

Document Name: pbsSoftLogic runtime Kernel installation Manual for Linux.

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This document describes pbsSoftLogic Kernel installation and configuration for Debian /Ubuntu Linux based controller.

From Version V3 RC3 you can define any User for Linux . But you need to give Read/Write access to user for /home/pbsLX and /mnt/ramdisk folders. You couldn't move runtime kernel in other folder and it should be only at /home/pbLX folder.

Step1: Install following modules for Linux:

- sudo apt-get install ftpd
- sudo apt-get install telnetd
- sudo apt-get install openssh-server

In This stage, it is easier to use FileZilla FTP Client Free tool for copying necessary files and do modification to Linux files <https://filezilla-project.org/>

For editing configuration files you should use professional editor like NotePad++. Because Windows File structure and Linux is different and simple editors like Notepad couldn't automatically detect is it Linux or Windows Files and will damage your Linux file.

Download and install Notepad++ from <https://notepad-plus-plus.org/>

pbsSoftLogic is using root user to transfer configuration and logic to Controller from IDE.

Allow root user for FTP connection : open /etc/ftpusers file and comment root user .

```
# /etc/ftpusers: list of users disallowed ftp access. See ftpusers(5).
```

```
#root  
ftp  
anonymous
```

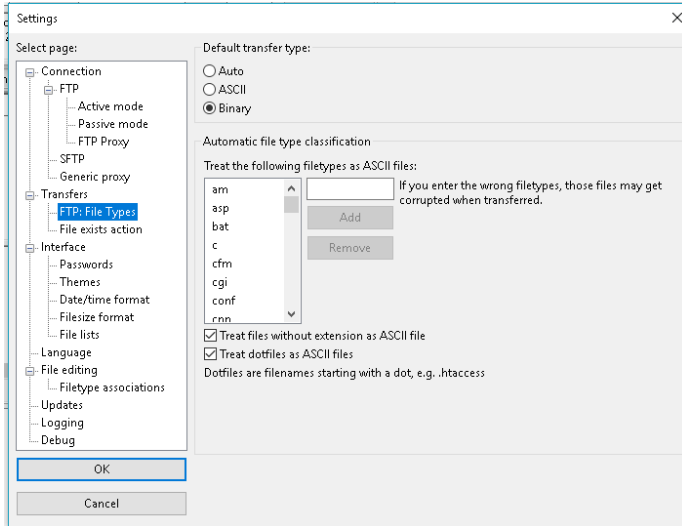
Allow root user for telnet connection : open /etc/securetty and add following lines to file :

```
#for telnet Root user login
pts/0
pts/1
pts/2
pts/3
pts/4
pts/5
pts/6
pts/7
pts/8
pts/9
pts/10
```

Allow root for ssh connection : Open /etc/ssh/sshd_config and uncomment PermitRootLogin and do following change : Set PermitRootLogin to yes

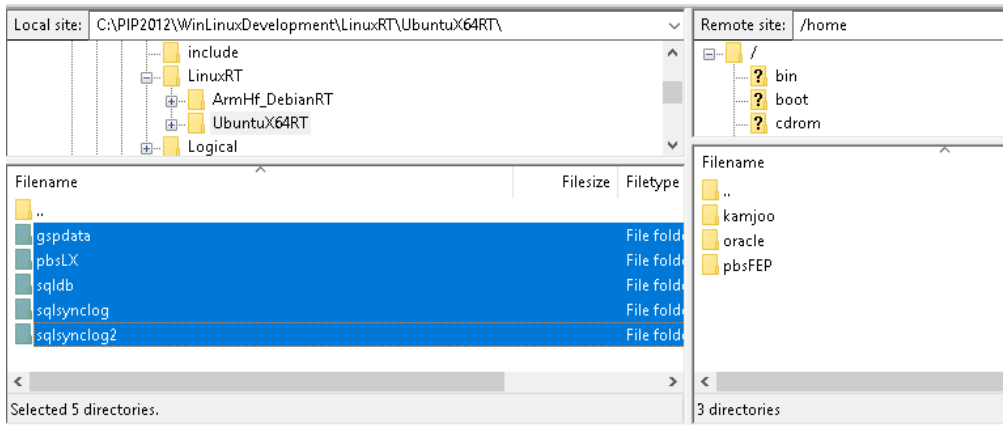
```
# Authentication:
#LoginGraceTime 2m
PermitRootLogin yes
```

Transfer pbsSoftLogic Runtime Kernel by FileZilla to Linux . check that in Filezilla Transfer type is set on Binary . Open Edit menu /Settings and Check Transfers . change Auto to Binary.

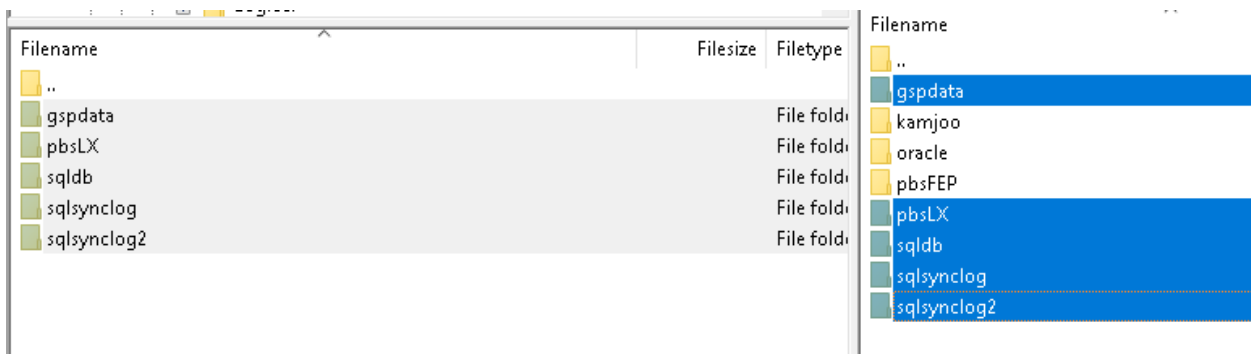


Download pbsSoftLogic Runtime from web site and unzip it.

Transfer kernel to /home/ folder . Select all folders in runtime kernel and transfer them to /home/



After transfer you have following folders at linux :



In above images , left panel is your PC and Right is Linux /home/ folder .

Define /mnt/ramdisk folder and add following line to /etc/fstab file :

```

tmpfs /mnt/ramdisk tmpfs rw,size=10M 0 0

# /etc/fstab: static file system information.
#
# Use 'blkid' to print the universally unique identifier for a
# device; this may be used with UUID= as a more robust way to name devices
# that works even if disks are added and removed. See fstab(5).
#
# <file system> <mount point> <type> <options> <dump> <pass>
# / was on /dev/sda1 during installation
UUID=91c23c62-1e07-4b2f-b0f7-e34f7fc1ea3f / ext4 errors=remount-ro 0 1
/swapfile none swap sw 0 0
tmpfs /mnt/ramdisk tmpfs rw,size=10M 0 0

```

Go to /home/pbsLX folder and change permission for pbsSLKLX file

```
cd /home/pbsLX
```

```
chmod +x pbsSLKLX
```

```
chmod +x getmac
```

Restart Controller . After Restart your Linux is ready to run pbsSoftLogic kernel and communicate with pbsSoftLogic IDE .

If you want to use SQLite and synchronize data with SQL server you need to install freetds-dev on linux

```
apt-get install freetds-dev
```

After transferred logic and configuration to Linux by pbsSoftLogic IDE you can run kernel by following command:

```
./pbsSLKLX &
```

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