

# **EXTERNAL SYSTEMS**

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Bintec User's Guide - XGeneration  
Version 0.9

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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 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**:

X2302 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 en0-2	none none	no Error no Error	10/29/04 13:57:55 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 <b>IFDESCR</b> from the <b>IFTABLE</b> .
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"> <li>■ <i>none</i>: Discovery is not running on this interface.</li> <li>■ <i>discovery</i>: Discovery is currently running on this interface.</li> </ul>

Column	Description
Result	This column displays the result of the operation. It is updated automatically; the values are read-only: <ul style="list-style-type: none"> <li>■ <i>no Error</i>: No discovery initiated or discovery was a success.</li> <li>■ <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.</li> </ul>
Last Run	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.

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**:

X2302 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 <b>SAVE</b>.</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"> <li>■ <i>none</i> (default value): No operation is performed when the entry has been saved. The discovery can later be triggered as described above.</li> <li>■ <i>discovery</i>: Discovery on this interface is performed immediately after the entry has been saved.</li> </ul>

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**:

X2302 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:a5:02	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**:

X2302 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	<p>The value of this field is read-only.</p> <p>This field displays the MAC address of the access point.</p>
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"> <li>■ <i>unknown</i>: The information cannot be collected from the access point.</li> <li>■ <i>static</i>: The IP configuration was carried out manually.</li> <li>■ <i>DHCP Lease</i>: The IP configuration was established by DHCP.</li> <li>■ <i>DHCP Failed</i>: IP configuration by DHCP has failed and a fallback IP configuration is used.</li> </ul>
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 <b>REFRESH</b>. Possible values are:</p> <ul style="list-style-type: none"> <li>■ <i>none</i>: No operation is currently running.</li> <li>■ <i>set in progress</i>: A "set" operation is running, i.e. parameters are being configured on the access point.</li> </ul>

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"> <li>■ <i>no Error</i>: The access point has reported success or has not been configured yet.</li> <li>■ <i>no Reply</i>: The access point has not replied.</li> <li>■ <i>Access denied</i>: The access point has reported an authorization failure.</li> <li>■ <i>invalid IP parameters</i>: There is a problem with the intended IP parameters (IP address, netmask or gateway address).</li> <li>■ <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.</li> <li>■ <i>other AP error</i>: The access point replies with an unexpected or unspecific error to the set request.</li> <li>■ <i>internal Error</i>: A gateway internal problem has prevented the set operation.</li> </ul>
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.

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