

Copyright [©] May 3, 2005 Funkwerk Enterprise Communications GmbH Bintec User's Guide - XGeneration Version 1.1

| Purpose | This document is part of the user's guide to the installation and configuration of Bintec gateways run- ning software release 7.1.15 resp. 7.1.19 for WLAN or later. For up-to-the-minute information and in- structions 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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| | The information in this manual is subject to change Release Notes for Bintec gateways can be found a | | |
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| | CE marking for all EU countries and Switzerland | | |
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1 System Menu

The fields of the SYSTEM menu are described below.

| X2302w Setup Tool [SYSTEM]: Change System Parameters | | Bintec | Access | Networks MyGat | GmbH teway |
|----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|---------------|--------|-------------------|---------------|
| System Name Local PPP ID (default) Location Contact | X2302w X2302w European Uni BINTEC | on | | | |
| Syslog Output on Serial S Message Level for the Sys Maximum Number of Syslog | log Table i | o nfo 0 | | | |
| External Activity Monitor > External System Logging > Schedule & Monitor > Password Settings > Time and Date > | | | | | |
| SAVE | CAN | CEL | | | |
| | | | | | |

The **System** menu is used for e.g. entering the basic system data of your gateway.

The SYSTEM menu consists of the following fields:

| Field | Description |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| System Name | Defines the system name of your gateway; is also used as PPP host name. Appears as input prompt when logging in to the device. The device type is entered as default value. |
| Local PPP ID (default) | This entry is necessary to identify your gateway if the remote gateway requests the PPP ID before the gateway has identified itself to the remote terminal. The device type is entered as default value. |

| Field | Description | |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Location | Indicates where your gateway is located. | |
| | Default value: European Union | |
| | Is shown, for example, on the HTML system information page or in the login message. | |
| Contact | Indicates the responsible contact person. Here you can enter the e-mail address of the system administrator, for example. | |
| | Default value: BINTEC. | |
| | Is shown, for example, on the HTML system information page. | |
| Syslog Output on Serial Console | Enables the display of syslog messages on the PC connected to the serial interface of the XGeneration gateway. Use this setting only if you make a fault analysis, as a very large output over the serial console adversely affects the throughput of the other interfaces. | |
| | You should normally use External System Logging . Possible values: | |
| | ■ yes | |
| | no (default value) | |

| Field | Description | |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Message Level for the Syslog Table | Specifies the priority of the syslog messages to be recorded internally. Possible values: | |
| | emerg: emergency messages (highest pri- ority) | |
| | ■ <i>alert</i> : alert messages | |
| | <i>crit</i> : critical messages | |
| | err: error messages | |
| | warning: warning messages | |
| | notice: notice messages | |
| | info (default value): info messages | |
| | debug: debug messages (lowest priority) | |
| | Syslog messages are only recorded internally if they have a higher or identical priority to that indicated, i.e. all messages generated are recorded at syslog level <i>debug</i> . | |
| Maximum Number of Sys- log Entries | Maximum number of syslog messages saved internally in the XGeneration gateway (possible values: 0 1000). | |
| | Default value: 20. | |
| | You can show the saved messages in the Setup Tool under <i>Monitoring and Debugging → Messages</i> . | |

Table 1-1: System menu fields



2 Submenu External Activity Monitor

The fields of the EXTERNAL ACTIVITY MONITOR submenu are described below.

| X2302w Setup Tool [SYSTEM]: [ACTIVMON]: External Activity | Bintec Access Networks GmbH Monitor MyGateway |
|--------------------------------------------------------------|--------------------------------------------------|
| | 255.255.255.255 2107 off 5 |
| SAVE | CANCEL |

The SYSTEM -> EXTERNAL ACTIVITY MONITOR menu contains the settings necessary for monitoring your XGeneration gateway with the Windows Activity Monitor tool (part of BRICKware for Windows).

- PurposeThe Activity Monitor enables Windows users to monitor the activities of the
gateway. Important information about the status of physical interfaces (e.g.
ISDN line) and virtual interfaces (e.g. WAN partner) is easily obtained with one
tool. A permanent overview of the utilization of the gateway is possible.
- Method of operation A Status Daemon collects information about the gateway and transfers it in the form of UDP packets to the broadcast address of the first LAN interface (default setting) or to an explicitly entered IP address. One packet is sent per time interval, which can be adjusted individually to values from 1 60 seconds. Up to 100 physical and virtual interfaces can be monitored, provided the packet size of 4,096 bytes is not exceeded. The Activity Monitor on your PC receives the packets and can display the information contained in them in various ways according to configuration.

Activate the Activity Monitor as follows:

Configure the relevant gateway(s) to be monitored.

Start and configure the Windows application on your PC (see BRICKware for Windows).

The EXTERNAL ACTIVITY MONITOR menu consists of the following fields:

| Field | Description | |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------|--|
| Client IP Address | IP address to which the gateway sends the UDP packets. | |
| | The default value 255.255.255.255 means that the broadcast address of the first LAN interface is used. | |
| Client UDP Port | Port number for the Bintec Activity Monitor (default value: <i>2107</i> , registered by IANA - Inter- net Assigned Numbers Authority). | |
| Туре | Type of information sent in the UDP packets to the Windows application. Possible values: | |
| | off: Deactivates the Activity Monitor (de- fault value) | |
| | <i>physical</i>: Only information about physical interfaces | |
| | physical_virt: Information about physical and virtual interfaces | |
| Update Interval (sec) | Update interval in seconds. Possible values: 0 to 60 (default value: 5). | |
| | The value 0 deactivates the function. | |

Table 2-1: EXTERNAL ACTIVITY MONITOR menu fields

3 Submenu External System Logging

The fields of the EXTERNAL SYSTEM LOGGING submenu are described below.

The SYSTEM -> EXTERNAL SYSTEM LOGGING menu shows the log host settings.

| X2302w Setup Tool [SYSTEM][LOGGING][ADD] | | Bintec Access Networks GmbH MyGateway |
|----------------------------------------------------|-------------------------------|------------------------------------------|
| Log Host Level Facility Type Timestamp | info local0 all none | |
| SAVE | | CANCEL |
| | | |

Events in the various subsystems of the gateway (e.g. **>> PPP**) are logged in the form of syslog messages (system logging messages), see "System Menu" on page 3. The number of messages visible depends on the level set (eight steps from *emerg* and *info* to *debug*).

In addition to the data logged internally on the gateway, all information can and should also be passed to one or more external PCs for storage and processing, e.g. to the system administrator's PC. The syslog messages saved internally on the gateway are lost on a restart.



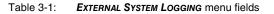
Make sure you only pass syslog messages to a safe computer. Check the data regularly and ensure that there is always enough spare capacity available on the hard disk of your PC.

Syslog Daemon All Unix operating systems support the recording of syslog messages. For Windows PCs, the Syslog Daemon included in the DIME Tools can record the data and distribute to various files depending on the contents (see BRICKware for Windows).

The settings for saving syslog messages externally are made in System → EXTERNAL SYSTEM LOGGING → ADD/EDIT.

The menu consists of the following fields:

| Field | Description |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Log Host | >>IP address of the host to which syslog messages are passed. |
| Level | Priority of the syslog messages to be sent to Log Host. The possible values correspond to those in "Message Level for the Syslog Table" on page 5. |
| | Only syslog messages with the same or higher priority than indicated are passed to the <i>Log Host</i> , i.e. all the messages created are passed to the <i>Log Host</i> in syslog <i>Level Debug</i> . |
| Facility | Syslog facility at <i>Log Host</i> . Only required if the <i>Log Host</i> is a Unix computer. |
| | Possible values: <i>local0 -</i> 7 (default value <i>local0</i>). |
| Туре | Message type. Possible values: |
| | all: All messages (default value) |
| | system: Syslog messages except accounting messages. |
| | accounting: Accounting messages |
| Timestamp | Format of the system time of the XGeneration gateway in the syslog. Possible values: |
| | <i>all</i> : System time with date |
| | <i>time</i> : System time without date |
| | none: No system time shown (default value) |



4 Submenu Schedule & Monitor

The fields of the SCHEDULE & MONITOR submenu are described below.

The SCHEDULE & MONITOR menu offers access to other submenus:

- KEEPALIVE MONITORING (HOSTS & IFC)
- EVENT SCHEDULER (TIME & SNMP)

4.1 Submenu Keepalive Monitoring (Hosts & Ifc)

The **System** → **Schedule & Monitor** → **Keepalive Monitoring** menu contains settings for the "Keepalive Monitoring" feature.

Keepalive Monitoring cannot be configured in the gateway for WAN partners that are authenticated via a RADIUS server!

SYSTEM \rightarrow **SCHEDULE & MONITOR** \rightarrow **KEEPALIVE MONITORING** lists the *hosts* and *interfaces* monitored by Keepalive Monitoring. The reachability of the hosts is listed under **STATE**: *alive* if the host was reachable on the last check, *down* if the host was not reachable.

The **WHAT TO MONITOR:** menu is used to set whether the configuration is made for *hosts* or *interfaces*.

WHAT TO MONITOR: hosts

| X2302w Setup Tool [SYSTEM][KEEPALIVE | MONITORING][ADD]: Host | | Networks GmbH MyGateway |
|----------------------------------------------------------------------------------------------|-----------------------------------|--------|----------------------------|
| Group IPAddress Interval Trials Source IP DownAction FirstIfIndex Range | 0 300 down 10001 4999 | | |
| SAVE | | CANCEL | |

If *hosts* has been selected, the *KEEPALIVE MONITORING* → *ADD/EDIT* menu consists of the following fields:

| Field | Description |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Group | Defines a group of hosts, whose reachability is to be monitored by the XGeneration gateway. Each host to be monitored is assigned to a group. A total of 256 groups can be created. Possible values: <i>0</i> (default value) <i>255</i> . |
| IP Address | Defines a host that is to be monitored by the XGeneration gateway. |
| Interval | Defines the time interval in seconds to be used for checking the reachability of hosts. Possible values: 1 65536 (default value: 300 s). The smallest INTERVAL of the group members is used within a group. |
| Trials | Defines the number of pings, that are sent to check the availability of hosts. Possible values: 1 65536 (default value: 3). |

| Field | Description | |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Source IP | The IP address that the gateway uses as source address of the packet sent to the host to be monitored. | |
| DownAction | Defines how the status of the XGeneration gateway interfaces selected in <i>FIRSTIFINDEX</i> and <i>RANGE</i> is set if all hosts in a group are not reachable. Possible values: | |
| | down: Interfaces are deactivated, i.e. ad- min status is set to down. (Default value) | |
| | none: No action, i.e. admin status is set to up. | |
| | up: Interfaces are activated. | |
| | The status of the interfaces is set to the original value again when at least one host in a group can be reached again. | |
| | Note: DownAction must be configured identi- cally within a group! | |
| FirstIfIndex | Defines the first interface of an interface range in the XGeneration gateway, for which the action (<i>down</i> or <i>up</i>) defined under DOWNACTION is to be executed. | |
| | Possible values: 100 65536 | |
| | Default value: 10001 | |
| | Interfaces with indices from 10001 to 14999 are provided for dialup connections to WAN part- ners. You can find the indices of the interfaces with, for example, the command ifstat. | |

| Field | Description |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Range | Defines the range of interfaces in the XGeneration gateway, for which the action defined under DownAction is to be executed. |
| | Default value: 4999 |
| | If you set FIRSTIFINDEX = 10001 and RANGE = 0 , only the interface with the index 10001 is affected. |
| | If you set FIRSTIFINDEX = 10001 and RANGE = 19 , the interfaces with the indices 10001 to 10020 are affected. |

Table 4-1: Fields in *KeepaLive Monitoring hosts* menu

WHAT TO MONITOR: Interfaces

| VX2302w Setup Tool [SYSTEM][KEEPALIVE | MONITORING][ADD]: | Bintec Access Ne Interface Monitoring | tworks GmbH MyGateway |
|------------------------------------------|-------------------|------------------------------------------|--------------------------|
| Interface Trigger Action | 0 down none | | |
| SAVE | | CANCEL | |

| Field | Description |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Interface | Defines the interface to be monitored in the XGeneration gateway. |
| | Enter the interface <i>INDEX</i> here. The <i>INDEX</i> can be determined, for example, with the command ifstat. Default value: <i>0</i> . |
| Trigger | Defines the status of <i>INTERFACE</i> , which initiates a certain <i>ACTION</i> . Possible values: |
| | down: Interface is deactivated (default value) |
| | up: Interface is activated |
| Action | Defines the action that is to follow the status defined in <i>TRIGGER</i> . The action is executed on the interface range from <i>FIRSTIFINDEX</i> and <i>FIRSTIFINDEX</i> + <i>RANGE</i> . |
| | Possible values: |
| | <i>none:</i> No action (default value) |
| | <i>down</i> : Deactivation of interface(s) |
| | up: Activation of interface(s) |

If WHAT TO MONITOR: interfaces has been selected, the KEEPALIVE MONITORING → ADD/EDIT menu consists of the following fields:

| Field | Description |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FirstlfIndex | Defines the first interface of an interface range in the XGeneration gateway, for which the action (<i>down</i> or <i>up</i>) defined under DownAction is to be executed. |
| | Possible values: 100 65536 |
| | Default value: 10001 |
| | Interfaces with indices from 10001 to 14999 are provided for dialup connections to WAN part- ners. You can find the indices of the interfaces with, for example, the command ifstat. |
| Range | Defines the range of interfaces in the XGeneration gateway, for which the action defined under ACTION is to be executed. |
| | If you set FIRSTIFINDEX = 10001 and RANGE = 0 , only the interface with the index 10001 is affected. |
| | If you set FIRSTIFINDEX = 10001 and RANGE = 4999 (default value), the interfaces with the indices 10001 to 14999 are affected. |

Table 4-2: Fields in KEEPALIVE MONITORING interfaces menu

4.2 Submenu Event Scheduler (Time & SNMP)

Your gateway is equipped with an event scheduler, which makes it possible to make any entries in the MIB as soon as a certain event (also freely configurable) occurs.

Apart from default and easily configured standard applications like time- or volume-controlled activation or deactivation of interfaces, the event scheduler permits access to any MIB parameter. This means that any event in the MIB can be defined as the trigger of any desired action.



The configuration of actions that are not available as defaults requires extensive knowledge of the method of operation of Bintec gateways. An incorrect configuration can cause considerable disturbances in operation. If applicable, save the original configuration e.g. on your PC.

The event scheduler is configured in the SYSTEM → SCHEDULE & MONITOR → EVENT SCHEDULER (TIME & SNMP) menu:

| X2302w Setup Tool [SYSTEM][SCHEDULED]: Event Schedule | Bintec Access Networks GmbH MyGateway |
|-------------------------------------------------------------|------------------------------------------|
| Event Scheduler Schedule Events > Schedule Commands > | disabled |
| SAVE | CANCEL |
| | |

Activate (*enabled*) or deactivate (*disabled*) the scheduler in the **EVENT SCHEDULER** field; the default setting is deactivated. When the **EVENT SCHEDULER** is activated, the schedule interval is set to 300s as default. Configure the events that are to initiate a certain action at the gateway in the **SCHEDULE EVENTS** menu and the actions to be executed in the **SCHEDULE COMMANDS** menu. The triggers (events) can be linked to event chains, so that complex conditions for initiating an action can also be created.

4.2.1 Configuration of triggers (Events)

The events that initiate a relevant action are created and edited in the SYSTEM \rightarrow SCHEDULE & MONITOR \rightarrow EVENT SCHEDULER (TIME & SNMP) \rightarrow SCHEDULE EVENTS \rightarrow ADD/EDIT menu.

The default menu opens with the mask for configuring an event of the time type:

| X2302w Setup Tool [SYSTEM][SCHEDULED][S | Bintec Access Networks GmbH SCHED_EVT][ADD]: Scheduler Events MyGateway |
|---------------------------------------------|----------------------------------------------------------------------------|
| Index 1 NextIndex nor Type tim | |
| Condition Start time (hł End time (hł | |
| Status | notavail |
| SAVE | CANCEL |
| | |
| | |

If you select **Type** = value, the menu changes as follows:

| X2302w Setup Tool [SYSTEM][SCHEDULED][SCH | Bintec Access Networks GmbH ED_EVT][ADD]: Scheduler Events MyGateway |
|-----------------------------------------------------------------------|-------------------------------------------------------------------------|
| Index 1 NextIndex none Type value | Description |
| Monitored event Table Variable Index variable Index value | user defined |
| Condition Compare value End value | range |
| Status | notavail |
| SAVE | CANCEL |
| | |

| Field | Description |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Index | The gateway assigns an index number for the entry automatically. This value can also be edited. |
| | Possible settings are all values from 1 to 65535. |
| Description | Here you enter the desired description for the event. The maximum length of the entry is 30 characters. |
| NextIndex | Here you select from the existing entries the entry that is to follow the current entry in an event chain. The entries in an event chain form a complex condition for an action to be exe- cuted. How the event chain leads to an action is configured in the SYSTEM → SCHEDULE & MONITOR → EVENT SCHEDULER (TIME & SNMP) → SCHEDULE COMMANDS menu. |
| Туре | Here you select which type of event is to initiate an action: Possible settings: |
| | time - The action is initiated at certain times (default value). Please make sure the gateway system time is set correctly! |
| | value - The action is initiated as soon as a MIB variable becomes a certain value. |

The menu contains the following fields depending on the setting:

| Field | Description |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Monitored event | Only for Type = value. Here you can choose between different events. Possible settings: user defined - You can choose which of the |
| | values and MIB variables the scheduler is to respond to with an action (default value). |
| | WAN interface total charge - A trigger be- comes active if a certain total charge limit is reached for all connections at a WAN inter- face (the interface is selected on configur- ing the action). The gateway must receive charging information from the provider for this purpose. |
| | WAN interface total duration - A trigger be- comes active if the total duration of all con- nections of a WAN interface (in seconds) has reached a certain value. |
| | WAN interface total RX traffic - A trigger be- comes active if a WAN interface has re- ceived a certain total amount of data (in bytes) for all connections. |
| | WAN interface total TX traffic - A trigger be- comes active if a WAN interface has sent a certain total amount of data (in bytes) for all connections. |
| Table | Only for MONITORED EVENT = user defined. |
| | Here you enter the name of the MIB table con- taining the MIB variable that is to be used for the trigger, e.g. BIBOPPPSTATTABLE . |

| Field | Description |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Variable | Only for MONITORED EVENT = user defined. |
| | Here you enter the name of the MIB variable that is to be used for the trigger, e.g. <i>TotalDuration</i> . |
| Index variable | Only for MONITORED EVENT = user defined. |
| | Here you enter the name of the index variable of the previously defined MIB table. This is the variable marked with an asterisk (*) in the table view of the desired MIB table, e.g. CONNIFINDEX . |
| Index value | Only for MONITORED EVENT = user defined. |
| | Here you enter the value of the INDEX VARIABLE for the table entry that is to be used for the trigger, e.g. 10001. |

| Field | Description |
|---------------|--------------------------------------------------------------------------------------------------------------------------|
| Condition | For <i>T</i>ype = <i>time</i> : |
| | daily - The trigger becomes active daily (de- fault value). |
| | <day of="" week=""> - The trigger becomes re- peatedly active on a certain day of the week.</day> |
| | mon_fri - The trigger becomes active daily from Monday to Friday. |
| | sat_sun - The trigger becomes repeatedly active on Saturdays and Sundays only. |
| | ■ <i>day</i> <1 31> - The trigger becomes repeatedly active on a certain day of the month. |
| | For Type = value: |
| | range - The trigger becomes active if the value of the variable is in a certain range (default value). |
| | greater - The trigger becomes active if the value of the variable exceeds a certain val- ue. |
| | equal - The trigger becomes active if the value of the variable is a certain value. |
| | <i>less</i> - The trigger becomes active if the value of the variable is below a certain value. |
| | notequal - The trigger becomes active if the value of the variable is not a certain value. |
| Compare value | Value with which the value of VARIABLE is compared under the condition defined in CONDITION . |
| | If CONDITION = range, this is the start value of the range of values. |

| Field | Description |
|--------------------|-------------------------------------------------------------------------------------------------------------------------|
| End value | If CONDITION = range, this is the end value of the range of values. |
| Start time (hh:mm) | Only for Type = time. |
| | Here you enter the time at which the trigger is to be activated. |
| End time (hh:mm) | Only for Type = time. |
| | Here you enter the time at which the trigger is to be deactivated. |
| Status | This field cannot be edited and shows the sta- tus of the trigger. |
| | Possible values: |
| | active - The trigger is currently active. |
| | ■ <i>inactive</i> - The trigger is inactive. |
| | <i>notavail</i> - The status cannot be determined, e.g. if the scheduler is not activated. |
| | error - An error has occurred; the configura- tion of the trigger is not consistent. |

Table 4-3: System → Schedule & Monitor → Event Scheduler (Time & SNMP) → Schedule Events → ADD/EDIT

4.2.2 Configuration of the Action (Command)

The action executed as soon as one of the events configured as trigger occurs is created or edited in the SYSTEM \rightarrow SCHEDULE & MONITOR \rightarrow EVENT SCHEDULER (TIME & SNMP) \rightarrow SCHEDULE COMMANDS \rightarrow ADD/EDIT menu.

The default menu opens for configuring the actions as follows:

| X2302w Setup Tool [SYSTEM][SCHEDULED][SCHE | D_CMD][ADD]: Sche | | ss Networks GmbH s MyGateway |
|-------------------------------------------------------------------------------------------------------------|--------------------------------------|------------|---------------------------------|
| Index 1 Mode 1. Event Index Eventlist Condition | Description enable none all | | |
| Execute command Table Variable Index variable Index value Set value active value inactive | user defined | | |
| Notify | all | | |
| Status notavail | Last Change | 01/01/1970 | 0:00:00 |
| SAVE | CA | NCEL | |
| | | | |

If you select the value *disable interface* or *enable interface* for the **EXECUTE COMMAND** field, the menu changes as follows:

| X2302w Setup Tool | Bintec Access Networks GmbH |
|----------------------------------------------------------|------------------------------------------|
| [SYSTEM][SCHEDULED][SCHED | _CMD][ADD]: Scheduler Commands MyGateway |
| Index 1 Mode 1. Event Index Eventlist Condition | |
| Execute command | disable interface |
| Interface | en1-0 |
| Notify | all |
| Status notavail | Last Change 01/01/1970 0:00:00 |
| SAVE | CANCEL |
| | |

| Field | Description | |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Index | The gateway assigns an index number for the entry automatically. This value can also be edited. | |
| | Possible settings are all values from 1 to 65535. | |
| Description | Here you enter the desired description for the action. The maximum length of the entry is 30 characters. | |
| Mode | Here you select if the configured action is to be active or inactive. | |
| | Possible settings: | |
| | enable (default value) | |
| | disable | |
| 1. Event Index | Here you define the first event of an event chain. The event chain is activated only by this entry, preceding entries are ignored. The default value is <i>none</i> . | |

The menu contains the following fields depending on the setting selected:

| Field | Description |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Eventlist Condition | Here you define whether all the entries of an event chain must occur before an action is exe- cuted. Possible settings: |
| | all - All events of an event chain must occur if the action is to be executed (default val- ue). |
| | one - At least one of the events of an event chain must occur if the action is to be exe- cuted. |
| | none - None of the events of an event chain may occur if the action is to be executed. |
| | one_not - At least one of the events of an event chain must not occur if the action is to be executed. |
| Execute command | Here you define the action that is executed by a trigger. Possible settings: |
| | disable interface - The interface set in the INTERFACE field is deactivated (its ADMINSTATUS is set to down). |
| | enable interface - The interface set in the INTERFACE field is activated (its ADMINSTATUS is set to up). |
| | user defined (default value)- The action is configured as desired in the following fields. |
| Interface | Here you select which interface is to be activated or deactivated if <i>disable interface</i> or <i>enable interface</i> is selected for <i>Execute Command</i> . |

| Field | Description |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Table | Only for Execute COMMAND = user defined. |
| | Here you enter the MIB table containing the variable to be set, e.g. <i>ifTable</i> . |
| Variable | Only for Execute Command = user defined. |
| | Here you enter the MIB variable to be set, e.g. <i>AdminStatus</i> . |
| Index variable | Only for Execute Command = user defined. |
| | Here you enter the index variable of the previ- ously selected MIB table. This is the variable marked with an asterisk (*) in the table view of the desired MIB table, e.g. <i>Index</i> . |
| Index value | Only for Execute Command = user defined. |
| | Here you enter the value of the index variable for the table entry that is to be changed by the action, e.g. <i>10001</i> . |
| Set value active | Only for Execute Command = user defined. |
| | Here you enter the value the VARIABLE is to be assigned by the action. The value is set as soon as an appropriate trigger becomes active and is retained until the trigger becomes inactive again. |
| value inactive | Only for EXECUTE COMMAND = user defined. |
| | Here you enter the value the VARIABLE is to become as soon as the trigger becomes inactive. This value is also assigned to the variable after a gateway restart or if the system time is not set correctly. |

| Field | Description |
|-------------|-------------------------------------------------------------------------------------------------------------|
| Notify | Here you select the mechanisms to be used to notify actions. Possible settings: |
| | all - Both SNMP traps and syslog messages are generated. (Default value) |
| | snmptrap - Only SNMP traps are generated. |
| | syslog - Only syslog messages are gener- ated. |
| | none - No messages are generated. |
| Status | This field cannot be edited and shows the sta- tus of the action. |
| | Possible values: |
| | <i>active</i> - The action is currently active. |
| | <i>inactive</i> - The action is inactive. |
| | notavail - The status cannot be determined, e.g. if the scheduler is not activated. |
| | error - An error has occurred; the configura- tion of the action is not consistent. |
| Last Change | Shows the time of the last status change. This field cannot be edited. |

Table 4-4: System → Schedule & Monitor → Event Scheduler (Time & SNMP) → Schedule Commands → ADD/EDIT

5 Submenu Password Settings

The fields of the PASSWORD SETTINGS submenu are described below.

| X2302w Setup Tool [SYSTEM][PASSWORDS]: Change | | ntec Access Networks GmbH MyGateway |
|-----------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------------|
| admin Login Password/SNMP read Login Password/SNMP write Login Password/SNMP HTTP Server Password Activity Monitor Password | Community ***** | |
| SAVE | | CANCEL |

Setting the passwords is one of the basic system settings. (Detailed information about the user rights of the various users can be found in **Access and Configuration**.)

The **PASSWORD SETTINGS** menu consists of the following fields:

| Field | Description |
|------------------------------------------|----------------------------------------------------------------------------------------------|
| admin Login Pass- word/SNMP Community | Password for user name admin. |
| read Login Pass- word/SNMP Community | Password for user name read. |
| write Login Pass- word/SNMP Community | Password for user name write. |
| HTTP Server Password | Password for the system variables pages accessible via the HTTP status page of your gateway. |
| Activity Monitor Password | Password for the ACTIVITY MONITOR . |

Table 5-1: **PASSWORD SETTINGS** menu fields



All Bintec gateways are shipped with the same user name and password. As long as the password remains unchanged, they are not protected against unauthorized use.

Change the password to prevent unauthorized access to the gateway.

As long as the password remains unchanged, the following warning appears on logging in: "Password not changed".

6 Submenu Time and Date

| | The fields | of the | TIME AND D | DATE subment | are described | below. |
|--|------------|--------|------------|--------------|---------------|--------|
|--|------------|--------|------------|--------------|---------------|--------|

| X2302w Setup Tool Bintec Access Network [SYSTEM][TIME]: Control System Time and Date | s GmbH MyGateway |
|-------------------------------------------------------------------------------------------------------------|---------------------|
| Current System Time: Wed 2005/Feb/28 19:19:37 setby: None | |
| Change System Time: 2005/Feb/28 19:19:17 CHANGE | |
| Time Update Interval : 86400 Seconds | |
| System Time Offset from GMT : 0 Seconds | |
| Time Servers: | |
| Name/Address Protocol 1: SNTP 2: SNTP 3: SNTP | |
| SAVE CANCEL | |
| | |

System time You need the system time for tasks such as correct timestamps for system messages, accounting or IPSec certificates.

You can derive the system time:

- automatically, e.g. via different time servers.
- manually in the gateway.

| $ \rightarrow$ |
|-----------------|
| |
| |
| Note |

If a method for deriving the time automatically is set in the gateway, the values obtained in this way have higher priority. Any system time entered manually is overwritten.

The menu for the configuration of the time retrieval is accessible via the **System** menu (**System** \rightarrow **Time and Date**).

The first line in the menu window displays the current system time. This can be changed manually in the second line. Confirming with *CHANGE* applies the changes.

Since the system time is reset by a reboot on gateways that do not have a hardware Real Time Clock (**XGeneration** gateways are not equipped with a Real Time Clock), synchronization with several time servers is supported. The Setup Tool allows the configuration of three time servers. These options are configured in the lower half of the menu window. The menu offers the following configuration options:

| Field | Description |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Time Update Interval | Here you enter the interval at which the gate- way will try to synchronize with one of the con- figured time servers (in seconds). Default value is 86400. |
| System Time Offset from GMT | Here you enter the offset the local time has from GMT. Values are entered in seconds, but values between 1 and 23 are interpreted as hours and are converted to seconds upon sav- ing the configuration. Positive values can be entered as well as nega- tive ones, the default value is 0. |
| Name/Address | Here you can enter up to three time servers, either by their domain name or by their IP address. There are no preconfigured servers. |

| Field | Description | |
|----------|-----------------------------------------------------------------------------------------------|--|
| Protocol | Here you choose the protocol used for querying the time server. | |
| | Available choices are: | |
| | SNTP - This server uses the Simple Net- work Time Protocol. | |
| | disabled - This time server is currently not used for time retrieval. | |
| | ■ <i>TIME/UDP</i> - This server uses the Time/UDP protocol. | |
| | TIME/TCP - This server uses the Time/TCP protocol. | |



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