

EXTERNAL SYSTEMS

Copyright © August 12, 2005 Funkwerk Enterprise Communications GmbH
bintec User's Guide - R Series
Version 1.0

Ziel und Zweck	Dieses Dokument ist Teil des Benutzerhandbuchs zur Installation und Konfiguration von bintec-Gateways ab Software-Release 7.2.4. 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 .																												
Haftung	Der Inhalt dieses Handbuchs wurde mit größter Sorgfalt erarbeitet. Die Angaben in diesem Handbuch gelten jedoch nicht als Zusicherung von Eigenschaften Ihres Produkts. Funkwerk Enterprise Communications GmbH haftet nur im Umfang ihrer Verkaufs- und Lieferbedingungen und übernimmt keine Gewähr für technische Ungenauigkeiten und/oder Auslassungen.																												
	Die Informationen in diesem Handbuch können ohne Ankündigung geändert werden. Zusätzliche Informationen sowie Release Notes für bintec-Gateways finden Sie unter www.funkwerk-ec.com .																												
	Als Multiprotokollgateways bauen bintec-Gateways in Abhängigkeit von der Systemkonfiguration WAN-Verbindungen auf. Um ungewollte Gebühren zu vermeiden, sollten Sie das Produkt unbedingt überwachen. Funkwerk Enterprise Communications GmbH übernimmt keine Verantwortung für Datenverlust, ungewollte Verbindungskosten und Schäden, die durch den unbeaufsichtigten Betrieb des Produkts entstanden sind.																												
Marken	bintec und das bintec-Logo sind eingetragene Warenzeichen der Funkwerk Enterprise Communications GmbH.																												
	Erwähnte Firmen- und Produktnamen sind in der Regel Warenzeichen der entsprechenden Firmen bzw. Hersteller.																												
Copyright	Alle Rechte sind vorbehalten. Kein Teil dieses Handbuchs darf ohne schriftliche Genehmigung der Firma Funkwerk Enterprise Communications GmbH in irgendeiner Form reproduziert oder weiterverwertet werden. Auch eine Bearbeitung, insbesondere eine Übersetzung der Dokumentation, ist ohne Genehmigung der Firma Funkwerk Enterprise Communications GmbH nicht gestattet.																												
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 .																												
Wie Sie Funkwerk Enterprise Communications GmbH erreichen	<table> <tr> <td>Funkwerk Enterprise Communications GmbH</td> <td>Südwestpark 94</td> <td>Deutschland</td> <td>bintec France</td> </tr> <tr> <td></td> <td>D-90449 Nürnberg</td> <td></td> <td>6/8 Avenue de la Grande Lande</td> </tr> <tr> <td></td> <td>Deutschland</td> <td></td> <td>F-33174 Gradignan</td> </tr> <tr> <td></td> <td></td> <td></td> <td>Frankreich</td> </tr> <tr> <td></td> <td>Telefon: +49 180 300 9191 0</td> <td></td> <td>Telefon: +33 5 57 35 63 00</td> </tr> <tr> <td></td> <td>Fax: +49 180 300 9193 0</td> <td></td> <td>Fax: +33 5 56 89 14 05</td> </tr> <tr> <td></td> <td>Internet: www.funkwerk-ec.com</td> <td></td> <td>Internet: www.bintec.fr</td> </tr> </table>	Funkwerk Enterprise Communications GmbH	Südwestpark 94	Deutschland	bintec France		D-90449 Nürnberg		6/8 Avenue de la Grande Lande		Deutschland		F-33174 Gradignan				Frankreich		Telefon: +49 180 300 9191 0		Telefon: +33 5 57 35 63 00		Fax: +49 180 300 9193 0		Fax: +33 5 56 89 14 05		Internet: www.funkwerk-ec.com		Internet: www.bintec.fr
Funkwerk Enterprise Communications GmbH	Südwestpark 94	Deutschland	bintec France																										
	D-90449 Nürnberg		6/8 Avenue de la Grande Lande																										
	Deutschland		F-33174 Gradignan																										
			Frankreich																										
	Telefon: +49 180 300 9191 0		Telefon: +33 5 57 35 63 00																										
	Fax: +49 180 300 9193 0		Fax: +33 5 56 89 14 05																										
	Internet: www.funkwerk-ec.com		Internet: www.bintec.fr																										

1	External Systems Menu	3
1.1	Submenu artem Access Point Discovery/Configuration	3
1.1.1	Submenu Initiate Discovery	3
1.1.2	Submenu View/Configure	7
	Index: External Systems	13



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:

R232bw Setup Tool	Funkwerk Enterprise Communications GmbH
[EXT] [artem AP] [DISCOV]	: artem AP Discovery
Press 'd' to run discovery on selected interface	
Interface	Operation
ISP en1-0 vss0	none discovery none
	no Error no Error Dest.unreachable
	Last Run
	10/29/04 13:57:55 10/29/04 13:57:55
ADD	DELETE
EXIT	

The list displays the following details about the configured entries:

Column	Description
Interface	This column 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	This column 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>This column 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>This column 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 that discovered access point are not stored in the flash, i.e. the discovery has to be repeated after a reboot of your gateway.

Note

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

R232bw 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**:

R232bw Setup Tool		Funkwerk Enterprise Communications GmbH		
[EXT] [artem AP] [CONF]: Discovered artem Access Points		MyGateway		
Interface	AP MAC Address	Node Name	IP Address	/ Mask
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**:

R232bw 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	The value of this field is read-only. This field displays the interface of your gateway to which the access point is connected.
AP MAC Address	The value of this field is read-only. This field displays the MAC address of the access point.

Field	Description
IP Status	<p>The value of this field is read-only.</p> <p>This field 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>The value of this field is read-only.</p> <p>This field 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>The value of this field is read-only.</p> <p>This field 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	<p>The value of this field is read-only.</p> <p>This field displays the date and time when the access point has been discovered or has last been configured.</p>
Node Name	<p>Here you can change the name of the discovered access point.</p>

Field	Description
IP Address	Here you can change the IP address of the discovered access point.
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.

Index: External Systems

A	Access Points	3
	Admin. Password	11
	AP MAC Address	8
	Authentisierungsverhandlung	3
C	Calling Party Number	3
	CLID	3
D	Discovery	3
	discovery	7
G	Gateway Address	11
I	Interface	4, 6, 8
	IP Address	11
	IP Status	9
L	Last Change	10
	Last Run	5
N	Netmask	11
	Node Name	10
O	Operation	4, 7, 9
R	Result	5, 10

