

EXTERNAL SYSTEMS

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Bintec User's Guide - X2250
Version 0.9

Purpose This document is part of the user's guide to the installation and configuration of Bintec gateways running software release 7.1.16 or later. 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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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.

**How to reach Funkwerk
Enterprise Communications
GmbH**

Funkwerk Enterprise Communications GmbH Suedwestpark 94 D-90449 Nuremberg Germany Telephone: +49 180 300 9191 0 Fax: +49 180 300 9193 0 Internet: www.funkwerk-ec.com	Bintec France 6/8 Avenue de la Grande Lande F-33174 Gradignan France Telephone: +33 5 57 35 63 00 Fax: +33 5 56 89 14 05 Internet: www.bintec.fr
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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	6
	Index: External Systems	11



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 of Artem Access Points that are located in the same network as your gateway. Once an access point has been discovered, a number of basic parameters can be configured on the access point (given that you know the administrative password).

1.1.1 Submenu Initiate Discovery

Once you have run an access point discovery, you can configure the discovered devices (node name, IP address, netmask and gateway address). Discovery is triggered in the menu *EXTERNAL SYSTEMS* → *ARTEM ACCESS POINT DISCOVERY/CONFIGURATION* → *INITIATE DISCOVERY*:

X2250 Setup Tool		Bintec Access Networks 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
en0-2	none	no Error	10/29/04 13:57:55
ADD		DELETE	EXIT

The menu displays the following details about the configured entries:

Column	Description
Interface	This column displays the name of interface which is configured for Artem access point discovery. The name shown to identify the interface is the <i>IFDESCR</i> from the <i>IFTABLE</i> .
Operation	This column displays whether a discovery is running. It is updated automatically to indicate, when the discovery operation has finished. It can assume the following (read-only) 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; 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. Specific failure reason can be found in the syslog.
Last Run	<p>This column displays the date and time of the last successful discovery. An empty string is displayed if no discovery has been performed yet or the initial discovery has been unsuccessful.</p>

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

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

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

X2250 Setup Tool		Bintec Access Networks 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.
Operation	<p>Here you can choose if the discovery is to be triggered immediately when the entry is saved, i.e. as soon as you confirm with SAVE.</p> <p>Note that discovered access point are not stored in the MIB, i.e. the discovery has to be repeated after a reboot of your gateway.</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/EDIT**

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**:

X2250 Setup Tool		Bintec Access Networks GmbH		
[EXT] [ARTEM AP] [CONF]: Discovered Artem Access Points		MyGateway		
Interface	AP MAC Address	Node Name	IP Address	/ Mask
en0-2	00:01:cd:0e:a5:01	XAIR AP1	192.168.0.1	/ 24
en0-2	00:01:cd:0e:af:02	XAIR AP2	192.168.0.20	/ 24
en0-2	00:01:cd:0f:e4:03	XAIR AP3	192.168.0.30	/ 24
en0-2	00:01:cd:0f:e4:ea	XAIR 4	192.168.0.30	/ 24
EXIT				

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

X2250 Setup Tool		Bintec Access Networks GmbH	
[EXT] [ARTEM AP] [CONF] [EDIT]: Artem AP Configuration		MyGateway	
Interface	en0-2		
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 to which the access point is connected.

Field	Description
AP MAC Address	The value of this field is read-only. This field displays the MAC address of the access point.
IP Status	The value of this field is read-only. This field displays by which mechanism the access point has received its IP configuration. Possible values are: <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 is used.
Operation	The value of this field is read-only. 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: <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 has not been configured yet. ■ <i>no Reply</i>: The access point has not replied. ■ <i>Access denied</i>: The access point has reported an authorization failure. ■ <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>
IP Address	<p>Here you can change the IP address of the discovered access point.</p>

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 set request, hit REFRESH: **OPERATION** will change back to *none* and **RESULT** will display the outcome of the set request.



Index: External Systems

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

