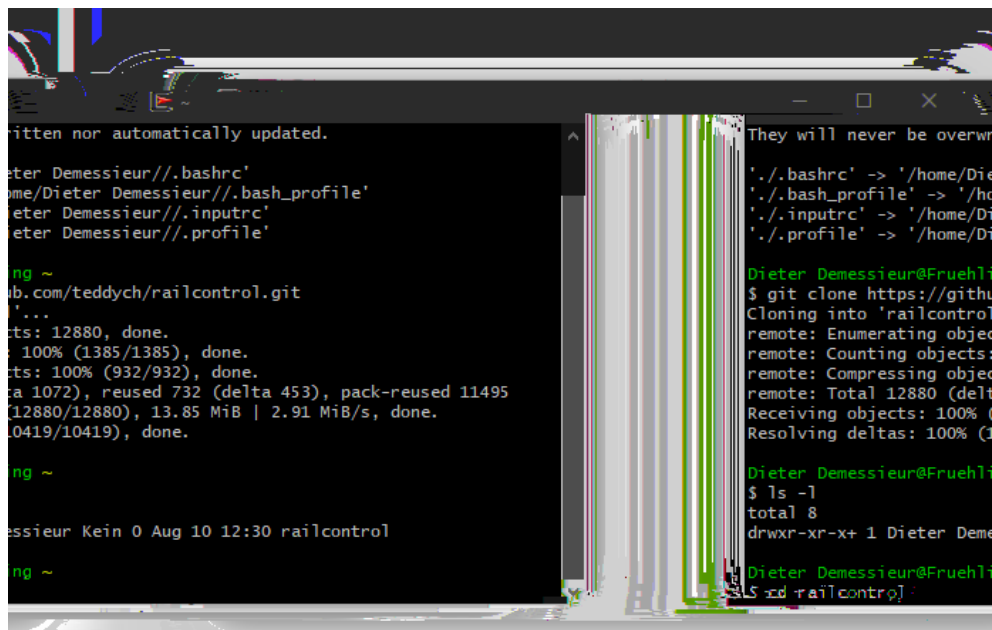
'./bashrc' -> '/home/Dieter Demessieur//.bashrc'
'./bash_profile' -> '/home/Dieter Demessieur//.bash_profile'
'./inputrc' -> '/home/Dieter Demessieur//.inputrc'
'./profile' -> '/home/Dieter Demessieur//.profile'

Dieter Demessieur@Fruehling ~
$ git clone https://github.com/teddych/railcontrol.git
Cloning into 'railcontrol'...
remote: Enumerating objects: 12880, done.
remote: Counting objects: 100% (1385/1385), done.
remote: Compressing objects: 100% (932/932), done.
remote: Total 12880 (delta 1072), reused 732 (delta 453), pack-reused 11495
Receiving objects: 100% (12880/12880), 13.85 MiB | 2.91 MiB/s, done.
Resolving deltas: 100% (10419/10419), done.

Dieter Demessieur@Fruehling ~
$ ls -l
total 8
drwxr-xr-x+ 1 Dieter Demessieur Kein 0 Aug 10 12:30 railcontrol

Dieter Demessieur@Fruehling ~
$
```

Ergebnis: der erzeugte „railcontrol“ Ordner



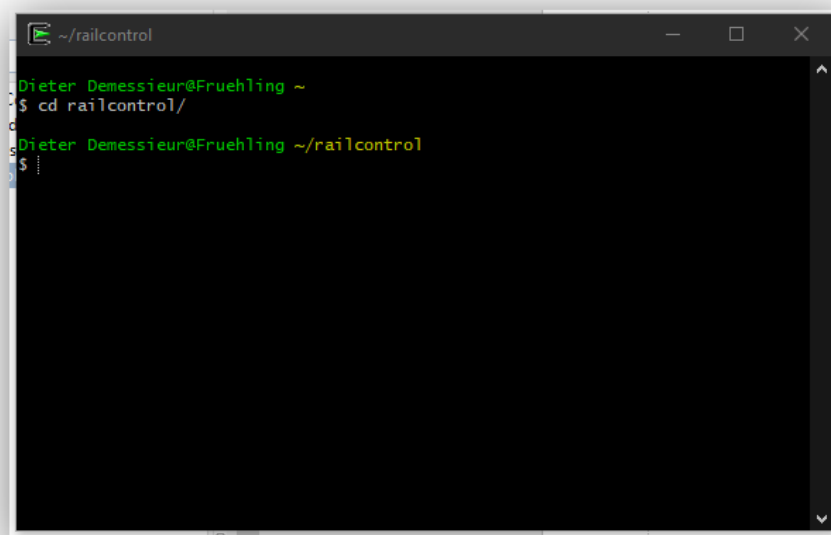
```
Written nor automatically updated.

Dieter Demessieur//.bashrc'
Dieter Demessieur//.bash_profile'
Dieter Demessieur//.inputrc'
Dieter Demessieur//.profile'

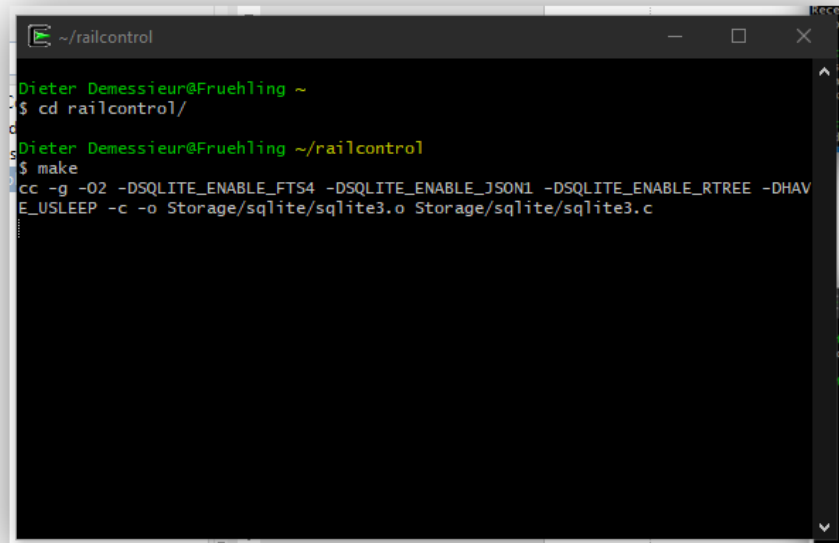
ng ~
git clone https://github.com/teddych/railcontrol.git
...
objects: 12880, done.
100% (1385/1385), done.
objects: 100% (932/932), done.
delta 1072), reused 732 (delta 453), pack-reused 11495
(12880/12880), 13.85 MiB | 2.91 MiB/s, done.
(10419/10419), done.

ng ~
Dieter Demessieur@Fruehling ~
$ ls -l
total 8
drwxr-xr-x+ 1 Dieter Demessieur
$ cd railcontrol/
```

`cd railcontrol`



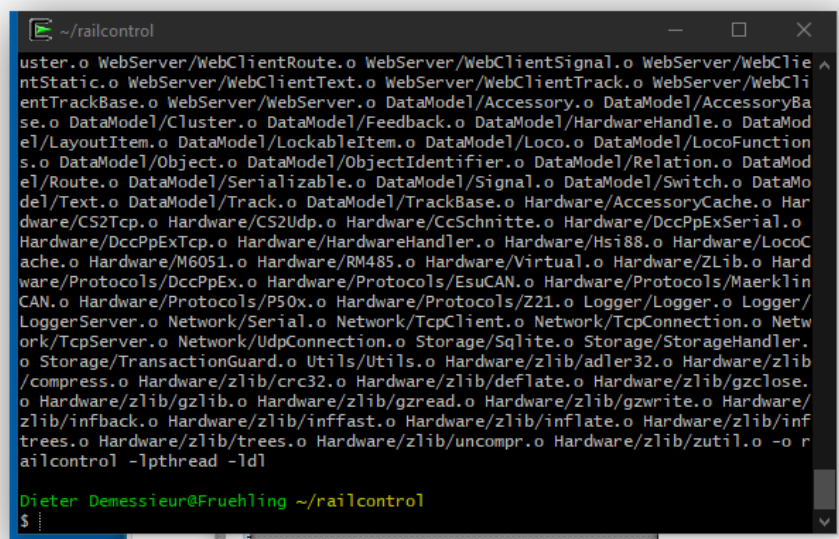
```
~/railcontrol
Dieter Demessieur@Fruehling ~
$ cd railcontrol/
Dieter Demessieur@Fruehling ~/railcontrol
$ ls -l
total 8
drwxr-xr-x+ 1 Dieter Demessieur
```



```
~/railcontrol
Dieter Demessieur@Fruehling ~
$ cd railcontrol/

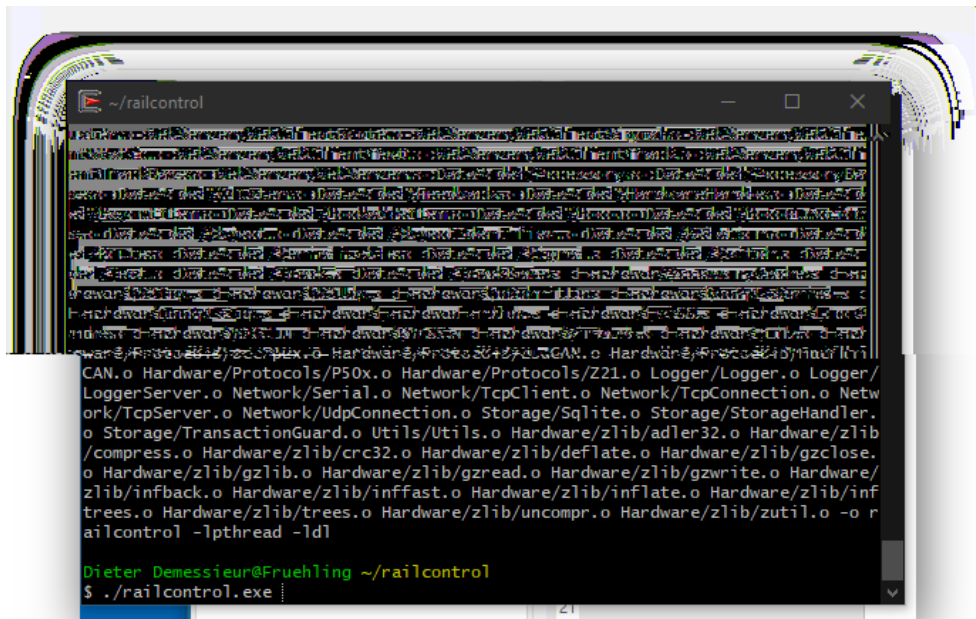
Dieter Demessieur@Fruehling ~/railcontrol
$ make
cc -g -O2 -DSQLITE_ENABLE_FTS4 -DSQLITE_ENABLE_JSON1 -DSQLITE_ENABLE_RTREE -DHAVE_USLEEP -c -o Storage/sqlite/sqlite3.o Storage/sqlite/sqlite3.c
```

make



```
~/railcontrol
Dieter Demessieur@Fruehling ~
$ make
ust.o WebServer/WebClientRoute.o WebServer/WebClientSignal.o WebServer/WebClientStatic.o WebServer/WebClientText.o WebServer/WebClientTrack.o WebServer/WebClientTrackBase.o WebServer/WebServer.o DataModel/Accessory.o DataModel/AccessoryBase.o DataModel/Cluster.o DataModel/Feedback.o DataModel/HardwareHandle.o DataModel/LayoutItem.o DataModel/LockableItem.o DataModel/Loco.o DataModel/LocoFunctions.o DataModel/Object.o DataModel/ObjectIdentifier.o DataModel/Relation.o DataModel/Route.o DataModel/Serializable.o DataModel/Signal.o DataModel/Switch.o DataModel/Text.o DataModel/Track.o DataModel/TrackBase.o Hardware/AccessoryCache.o Hardware/CS2Tcp.o Hardware/CS2Udp.o Hardware/CcSchnitte.o Hardware/DccPpExSerial.o Hardware/DccPpExTcp.o Hardware/HardwareHandler.o Hardware/Hsi88.o Hardware/LocoCache.o Hardware/M6051.o Hardware/RM485.o Hardware/Virtual.o Hardware/ZLib.o Hardware/Protocols/DccPpEx.o Hardware/Protocols/EsuCAN.o Hardware/Protocols/MaerklinCAN.o Hardware/Protocols/P50x.o Hardware/Protocols/Z21.o Logger/Logger.o Logger/LoggerServer.o Network/Serial.o Network/TcpClient.o Network/TcpConnection.o Network/TcpServer.o Network/UdpConnection.o Storage/Sqlite.o Storage/StorageHandler.o Storage/TransactionGuard.o Utils/Utils.o Hardware/zlib/adler32.o Hardware/zlib/compress.o Hardware/zlib/crc32.o Hardware/zlib/deflate.o Hardware/zlib/gzclose.o Hardware/zlib/gzlib.o Hardware/zlib/gzread.o Hardware/zlib/gzwrite.o Hardware/zlib/infbck.o Hardware/zlib/inffast.o Hardware/zlib/inflate.o Hardware/zlib/inftrees.o Hardware/zlib/trees.o Hardware/zlib/uncompr.o Hardware/zlib/zutil.o -o railcontrol -lpthread -ldl

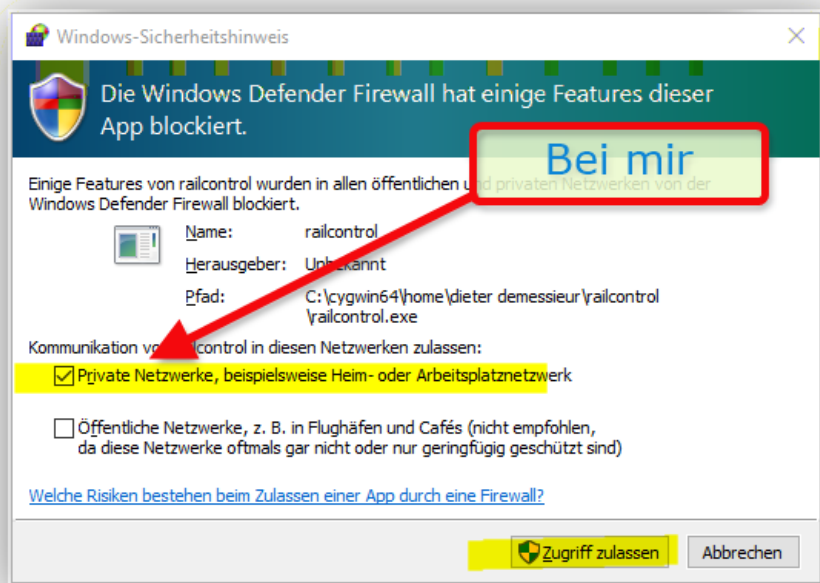
Dieter Demessieur@Fruehling ~/railcontrol
$
```



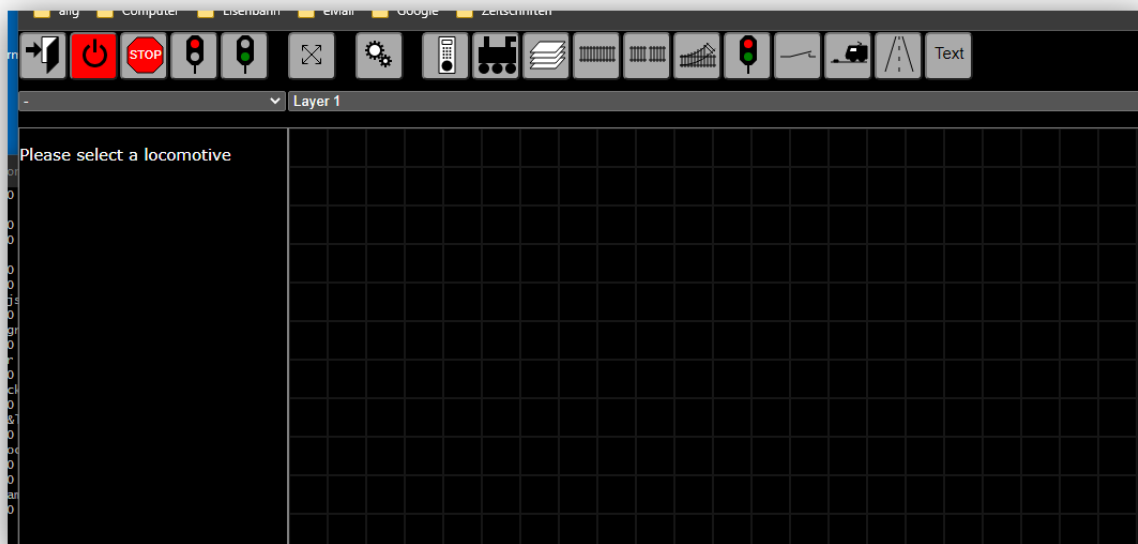
```
~/railcontrol
CAN.o Hardware/Protocols/PS0x.o Hardware/Protocols/Z21.o Logger/Logger.o Logger/
LoggerServer.o Network/Serial.o Network/TcpClient.o Network/TcpConnection.o Netw
ork/TcpServer.o Network/UdpConnection.o Storage/Sqlite.o Storage/StorageHandler.
o Storage/TransactionGuard.o Utils/Utils.o Hardware/zlib/adler32.o Hardware/zlib
/compress.o Hardware/zlib/crc32.o Hardware/zlib/deflate.o Hardware/zlib/gzclose.
o Hardware/zlib/gzlib.o Hardware/zlib/gzread.o Hardware/zlib/gzwrite.o Hardware/
zlib/infbac.o Hardware/zlib/inffast.o Hardware/zlib/inflate.o Hardware/zlib/inf
trees.o Hardware/zlib/trees.o Hardware/zlib/uncompr.o Hardware/zlib/zutil.o -o r
ailcontrol -lpthread -ldl

Dieter Demessieur@Fruehling ~/railcontrol
$ ./railcontrol.exe
```

./railcontrol.exe



```
~/railcontrol
backups = 10
2021-08-10 11:03:30.113792: Info: Config: Parameter found in config file: webserveraddress = any
2021-08-10 11:03:30.113810: Info: Config: Parameter found in config file: webserverport = 8082
2021-08-10 11:03:30.114230: Info: SQLite: Opening SQLite database with filename railcontrol.sqlite
2021-08-10 11:03:30.115843: Info: SQLite: Creating table hardware
2021-08-10 11:03:30.275195: Info: SQLite: Creating table objects
2021-08-10 11:03:30.407367: Info: SQLite: Creating table relations
2021-08-10 11:03:30.524848: Info: SQLite: Creating table settings
2021-08-10 11:03:30.600385: Info: WebServer: Webserver started
2021-08-10 11:03:30.632971: Info: WebServer: Please type one of the following links in your browser to connect to RailControl:
  http://localhost:8082/
  http://192.168.178.25:8082/
  http://127.0.0.1:8082/
  http://[fe80::1ce0:b620:c147:a0fc]:8082/
  http://[fe80::9b3:c5d0:c6fc:c32d]:8082/
  http://[fe80::b801:6290:f4f5:facd]:8082/
  http://[fe80::b0c4:a7ba:9b46:fff4]:8082/
  http://[::1]:8082/
2021-08-10 11:03:30.918108: Info: Manager: Debounce thread started
```



..localhost:8082

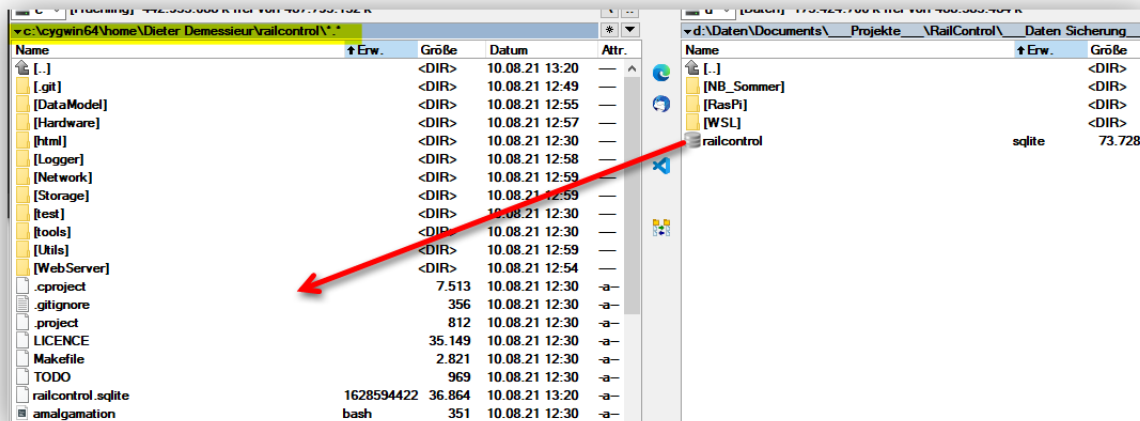


## RailControl aktualisieren

- Cygwin starten
- `cd railcontrol`
- `git pull`
- `make`

## Datensicherung

`railcontrol.sqlite`



- `railcontrol` stoppen
- Datei kopieren
- `railcontrol` starten

