

System Software 7.4.1 - HOW TO PREPARE YOUR X2000-FAMILY GATEWAY FOR AN UPDATE

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Version 1.0

Purpose This document describes the prerequisites of updating your Bintec Gateway to **System Software 7.4.1**. For up-to-the-minute information and instructions concerning the latest software release, you should always read our **Release Notes**, especially when carrying out a software update to a later release level. The latest **Release Notes** can be found at www.funkwerk-ec.com.

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R&TTE Directive 1999/5/EG

CE marking for all EU countries and Switzerland

You will find detailed information in the Declarations of Conformity at www.funkwerk-ec.com.

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1 System Software Update

Due to a large number of new features available in [System Software 7.4.1](#), updating requires a little more attention that is usually the case. This document describes the steps you need to take before you can actually update the System Software.



This document does not apply to [X2301](#) and [X2302](#).

1.1 BOOTmonitor Update

Updating to [System Software 7.4.1](#) may require a BOOTmonitor update on gateways of the [X2000 Family](#).

You will find the necessary files in the ZIP file in which you have found this description, too. The BOOTmonitor can be updated just like the system software using the `update` command. You can find detailed information on how to perform this kind of update in the user's guide of your gateway ("Configuration Management" → "Updating Software" – depending on your user's guide, the chapter name may differ slightly).



If you intend to update your system software from system software release 7.1.4 or later, you do not need to perform the BOOTmonitor update. It is only required for updates from system software releases earlier than 7.1.4.

The BOOTmonitor update must be carried out before the system software update, otherwise the system software update is not possible.

Gateways of the [X2000 Family](#) need a BOOTmonitor version 6.3.8 or higher.

1.2 Deleting an ADSL Modem Logic from X2300-Family Gateways

When updating a gateway of the **X2300 Family** to **System Software 7.4.1** from a release earlier than 7.1.1, it is necessary to delete one of the two ADSL Modem Logic files from your gateway (only one of them is used to connect your gateway to an ADSL link). Otherwise, the new image cannot be written to the Flash ROM. Proceed as described below to delete the unused logic file from your gateway.

1.2.1 Identify the Logic File to Remove

It is crucial that you correctly identify the logic file you need to remove: If your ADSL connection is realized via an ISDN line, delete the logic file that is used for DSL over POTS (Plain Old Telephones), and if your ADSL connection is realized via POTS, delete the logic file used for ADSL over ISDN. You can identify the files by their respective file names: the filename of the logic file used for ADSL over ISDN contains the string "ADSLi", the filename of the logic file used for ADSL over POTS contains the string "ADSLp".



Note

The most recent **X2000-Family** gateways now come with only the required logic installed. If you find that there is only one logic file stored in the Flash ROM of your gateway, do not delete it.

If you happen to delete the wrong file, the ADSL menu will not be available in the Setup Tool, and you will not be able to use a ADSL connection.

If you have deleted the wrong file from the Flash ROM of your gateway, you should restore it before updating the system software. See [“Updating/Restoring a Logic File” on page 5](#) for information on how to restore a logic file.

1.2.2 Deleting the Unused Logic

To delete the unused logic file from the Flash ROM (all commands must be called from the SNMP shell):

1. Access the Flash ROM management shell: `update -i`.
2. Call a listing of all files stored in the Flash ROM: `ls -l`.

You will see something like this:

```
Flash-Sh > ls -l
Flags      Version Length  Date                Name ...
Vr-x-bc-B 6.3.04  1740353 2003/06/05 7:53:06 box155rel.ppc860
Vr---l--f 3.8.129 319696  2003/01/24 15:48:05 X2E-ADSLp.x2c
Vr---l--f 3.8.129 315904  2003/01/16 13:17:42 X2E-ADSLi.x2c
Flash-Sh >
```

The file called X2E-ADSLp.x2c is used by **X2300** (ADSL over POTS), X2E-ADSLi.x2c is used by **X2300i** and **X2300is** (ADSL over ISDN).

3. Delete the file that is not used for your type of ADSL connection:
`rm X2EADSLi.x2c` or `rm X2E-ADSLp.x2c`.
4. Verify that the file has been removed: `ls -l`.

Again, you will see something like this (if you have, e.g., deleted the logic for ADSL over ISDN):

```
Flash-Sh > ls -l
Flags      Version Length  Date                Name ...
Vr-x-bc-B 6.3.04  1740353 2003/06/05 7:53:06 box155rel.ppc860
Vr---l--f 3.8.129 319696  2003/01/24 15:48:05 X2E-ADSLp.x2c
Flash-Sh >
```

5. Perform a "reorg" to ultimately delete the file from the Flash ROM: `reorg`.
6. If you want to, you can again check the file listing by calling `ls -l`.
7. Exit the Flash ROM management shell: `exit`.

You have now deleted the currently unused modem logic.

1.3 Updating/Restoring a Logic File

Importing a new logic file is done exactly as any other system software update. You can find detailed information on how to perform this kind of update in the user's guide of your gateway ("Configuration Management" → "Updating Software" – depending on your user's guide, the chapter name may differ slightly).

The logic file you have to import is currently named according to a schema that differs from the one used for older logic files. The file name includes a version number:

- X2E-ADSLp_<version>.x2c, e.g. X2E-ADSLp_3.8.129.x2c
- X2E-ADSLi_<version>.x2c, e.g. X2E-ADSLi_4.10.04.x2c.

Perform the update as is described in the user's guide. This procedure will also restore an accidentally deleted logic file.

1.3.1 Verifying Logic Upload

After you have imported the logic file, you should verify that it has been successfully stored in the Flash ROM:

1. Access the Flash ROM management shell: `update -i`.
2. Call a file listing: `ls -l`.

You should see something like this:

```
Flash-Sh > ls -l
Flags      Version Length  Date                Name ...
Vr-x-bc-B 6.3.04  1740353 2004/06/057:53:06 box155rel.ppc860
Vr---l--f 4.10.04 315904  2004/01/1613:17:42 X2E-ADSLi_4.10.04.x2c
Flash-Sh >
```

3. Exit the Flash ROM management shell: `exit`.



Note

If you want to restore an accidentally deleted logic file, it does not matter whether you restore the previous logic file, or if you choose to directly use the newest logic file for your gateway model. Logic files are available for download from www.funkwerk-ec.com.

1.4 Rebooting the Gateway

In order to activate the changes made to the software configuration you must reboot your gateway: `cmd=reboot`. After the gateway has been rebooted, you can proceed to update the system software to release 7.4.1.

1.5 If this fails...

Even though we try to keep updating procedures as simple as possible, more complicated situations cannot be completely ruled out. Under certain circumstances, the procedure described above will fail.

This is the case if the contiguous amount of space available in the Flash ROM is not enough for storing a software image larger than the old one. If this is the case, no error message is displayed, so what you will see is simply this:

```
x2300ic:> update 192.168.1.10 s7104b04.x2c
Starting TFTP File Transfer .x2300ic:>
```

This does by no means mean that you cannot update your gateway. Proceed as follows to update your gateway in this case:

Delete files

1. Access the Flash management shell: `update -i`.
2. Call a file listing: `ls -l`.
3. Delete all ADSL logic files that are stored on your gateway. See [“Deleting the Unused Logic” on page 4](#) on how to do that. Make sure to delete all logic files.
4. If there are any files other than the system software stored on your gateway (e.g. language files for the localization of the HTML Wizard), delete them in the same way. Only the system software image may remain stored in the Flash ROM.

A file listing now shows something like this:

```
Flash-Sh > ls -l
  Flags   Version   Length   Date           Name ...
Vr-x-bc-B 7.1.04    2445267 2004/06/07 15:29:03 box155rel.ppc860
Flash-Sh >
```

5. Leave the Flash ROM management shell: `exit`.

Update the system software

1. Update your system software (for detailed information see the user's guide): `update <TFTP server IP address> <file name>`.
2. Reinstall the ADSL logic file required for your kind of ADSL connection. See [“Updating/Restoring a Logic File” on page 5](#) on how to do that.

3. Reinstall any language file you want to use with the HTML Wizard. The procedure is the same as with a logic file.
4. Verify that all files have been saved successfully. See “[Verifying Logic Upload](#)” on page 6 on how to do that.

You now have updated the system software of your gateway.

**Note**

Note that the BOOTmonitor you may have had to update prior to updating the system software is not listed by calling `ls -l`. It is not treated as a file in the same sense as an ADSL logic file or a language file. If you need to update your BOOTmonitor, the respective procedure is independent from updating the system software.

1.6 Installing an SDSL Logic on X2400 Gateways

System Software 7.4.1 does not include the logic required for SDSL connections. Depending on the software version you start from you may need to install the SDSL logic after an upgrade to System Software 7.4.1.

You can find the logic file you need to install in the ZIP file which also contains this **How To**. Additionally, you can download the most recent version from the download area of your gateway at www.funkwerk-ec.com.

The file name scheme is: X2E-SHDSL-<version>.x2c, e.g. X2E-SHDSL-v2.2.0.x2c.

The SDSL logic is installed in exactly the same way as an ADSL logic. Refer to “[Updating/Restoring a Logic File](#)” on page 5 and to the user’s guide of your gateway for instruction on how to install the software.