

User's Guide
bintec R4100 / R4300
External Systems

Ziel und Zweck Dieses Dokument ist Teil des Benutzerhandbuchs zur Installation und Konfiguration von bintec-Gateways ab Software-Release 7.4.5. Für neueste Informationen und Hinweise zum aktuellen Software-Release sollten Sie in jedem Fall zusätzlich unsere **Release Notes** lesen – insbesondere, wenn Sie ein Software-Update zu einem höheren Release-Stand durchführen. Die aktuellsten **Release Notes** sind zu finden unter www.funkwerk-ec.com.

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Richtlinien und Normen bintec-Gateways entsprechen folgenden Richtlinien und Normen:

R&TTE-Richtlinie 1999/5/EG

CE-Zeichen für alle EU-Länder

Weitere Informationen finden Sie in den Konformitätserklärungen unter www.funkwerk-ec.com.

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1 External Systems Menu

The fields of the *EXTERNAL SYSTEMS* menu are described below.

In the *EXTERNAL SYSTEMS* menu external systems can be configured resp. monitored. Presently only the artem Access Point discovery is implemented.

1.1 Submenu artem Access Point Discovery/Configuration

The fields of the *ARTEM ACCESS POINT DISCOVERY/CONFIGURATION* menu are described below.

The options of this menu enable the discovery and configuration of artem Access Points that are located in the same wired network as your gateway. Once an access point has been discovered, a number of basic parameters (node name, IP address, netmask and gateway address) can be configured on the access point (given that you know the administrative password).

1.1.1 Submenu Initiate Discovery

In the *EXTERNAL SYSTEMS* → *ARTEM ACCESS POINT DISCOVERY/CONFIGURATION* → *INITIATE DISCOVERY* menu the discovery of possibly existing artem Access Points is initiated.

In ex works state the displayed list contains no entries. The following screenshot shows an example:

| | | | |
|--|-----------|---|-------------------|
| R4100 Setup Tool | | Funkwerk Enterprise Communications GmbH | |
| [EXT] [artem AP] [DISCOV]: artem AP Discovery | | MyGateway | |
| Press 'd' to run discovery on selected interface | | | |
| Interface | Operation | Result | Last Run |
| ISP | none | no Error | 10/29/04 13:57:55 |
| en1-0 | discovery | no Error | 10/29/04 13:57:55 |
| en1-4 | none | Dest.unreachable | |
| | ADD | DELETE | EXIT |

The list displays the following details about the configured entries:

| Column | Description |
|-----------|---|
| Interface | Displays the name of the IP interface which is configured for artem access point discovery. The name shown to identify the interface is the IFDESCR from the IFTABLE . |
| Operation | Displays whether a discovery for artem access points is running. It is updated automatically to indicate, when the discovery operation has finished. It can assume the following values: <ul style="list-style-type: none"> ■ <i>none</i>: Discovery is not running on this interface. ■ <i>discovery</i>: Discovery is currently running on this interface. |

| Column | Description |
|----------|---|
| Result | <p>Displays the result of the operation. It is updated automatically.</p> <p>Ensure that the network cable is plugged in to the required interface.</p> <p>The values are read-only:</p> <ul style="list-style-type: none"> ■ <i>no Error</i>: No discovery initiated or discovery was a success. ■ <i>Dest. unreachable</i>: The interface is currently not usable, i.e. the interface is not operational, has no IP address assigned or has no associated direct route. The request could not be sent. ■ <i>internal error</i>: Is displayed, if the discovery has been configured more than once for one interface. <p>Specific failure reason can be found in the syslog messages.</p> |
| Last Run | <p>Displays the date and time of the last successful discovery. Nothing is displayed if no discovery has been performed yet or all discovery runs have been unsuccessful.</p> |

Table 1-1: **EXTERNAL SYSTEMS** → **ARTEM ACCESS POINT DISCOVERY/CONFIGURATION** → **INITIATE DISCOVERY**

By selecting an entry and pressing the **d** key on your keyboard, you can initiate the discovery process for the selected interface.



Note

Possibly available artem access points are discovered by sending a multicast. Thus it is not important whether the access point has an IP address and which one it is.

**Note**

Note that discovered access point are not stored in the flash, i.e. the discovery has to be repeated after a reboot of your gateway.

You can add an instance of the access point discovery in the menu **EXTERNAL SYSTEMS → ARTEM ACCESS POINT DISCOVERY/CONFIGURATION → INITIATE DISCOVERY → ADD**:

| | |
|---|---|
| R4100 Setup Tool | Funkwerk Enterprise Communications GmbH |
| [EXT] [ARTEM AP] [DISCOV] [ADD]: Add Interfaces for | MyGateway |
| artem AP Discovery | |
| Interface | en1-0 |
| Operation | none |
| SAVE | CANCEL |

The menu contains the following fields:

| Field | Description |
|-----------|---|
| Interface | Here you can choose for which of the IP interfaces the discovery is to be performed. All access points to which the gateway connects via this interface will be discovered. |

| Field | Description |
|-----------|---|
| Operation | <p>Here you can choose if the discovery of an artem access point is to be triggered immediately when the entry is saved, i.e. as soon as you confirm with SAVE.</p> <p>Available choices are:</p> <ul style="list-style-type: none"> ■ <i>none</i> (default value): No operation is performed when the entry has been saved. The discovery can later be triggered as described above. ■ <i>discovery</i>: Discovery on this interface is performed immediately after the entry has been saved. |

Table 1-2: **EXTERNAL SYSTEMS → ARTEM ACCESS POINT DISCOVERY/CONFIGURATION → INITIATE DISCOVERY → ADD**

1.1.2 Submenu View/Configure

Once you have run the discovery on all desired interfaces, you can view the result of the discovery and configure the discovered access points in the menu **EXTERNAL SYSTEMS → ARTEM ACCESS POINT DISCOVERY/CONFIGURATION → VIEW/CONFIGURE**:

| Interface | AP MAC Address | Node Name | IP Address | / Mask |
|--|-------------------|-----------|--------------|--------|
| R4100 Setup Tool Funkwerk Enterprise Communications GmbH | | | | |
| [EXT] [artem AP] [CONF]: Discovered artem Access Points MyGateway | | | | |
| en1-0 | 00:01:cd:0e:a5:01 | XAIR AP1 | 192.168.0.1 | / 24 |
| en1-0 | 00:01:cd:0e:af:02 | XAIR AP2 | 192.168.0.20 | / 24 |
| en1-0 | 00:01:cd:0f:e4:03 | XAIR AP3 | 192.168.0.30 | / 24 |
| en1-0 | 00:01:cd:0f:e4:ea | XAIR 4 | 192.168.0.30 | / 24 |
| EXIT | | | | |

The list displays all discovered access points giving the following information: the interface of the gateway they have been found at, the MAC address of the access point, their current node name and their current IP configuration. You can change a number of values by selecting an entry and confirming with

Return:

| | | | |
|--|-------------------|---|--------|
| R4100 Setup Tool | | Funkwerk Enterprise Communications GmbH | |
| [EXT] [artem AP] [CONF] [EDIT]: artem AP Configuration | | MyGateway | |
| Interface | en1-0 | | |
| AP MAC Address | 00:01:cd:0e:a5:01 | | |
| IP Status | unknown | | |
| Operation | none | | |
| Result | no Error | | |
| Last Change | 10/29/04 14:13:29 | | |
| Node Name | XAIR AP1 | | |
| IP Address | 192.168.0.1 | | |
| Netmask | 255.255.255.0 | | |
| Gateway Address | | | |
| Admin. Password | | | |
| | SET | REFRESH | CANCEL |

The menu offers the following configuration options:

| Field | Description |
|----------------|--|
| Interface | Displays the interface of your gateway to which the access point is connected. |
| AP MAC Address | Displays the MAC address of the access point. |

| Field | Description |
|-----------|--|
| IP Status | <p>Displays by which mechanism the access point has received its IP configuration.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> ■ <i>unknown</i>: The information cannot be collected from the access point. ■ <i>static</i>: The IP configuration was carried out manually. ■ <i>DHCP Lease</i>: The IP configuration was established by DHCP. ■ <i>DHCP Failed</i>: IP configuration by DHCP has failed and a fallback IP configuration, i.e. its static IP address or, if this has not been configured, the 0.0.0.0 (ex works state) is used. |
| Operation | <p>Displays the operation that is currently carried out, it is updated depending on the operation state, when you hit REFRESH. Possible values are:</p> <ul style="list-style-type: none"> ■ <i>none</i>: No operation is currently running. ■ <i>set in progress</i>: A "set" operation is running, i.e. parameters are being configured on the access point. |

| Field | Description |
|-------------|---|
| Result | <p>Displays the result of a "set" operation. Possible values are:</p> <ul style="list-style-type: none"> ■ <i>no Error</i>: The access point has reported success or a configuration modification with SET has not yet been initiated. ■ <i>no Reply</i>: The access point has not replied. ■ <i>Access denied</i>: The access point has reported an authorization failure. Please check the admin password. ■ <i>invalid IP parameters</i>: There is a problem with the intended IP parameters (IP address, netmask or gateway address). ■ <i>Dest. unreachable</i>: The access point cannot be reached because of internal reasons (e.g. the interface the access point is connected to is down). A set request cannot be sent to the access point. ■ <i>other AP error</i>: The access point replies with an unexpected or unspecific error to the set request. ■ <i>internal Error</i>: A gateway internal problem has prevented the set operation. |
| Last Change | Displays the date and time when the access point has been discovered or has last been configured. |
| Node Name | Here you can change the name of the discovered access point. |
| IP Address | Here you can change the IP address of the discovered access point. |

| Field | Description |
|-----------------|--|
| Netmask | Here you can change the netmask of the discovered access point. |
| Gateway Address | Here you can change the gateway address of the discovered access point. |
| Admin. Password | Here you must enter the admin password of the access point. Otherwise the set operation cannot be carried out. |

Table 1-3: **EXTERNAL SYSTEMS → ARTEM ACCESS POINT DISCOVERY/CONFIGURATION → VIEW/CONFIGURE → EDIT**

After starting the set operation with the **SET** button, the help line displays the message `Set in progress...` and the value of **OPERATION** changes to `set in progress`. To view the result of the configuration modification, hit **REFRESH**: **OPERATION** will change back to `none` and **RESULT** will display the outcome of the set request.

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