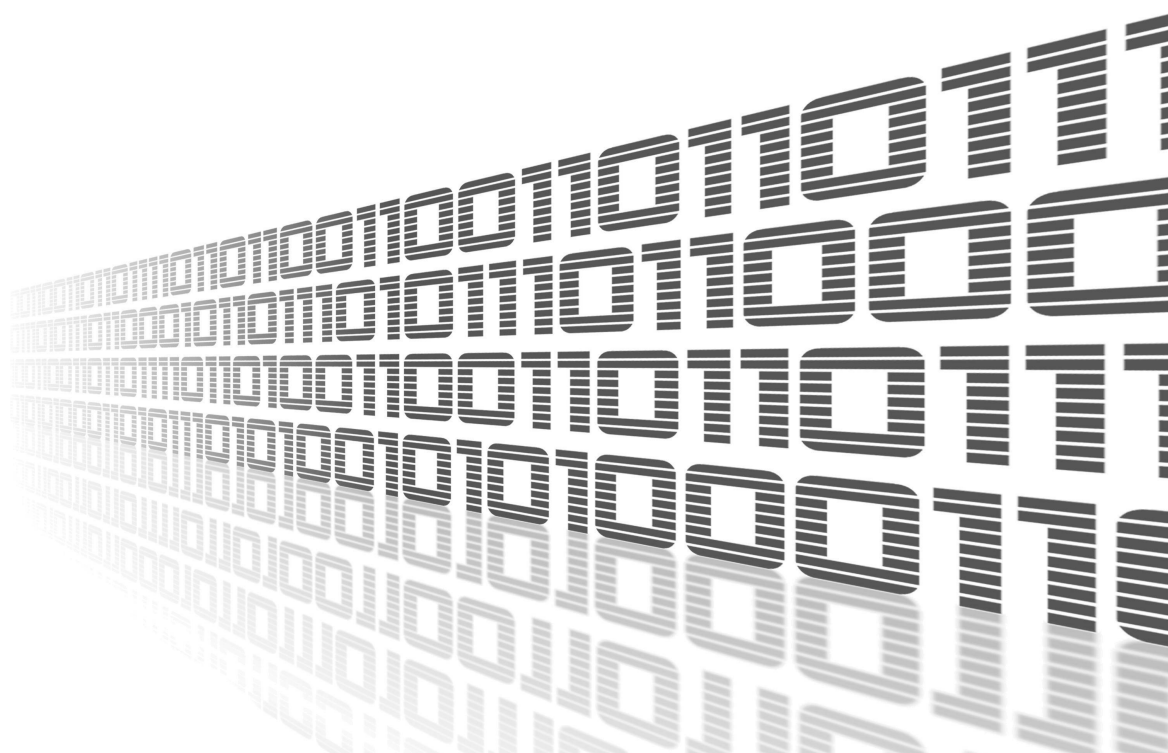




User Module

Suite HT of protocols

APPLICATION NOTE



ADVANTECH

Used symbols



Danger – Information regarding user safety or potential damage to the router.



Attention – Problems that may arise in specific situations.



Information or notice – Useful tips or information of special interest.



Example – example of function, command or script.



Advantech Czech s.r.o., Sokolska 71, 562 04 Usti nad Orlici, Czech Republic
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1. Description of user module



User module *Suite HT of protocols* is not contained in the standard router firmware. Uploading of this user module is described in the Configuration manual (see [1, 2]).



The user module is v2 and v3 router platforms compatible.

This module allows the router to send queries from the AMR system to a meter through an IP network using the router as a gateway. AMR system will send commands and these commands will not be encoded or encapsulated, but shall be sent "in clear" over a TCP connection. The router, upon receiving this command, will send it to the meter, following the timings and the handshake process. Once router has received the response message from the meter, it sends it back to the AMR system and waits for another command. If AMR has no more commands to send, it will close the TCP session and the router will have to end the communication with the meter.

For configuration *Suite HT of protocols* user module is available web interface, which is invoked by pressing the module name on the *User modules* page of the router web interface. The left part of the web interface contains the menu with pages for monitoring (*Status*), configuration (*Configuration*) and customization (*Customization*) of the module. *Customization* block contains only the *Return* item, which switches this web interface to the interface of the Conel router.

Suite HT of protocols

Status	Suite HT of protocols Status
Overview	Expansion Port 1
Configuration	Service : running
Global	AMR System : disconnected
Customization	Meter : disconnected
Return	TCP sessions : 0
	Meter connected : 0
	Meter disconnected : 0
	Meter connection lost : 0
	Commands OK : 0
	Commands failed : 0
	Responses OK : 0
	Responses failed : 0
	Expansion Port 2
	Service is disabled.

Figure 1: Web interface

2. Web interface

2.1 Overview

In the section with pages for monitoring the status of the router (*Status*) is available only *Overview* item which displays detailed information about the activities of this user module. Information is divided into two blocks which correspond to fitted optional ports (Port 1 or Port 2) on which communication takes place.

Suite HT of protocols Status	
Expansion Port 1	
Service	: running
AMR System	: disconnected
Meter	: disconnected
TCP sessions	: 0
Meter connected	: 0
Meter disconnected	: 0
Meter connection lost	: 0
Commands OK	: 0
Commands failed	: 0
Responses OK	: 0
Responses failed	: 0
Expansion Port 2	
Service is disabled.	

Figure 2: Overview

Meaning of individual items is as follows:

Item	Description
Service	Current status of the service (if it's active, the value is <i>running</i>)
AMR System	Availability of AMR system
Meter	Availability of meter
TCP sessions	Number of TCP sessions
Meter connected	Number of connected routers
Meter disconnected	Number of disconnected routers
Meter connection lost	Number of lost connections
Commands OK	Number of commands processed in order
Commands failed	Number of failed commands
Responses OK	Number of responses processed in order
Responses failed	Number of failed responses

Table 1: Overview

2.2 Global

The actual configuration of this user module is performed via the form named *Global*. The first item in this form – *Enable Suite HT of protocols* – is used to activate these user module. This form also allows user to select expansion ports for which the service will be available. It is necessary to specify the TCP port for selected port.

All changes will be applied after pressing the *Apply* button.

Global Configuration	
<input type="checkbox"/> Enable Suite HT of protocols	
<input type="checkbox"/> on Expansion Port 1, listen TCP port	14522
<input type="checkbox"/> on Expansion Port 2, listen TCP port	14523
at fixed speed 9600,8,N,1	
<input type="button" value="Apply"/>	

Figure 3: Global

3. Related Documents

- [1] Advantech Czech: **v2 Routers Configuration Manual** (MAN-0021-EN)
- [2] Advantech Czech: **SmartFlex Configuration Manual** (MAN-0023-EN)
- [3] Advantech Czech: **SmartMotion Configuration Manual** (MAN-0024-EN)
- [4] Advantech Czech: **SmartStart Configuration Manual** (MAN-0022-EN)
- [5] Advantech Czech: **ICR-3200 Configuration Manual** (MAN-0042-EN)



Product related documents can be obtained on *Engineering Portal* at www.ep.advantech-bb.cz address.