How to Update to System Software Release 6.1.2 with BLUP

BLUP = BinTec Large Update

System Software Release 6.1.2 requires a more thorough update of your router's software than other updates have done so far. You have to update not only the System Software itself, but the BOOTmonitor and the Firmware Logic (for the basic unit and your expansion cards alike), as well.
For updating to the initial release of system software version 6.1.2, BinTec will provide a single software file (BLUP = BinTec Large Update) that contains all necessary updates, i.e. the BOOTmonitor,the Firmware Logic (for the basic unit as well as for expansion cards) and the system software.

Later, the individual files will be available, too. Please, look for the update files on BinTec's webserver at http://www.bintec.net.

Special note:
Licensing of Hardwaremodules is required since Release 6.1.2.
You will find some Information on
http://www.bintec.de/cgi-bin/faqde/faq.pl?suchen&24
For older software images no license keys are required.

Updating your BinTec Router

The update is carried out using the BOOTmonitor. To carry out an update for your BinTec Router, proceed as follows:

Configure a computer in your local network as TFTP server. For a Windows PC, you can use the TFTP server of **DIME Tools** (see documentation for **BRICKWare for Windows** which you can download from our webserver).

Copy the BLUP update file (e.g. bl6102.x4a) downloaded from BinTec´s Web server to the TFTP folder on your TFTP server in your local network.

Log in on your router from a computer serially connected and reboot the router by typing `cmd=reboot` in the SNMP shell.

Caution!

The update operation involves the risk that if updating one of these files fails, e.g. due to a power cut, it may no longer be possible to boot your router, i.e. it is damaged. You would then have to send your router in to your vendor.
If the update procedure is interrupted, e.g. due to a power cut or switching off the router, it may no longer be possible to reboot the router.
The update procedure must not be interrupted.

How to Update to System Software Release 6.1.2

Your router restarts. When self tests are completed, the following line shows:

```
Press <sp> for boot monitor or any other key to boot system
```

Now press **Space** within four seconds to enter BOOTmonitor mode (please note that all values shown here are examples only).

```
BINTEC X4000 Bootmonitor V. 5.1 Rev. 5 from 2000/08/07
Copyright (c) by BinTec Communications AG
(1) Boot System
(2) Software Update via TFTP
(3) Software Update via XMODEM
(4) Delete Configuration
(5) Default Bootmonitor Parameters
(6) Show system information

Your choice>
```

To update the router choose `2` again and confirm with **Return**. Again you must enter the IP address of your router, the IP address of the TFTP server and the file name of the file to be updated, in this case the BLUP bl6102.xa4, and confirm every entry with **Return**.

The menu `(6) Show system information` is only displayed when the BOOTmonitor has version 5.1.5 or higher.
It enables you to display some useful information about X4000, e.g. serial number, MAC address, current software, and so on.

```
Your choice> 2
Enter local IP address [192.168.1.254]:
Enter IP address of TFTP server [192.168.1.1]:
Enter file name of image [b5106.x4a]: bl6102.x4a

Are your entries correct (y or n) ?
```

Reexamine your settings. If they are correct, confirm with `y` and the **Return** key.

```
Starting file transfer ...................................................OK
(1
661928 bytes received)
Checking new image ... OK

Loaded new image has release 6.1.2.

Now choose from the following:

(u) Update Flash ROM
(r) Write image to RAM and start it
(e) Exit

Enter (u, r or e):
```

To update the Software press **r** and confirm with **Return**.

```
Booting BOSS...
boss image started at 0x82a034

BINTEC-X4100 BLUP V.6.1 Rev. 2 from 2001/09/26 00:00:00
Copyright (c) 2001 by BinTec Communications AG

List of files in this update:
Version    Length  Name
     2.1    65588  Logic
   6.1.2   131124  Bootmon
   6.1.2  1235266  Boss
     2.0    70028  x4e_2pri.x4a
     1.2    12097  x4e_3bri.x4a

Proceed with update (y or n) ?
```

Confirm with y to update all necassary files and to save the files to flash.

```
*** Don't power-off your router while the update takes place ***


Updating Logic
New logic has release 2.1.
Erasing Flash-ROM . OK
Writing Flash-ROM . OK
Verify  Flash-ROM . OK

Updating Bootmon
New bootmonitor has release 6.1.2
Erasing Flash-ROM .. OK
Writing Flash-ROM .. OK
Verify  Flash-ROM .. OK

Updating Boss
New software release is 6.1.2
Erasing Flash-ROM ................... OK
Writing Flash-ROM ................... OK
Verify  Flash-ROM ................... OK

Updating x4e_2pri.x4a

Perform Flash-ROM update
Update  Flash-ROM .. OK
Verify  Flash-ROM .. OK

File update successfully finished

Updating x4e_3bri.x4a

Perform Flash-ROM update
Update  Flash-ROM . OK
Verify  Flash-ROM . OK

File update successfully finished
Rebooting...
```

```
### X4000 (Hardware-Rev. 2.0, Firmware-Rev. 2.1) ###

CPU   Check ... passed (MPC 8XXT D3)
SDRAM Check ............... passed (16 MByte)
FLASH Check .... passed (4 MByte)
ISDN  Check ... passed
100BT Check ... passed
I2C   Check ... passed
TEMP  Check ... mainboard +42.0 celsius
MMI   Check ... passed (Id: 41/41)

Check slot  ... found <X4E-2FE> (HW-Rev 1.2, FW-Rev 1.0)
                Serial-No. 4FE120000430151
MAC-1 Check ... passed
MAC-2 Check ... passed


### Selftest passed ###


Press <sp> for boot monitor or any other key to boot system

Booting Image from Flash ROM
Checking image ... OK
Writing image to RAM (Release 6.1.2)
........................................
......................................... OK (2984012 bytes)
Booting BOSS...
boss image started at 0x540590


BOSS PPC kernel v2.0 (BINTEC-X4000)
Copyright (c) 1999-2000 by BinTec Communications AG
Version V.6.1 Rev. 2 from 2001/08/07 00:00:00

The system is coming up.

Speed index... 49.81 MIPS
Init modules:
slot: BoardId    SerialNo
   3: CM-SERIAL  X4B200101260018  loading ... ok
      Scanning devices ...
   4: X4E-2FE    4FE120000430151  loading ... ok
      Scanning devices ...
InstallModules = 0x2

The system is ready.

AUTOEXEC:
   1    date Mon Oct 18 23:43:30 2105 done
   1    configd   SystemId: X4B200101260018  done
   2    mmid background
  10    isdnd background
  11    isdnautocf background
  20    x25swd background
  20    frd background
  21    mpxd background
  50    ipd background
```

```
   51      snmpd background
   51      telnetd background
   51      syslogd background
   51      minipadd background
   51      txd background
   66      httpd background
   67      pppxd background
   68      pppoed background
   69      tud background
   70      routed background
   70      radiusd background
   70      pppd background
   70      tafd background
   80      bridged background
   90      timed background
   97      ipalived background
   98      statusd background
   99      bootpd background
BOOTP: IP address already set
   99      traced background
   99      dnsd background
   99      isdnlogind background
   99      dhkeyd background
   99      vcapid background


Welcome to BINTEC-X4000 version V.6.1 Rev. 2 from 2001/08/07 00:00:00
systemname is bintec, location bintec

Login:
```

Now the update of all necessary files is complete