

**Release Notes**  
**System Software 7.9.2**

**Purpose** This document describes new features, changes, and solved problems of System Software 7.9.2.

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**Guidelines and standards** Bintec gateways comply with the following guidelines and standards:

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](http://www.funkwerk-ec.com).

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# 1 Important Information

Please read the following information about **System Software 7.9.2** carefully to avoid problems when updating or using the software.

## 1.1 Applicability

**System Software 7.9.2** is available only for the following devices and cannot be used on other devices:

- **devices of the RT series**
- **devices of the Rxxxx series equipped with a DSP.**



**Note**

Please note that new features, changes or the solution of a problem are only available on your device if the menu described is shown.

## 1.2 Update and Downgrade

Take note of the following indications regarding the update and the possibilities of a downgrade.

You can carry out an update or downgrade using the **Funkwerk Configuration Interface** (FCI) or - if desired - using the SNMP shell and the Setup tool.

### 1.2.1 Preparation and update with the FCI

The update of the system software with the **Funkwerk Configuration Interface** uses a **BLUP** (bintec Large Update) so as to update all necessary

**modules intelligently. All those elements are updated that are newer in the BLUP than on your gateway.**



**Attention!**

The result of interrupted updating operations could be that your gateway no longer boots. Do not turn your gateway off during the update.

To prepare and carry out an update to **System Software 7.9.2** with the **Funkwerk Configuration Interface**, proceed as follows:

1. For the update you will need the file `XXXXX_b17902.xxx`, where `XXXXX` stands for your device.  
 Ensure that the file that you need for the update is available on your PC.  
 If the file is not available on your PC, enter [www.funkwerk-ec.com](http://www.funkwerk-ec.com) in your browser.  
 The Funkwerk homepage will open. You will find the required file in the download area for your gateway. Save it on your PC.
2. Backup the current boot configuration.  
 Export the current boot configuration using the **MAINTENANCE → SOFTWARE & CONFIGURATION** menu on the **Funkwerk Configuration Interface**. To do this, select:  
**ACTION** = *Export configuration*  
**CURRENT FILE NAME IN FLASH** = *boot*  
**INCLUDE CERTIFICATES AND KEYS** = Enabled  
**CONFIGURATION ENCRYPTION** = Disabled  
 Confirm with **Go**. The window *Opening <name of gateway>.cf* will open.  
 Leave the selection *Save to diskette/hard disk* and click **OK** to save the configuration to your PC.  
 The file *<Name of gateway.cf>* is saved, the *Downloads* window shows the saved file.
3. Carry out the update to **System Software 7.9.2** via the **MAINTENANCE → SOFTWARE & CONFIGURATION** menu.  
 To do this, select:  
**ACTION** = *Update system software*  
**SOURCE** = *Local File*  
**FILENAME** = `XXXXX_b17902.xxx`

Confirm with **Go**.

The message “System request. Please stand by. Operation in progress.” or “System maintenance. Please stand by. Operation in progress.” shows that the selected file is being uploaded to the device. When the upload procedure is finished, you will see the message “System - Maintenance. Success. Operation completed successfully. The system must be restarted.”

Click **Reboot**.

You will see the message “System - Reboot. Rebooting. Please wait. This takes approximately 40 seconds.” The device will start and the browser window will open.

You can log into your device and configure it.

## 1.2.2 Downgrade with the FCI

If you wish to carry out a downgrade, proceed as follows:

1. Replace the current boot configuration with the previous backup version. Import the backup boot configuration via the **MAINTENANCE → SOFTWARE & CONFIGURATION** menu.

To do this, select:

**ACTION** = *Import configuration*

**CONFIGURATION ENCRYPTION** = Disabled

**FILENAME** = *<Name of device>.cf*

Confirm with **Go**. The message “System request. Please stand by. Operation in progress.” or “System maintenance. Please stand by. Operation in progress.” shows that the selected system software is being uploaded to the device. When the upload procedure is finished, you will see the message “System - Maintenance. Success. Operation completed successfully. The system must be restarted.”

Click **Reboot**.

You will see the message “System - Reboot. Rebooting. Please wait. This takes approximately 40 seconds.” The device will start and the browser window will open. Log into your device.

2. Carry out the downgrade to the required software version via the **MAINTENANCE → SOFTWARE & CONFIGURATION** menu.

To do this, select:

**ACTION** = *Update system software*

**SOURCE** = *Local File*

**FILENAME** = *R3000\_b17807.r3d* (example)

Confirm with **Go**.

The message “System request. Please stand by. Operation in progress.” or “System maintenance. Please stand by. Operation in progress.” shows that the selected system software is being uploaded to the device. When the upload procedure is finished, you will see the message “System - Maintenance. Success. Operation completed successfully. The system must be restarted.”

Click **Reboot**.

You will see the message “System - Reboot. Rebooting. Please wait. This takes approximately 40 seconds.” The device will start with the previously backed up boot configuration and the old version of the system software. The browser window will open.

You can log into your device and configure it.



## 2 New Functions and Changes

The following new functions and changes are introduced with **System Software 7.9.2**:

- “Fax with 30 Channels” on page 9
- “Changes in Call Routing” on page 9
- “Further Changes” on page 14

### 2.1 Fax with 30 Channels

All 30 Channels of a PRI (S2M) connection can now be used for sending and receiving faxes if the DSP in use supports this number of channels.

Using the increased number of fax channels requires the purchase of a corresponding license.

### 2.2 Changes in Call Routing

Configuration of the call routing has been changed. The following tables describe the redesigned configuration menus.

#### 2.2.1 VoIP → Media Gateway → Call Routing → Edit/New

Fields in the **CALL ROUTING → BASIC PARAMETERS** menu

Field	Description
<b>DESCRIPTION</b>	Enter the name of an entry.

Field	Description
<b>ADMINISTRATIVE STATUS</b>	<p>Choose if the entry is to be active.</p> <p><i>Enable</i> activates a routing entry.</p> <p>Routing entries are enabled by default.</p>
<b>TYPE</b>	<p>Choose if a call is to be handled and which connection is to be used.</p> <p>Possible values:</p> <ul style="list-style-type: none"> <li>■ <i>Accept Rule (default value)</i>: For calls the media gateway is to handle and to forward via a selected connection.</li> <li>■ <i>Ignore Rule</i>: For calls that are not to be handled, but ignored. This type can be used to prevent certain calls or to reserve certain numbers for other services (e.g. a Remote Capi Server).</li> </ul>
<b>CALLING LINE</b>	<p>You can restrict the application of a routing entry to the line the call is coming in on.</p> <p>The available choices depend on the available interfaces and on the SIP accounts created.</p> <p>Possible values:</p> <ul style="list-style-type: none"> <li>■ <i>pri&lt;interface index&gt;</i>: Restricts the routing entry to the selected PRI interface.</li> <li>■ <i>bri&lt;interface index&gt;</i>: Restricts the routing entry to the selected BRI interface.</li> <li>■ <i>&lt;SIP Account&gt;</i>: Restricts the routing entry to the selected SIP account.</li> <li>■ <i>Any</i>: the entry is unrestricted.</li> </ul>
<b>CALLING ADDRESS</b>	<p>You can restrict the application of an entry to a specific calling number. For this, the calling number has to be exactly specified (no wild-cards).</p>

Field	Description
<b><i>CALLED ADDRESS</i></b>	<p>Enter the an address (target number or target address) as a numeric or alphanumeric string that is matched to the called address of a call.</p> <p>You can use the following wildcards:</p> <ul style="list-style-type: none"><li>■ * means that arbitrary characters can follow a given numeric or alphanumeric string. The media gateway will handle the call as soon as the dial latency has expired. Dial latency can be configured at <b>VOIP → MEDIA GATEWAY → OPTIONS</b>.</li><li>■ ? serves as a placeholder for one arbitrary character. Calls are handled as soon as the length of the (alphanumeric) target number or address equals the total length of specified alphanumeric characters and number of wildcards for the rule.</li></ul>

Field	Description
<b><i>CALLED ADDRESS (CONT.)</i></b>	<p>Examples:</p> <ul style="list-style-type: none"> <li>■ 9673???? - The rule will be used only if the target number or address has a length of eight characters and the initial four digits are 9673.</li> <li>■ *-rules, that have a single * configured as <b><i>CALLED ADDRESS</i></b> are valid for all target numbers or addresses. After each entry of a called number or address a configurable dial latency is used before the call is handled.</li> <li>■ 0* - This rule is used for calls which have a leading 0 in their <b><i>CALLED ADDRESS</i></b>. A dial latency (default is five seconds) is activated before the call is handled.</li> </ul> <p>Note: The more specifically the value for <b><i>CALLED ADDRESS</i></b> is configured, the higher is the priority of this entry. E.g.: an entry with only a * specified as <b><i>CALLED ADDRESS</i></b> takes a lower priority than another entry with a <b><i>CALLED ADDRESS</i></b> of 0*.</p>

Table 2-1: Fields in the ***CALL ROUTING*** → ***BASIC PARAMETERS***:menu

## 2.2.2 Call Routing → Routing Rules (only for Type = Accept Rule)

In the section Routing Rules, you can define rules that determine via which line a call is routed and how the target number or address is manipulated.

You can add entries with Add.

Fields in the **CALL ROUTING → ROUTING RULES** menu (only for Type = Accept Rule):

Field	Description
<b>PRIORITY</b>	Enter an increasing integer, starting with 1, in order to determine the sequence of the routing rules. Rules are applied in the order of the created sequence.  If a line or a SIP account is not available, the next rule is used automatically.
<b>ADMINISTRATIVE STATUS</b>	Choose if the entry is to be active. <i>Enable</i> activates a routing entry.  Routing entries are enabled by default.
<b>LINE</b>	Select the ISDN line ( <i>PRI</i> or <i>BRI</i> ) or the SIP account for the outgoing call.

Field	Description
<b><i>CALLED ADDRESS TRANSLATION</i></b>	<p>Define how a number is to be manipulated before being used for dialling.</p> <p>Notation: &lt;a:b&gt;, i.e. a is replaced with b. Multiple rules can be combined to form a rule chain by separating the single rules with a semicolon, e.g. &lt;a:b&gt;;&lt;c:d&gt;;&lt;e:f&gt;. Once it has been entered, the rule chain is automatically ordered according to the "best match" principle.</p> <p>Numeric and alphanumeric values are allowed.</p> <p>? is used as a placeholder for one arbitrary character.</p> <p>Example 1 for a rule:</p> <ul style="list-style-type: none"> <li>■ Rule: &lt;:+49911&gt;</li> <li>■ dialled number: 96731234</li> <li>■ manipulated number: +4991196731234</li> </ul> <p>Example 2 for a rule:</p> <ul style="list-style-type: none"> <li>■ Rule: &lt;0:&gt;</li> <li>■ dialled number: 0091196731234</li> <li>■ manipulated number: 091196731234</li> </ul>

Table 2-2: Fields in the **CALL ROUTING → ROUTING RULES** menu (only for Type = Accept Rule)

## 2.3 Further Changes

### 2.3.1 QSIG Support

(ID 12635, 12636)

Support for QSIG was not configurable in the FCI. It can now be configured in the menu **PHYSICAL INTERFACES → ISDN PORTS → <PRIX-X> BZW. <BRIX-X> →**

**PORT USAGE.** If *QSIG* is chosen, the **SWITCH TYP** is automatically set to *Point to Point*.

### 2.3.2 ISDN - Type of Number

(ID n/a)

Up to now, the Type of Number was signalled as unknown. Some providers do not signal the calling number under this condition. **System Software 7.9.2** offers a TON automatism for ISDN TE connections which automatically sets the Type of Number for outgoing ISDN calls into the exchange to national, international or subscriber number.

### 2.3.3 ISDN - Voice Connections Unidirectional

(ID 12407)

As soon as a data connection had once been established, all subsequent voice connections using the same channel were unidirectional and hence useless.

The problem has been solved.

