

Translation with bable fish, so read carefully and have fun :)

Entrance to the SVN Repository the entrance to the Sports association Repository is made by a SSH connection. The Authentifizierung takes place with publication IC keys authentication. But one needs SSH keys.

Entrance to the server please with us inquire, either in the IRC or email send with your desired user name, pre and surname idfix an RK fechner.net for those, which are already experienced in handling subversion, here the address under that the Repository to be on ausgecheckt can:

svn+ssh:// @dev.freebus.org/usr/local/svn/freebus

in the following one describes, which steps and Tools are necessary around the entrance to furnish. Under point 1 for Windows, point 2 for Linux. The SSH Fingerprint is: 53:06:27:da:4d:b6:5d:53:52:da:0b:46:a3:00:33:ee

### 1.1.SSH-Keys

Put on now a few programs are needed. Ssh key Maker: here then the Keymaker start and click on generate. With keys passport cliche long password enter, with which the SSH key am coded is, this password well to note and absolutely a safe select, this password must only once be entered, with each computer restart. Repeat passport cliche password with Confirm again. Click then on save private keys and under a safe listing store, ATTENTION this file in NO case pass on! Now you copy you public the key, which is located completely above in the large text box (marking and begins Strg+c), with ssh rsa. Now note PADS open (starting implementing: note PADS) and CTRL+v press, now should have done there a long line. Now on to store, with type of file all files do not go selecting, with file name authorized\_keys to enter, attention file dung! If note PAD stored it with the ending txt, the file umbenennen and txt to remove.

1.2.SSH-Key load now need we the program SSH key agent. Now have you start the program down right in the menu border the Icon: \_ click drauf ADD key and now the key load the it before provide have. Now the passport cliche those enter to it before entered.

### 1.3.SSH-Key upload

now need we the program WinSCP. The program install and start. Now a new connection too: Host: dev.freebus.org user: your user name you got, no password to enter! Then on Login. Now should you an inquiry because of the SSH Fingerprint get, compares, which is correct (see this document completely above). Subsequently, enter the password, which got you. Now on the right of a listing put on: ssh (attention that. importantly) into the listing changes and those is before put on authorized\_keys clean-copies there there. Afterwards described log in above, now should not WinSCP terminate the program, start again again and again as any longer for a password ask, if nevertheless, have you an error made. Then again all step for step examines: 1.Name of the file must be authorized\_keys, no ending 2.Datei on the server copied in the listings ssh 3.pageant started and keys loaded

1.4.SVN-Repository auschecken gets you the program SVN Tortoise now. The program install. Then, means with me it puts on a listing on the plate freebus. There, right-click and SVN Checkout clean-go to select. With URL the following entered: svn+ssh:// @dev.freebus.org:/usr/local/svn/freebus by your user name replace then on OK ONE click, now should he source code auschecken. Now can work you on the source code and einchecken this again.

### 1.5.Ganz normally work with SVN

if everything times furnished and the computers was started is new, simply again that makes which with SSH keys loads is described.

## 2.LINUX

for the use of subversion under Linux one needs at least a ssh and a subversion Client. First is usually already in the standard extent contained of a distribution, subversion can usually from the sources of package be after-installed. In Ubuntu Linux the appropriate package is called for example subversion. Who no friend of the command line is or more comfort needs, here few left: Eclipse offers over plugin a SVN integration: <http://subclipse.tigris.org/> for Ubuntu gibt's a package for the integration of SVN in Nautilus (nautilus script collection svn) for KDE gibt's KDEsvn <http://kdesvn.alwinsthomas.de/> for gnomes gibt's NaughtySVN <http://naughtysvn.tigris.org/>

### 2.1.SSH-Keys put on SSH keys

completely simply by the input of ssh to keygen in the command line are put on. Generating publication-IC/PRIVATE rsa keys pair. Enter file in which ton save the keys (/home/username/.ssh/id\_rsa) first one is asked for the memory place of the key, ueblichweise fits the standard suggestion, thus simply with Return to confirm. Enter passport cliché (empty for NO passport cliché): Next follows the input of the passport cliché, which unlock later to the key are used. She should be selected as surely as possible (at least 8 indications, words, at best paying and special character to insert and do not mix large and lower case). One can put on also keys without passport cliché, by it is however in any case to be advised against. After confirmation of the passport cliché one is already finished, it more publicly and a private conclusions was put on.

2.2.SSH-Key load it around not each time, if one accomplishes an operation in subversion repository to have to unlock its private key empfiehl themselves to load it once with ssh ADDS. Afterwards it remains loaded for the existing session (possibly it is key chain to necessarily install). If one lies the keys in the standard listing has, a simple ssh ADD Enter passport cliché is enough for /home/username/.ssh/id\_rsa:

### 2.3.SSH-Key upload

around the key with the server admit to make, must at the server of the files ssh be put on and into it public(!) key in the file authorized\_keys to be written. That can be done e.g. in such a way: mkdir /tmp/.ssh cp ~/.ssh/id\_rsa.pub /tmp/.ssh/authorized\_keys scp r /tmp/.ssh @dev.freebus.org.net: Examined here whether the host finger print fits, is located completely above in this document.

2.4.SVN-Repository auschecken to checkout the Repositories put on themselves one best a suitable file, e.g. freebus svn. In it one accomplishes the following command then in the command line, with loaded key, svn CO svn+ssh:// @dev.freebus.org/usr/local/svn/freebus

2.5.Arbeiten with SVN the files now and be become with svn ci the changes can be worked on committed. One can add new file/files with svn ADDS. In order to bring itself up to date, a simple svn update in repository the listing is enough. Thus one can cancel also inadvertent changes: delete in addition simply the file locally and with svn updates the current version get. For a detailed introduction to the work with svn there is each quantity on-line Tutorials. 3.Was is when programming to consider we uses a Tabstob of 5 indications, that should in each IDE be adjustable (e.g. AVR studio 4). Comments in the program are held in English, exactly the same the description with the einchecken. If code is eingecheckt is a description to be always written! The documentation in the source code is provided with doxygen. So much fun when helping, if there should be questions, helps you everyone gladly. Matthias (& Thomas alias thoma5 - Linux part)