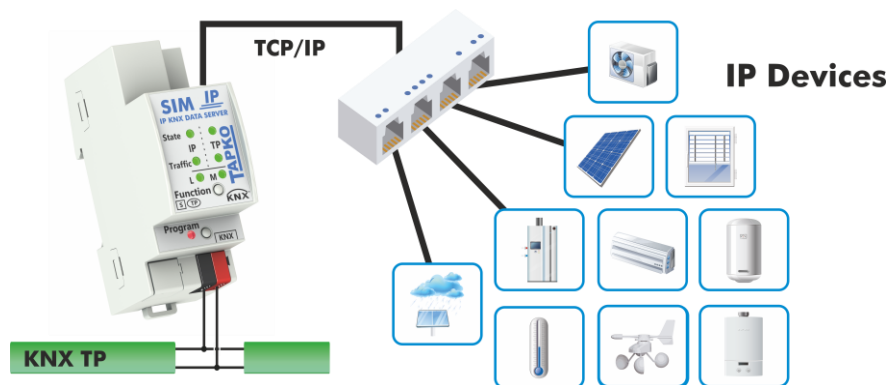


TAPKO

TECHNOLOGIES GMBH



SIMip

Generic ETS Database with 600 Objects
for a Quick Start towards Developing with SIMip

Application Support Document

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1 Introduction

SIMip is a data server device that is intended for product development. It is suitable to connect a certain kind of non-KNX IP product to the KNX system, but is also suitable to serve as a data protocol converter for several different IP products. For this purpose, usually a customer individual database entry for ETS has to be created by TAPKO's development department, or by the customer himself.



For creating ETS databases, please contact the manufacturer to get detailed information about device-internal data.

For not having to create an individually customized ETS database before using SIMip – this can sometimes be a very time-consuming step – TAPKO provides a generic database for customization (TAPKO_ETS5_SIMip_R1-0.knxprod). It supports 600 objects. So, customers have a quick and uncomplicated start to development and testing. This Application Support Document gives all necessary details about the ETS database parameters that can be customized to a customer's individual requirements.

2 ETS Database

All screen shots are related to the SIMip database file in ETS5.

2.1 General

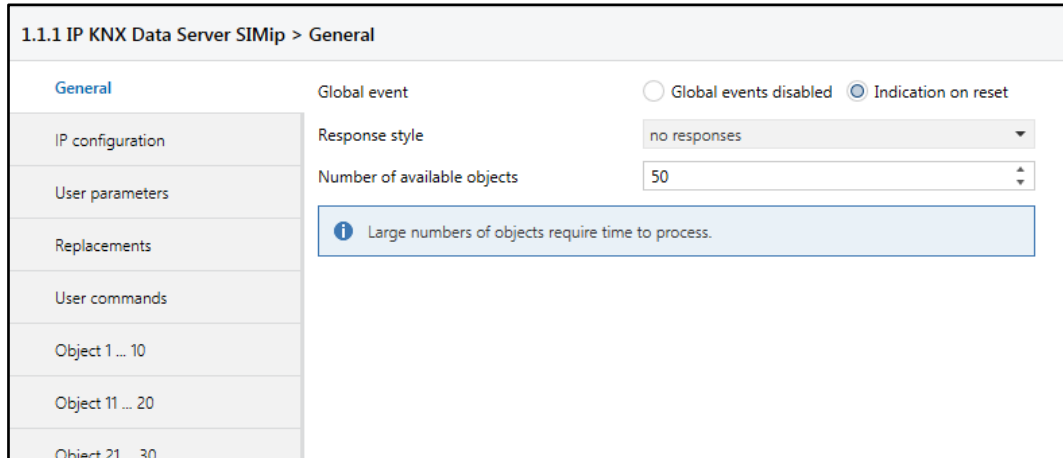


Figure 1: General Tab Parameters

Table 1: General Tab Parameter Settings

ETS Parameter	Settings [Factory Default]	Comment
Global event	Global events disabled Indication on reset [Indication on reset]	After an event (for example device restart over the telnet), SIMip indicates with a response on IP side that the event is complete/finished. No response follows when Global events are disabled.
Response style	no responses echo command echo ok [no responses]	When 'echo command' is set, SIMip repeats the command entered on Telnet before displaying the return value. Similarly, when 'echo ok' is set, Telnet responds with OK after every command.
Number of available objects	1...600 [1]	The number of available communication objects, that are necessary for data exchange, must be set here.

2.2 IP configuration

Here, the IP connection settings to reach the data server device via IP can be configured.

The screenshot shows the 'IP configuration' tab for '1.1.1 IP KNX Data Server SIMip'. The interface includes a sidebar with navigation options like 'General', 'IP configuration', 'User parameters', etc. The main area contains the following settings:

- Host name:** SIMip
- HTTP port:** Radio buttons for 80 and 8080 (8080 is selected).
- DHCP:** Radio buttons for No and Yes (No is selected).
- IP address:** 0.0.0.0
- Default gateway:** 0.0.0.0
- DNS server:** 0.0.0.0
- Subnet mask:** 0.0.0.0
- IP connection:**
 - Connection port:** 12004
 - Enable timeout:** Radio buttons for No and Yes (Yes is selected).
 - Timeout value:** 600 [s]

Figure 2: General Tab Parameters

Table 2: IP configuration Tab Parameter Settings

ETS Parameter	Settings [Factory Default]	Comment
Host name	<max. 30 bytes name length> [SIMip]	The host name is shown in the network to reach the data server's web front-end.
HTTP port	80 8080 [8080]	HTTP port can be set to 80 or 8080.
DHCP	No Yes [Yes]	When DHCP is active, IP address, default gateway, DNS server address, and subnet mask will be assigned automatically.
IP address	<IPv4 format> [0.0.0.0]	When DHCP is not active, please set the fixed IP address manually here. (Example: 192.168.2.101)
Default gateway	<IPv4 format> [0.0.0.0]	When DHCP is not active, please set the fixed default gateway manually here.
DNS server	<IPv4 format> [0.0.0.0]	When DHCP is not active, please set the fixed DNS server address manually here.
Subnet mask	<IPv4 format> [0.0.0.0]	When DHCP is not active, please set the fixed subnet mask manually here. (Example: 255.255.255.0)
IP connection		
Connection port	0...32,264 [12,004]	The connection port is necessary to reach the device via a terminal program.

ETS Parameter	Settings [Factory Default]	Comment
Enable timeout	No Yes [No]	When enabled, the IP connection is set back automatically after a certain time interval.
Timeout value	0...32,264[s] [600]	When the automatic setback of the IP connection is enabled, the corresponding time interval can be set here.

2.3 User parameters

1.1.1 IP KNX Data Server SIMip > User parameters

General	Number of user parameters	4
IP configuration	User parameter 0	0
User parameters	User parameter 1	0
Replacements	User parameter 2	0
User commands	User parameter 3	0

Figure 3: General Tab Parameters

Table 3: User parameters Tab Parameter Settings

ETS Parameter	Settings [Factory Default]	Comment
Number of user parameters	0...255 [0]	The number of available user parameters must be set here.
User parameter (0-254)	1...255 [0]	

2.4 (String) Replacements

1.1.1 IP KNX Data Server SIMip > Replacements

General	Number of replacements	64
IP configuration	Replacement 1	
User parameters	Original string	<input type="text"/>
Replacements	String replacement	<input type="text"/>
User commands	Replacement 2	
Object 1 ... 10	Original string	<input type="text"/>
Object 11 ... 20	String replacement	<input type="text"/>
Object 21 ... 30	Replacement 3	

Figure 4: General Tab Parameters

Table 4: Replacements Tab Parameter Settings

ETS Parameter	Settings [Factory Default]	Comment
Number of replacements	0...64 [0]	The number of available string replacements must be set here.
Replacement 1-64		
Original string	<max. 31 bytes string length> []	Enter here the original string that shall be replaced.
String replacement	<max. 31 bytes string length> []	Enter here the string with that the original string shall be replaced.

2.5 User commands

Figure 5: General Tab Parameters

Table 5: User commands Tab Parameter Settings

ETS Parameter	Settings [Factory Default]	Comment
Number of user commands	0..64 [0]	The number of available user commands must be set here.
User command 1-64		
Object number	1...599 [1]	Select the object of interest.
Send string	<max. 31 bytes string length> []	Enter here the string that shall be sent.
Check specific value	No Yes [No]	Activation of sending only on a certain value.
Value to check	0...255 [0]	When the specific value check is activated, enter here the value that shall be checked.

2.6 Object (1-600)

The total number of available objects can be set in the General tab. A single object tab contains maximum ten objects. The contained objects are indicated by object numbers.

Figure 6: General Tab Parameters

Table 6: Object Tab Parameter Settings

ETS Parameter	Settings [Factory Default]	Comment
Command index (-0- to -599-)		
Object name	<max. 128 bytes name length> []	Define the communication object's name (that ETS will show in the object list behind the index indication) here.
Object usage	sending receiving [sending]	Set the usage of the object.
Select DPT	DPT1, DPT2, DPT3, DPT4 DPT5.001 - Scaling DPT5.003 - Angle (200) DPT5.010 - Count (201) DPT6, DPT7, DPT8, DPT9, DPT10, DPT11, DPT12, DPT13, DPT14, DPT16, DPT17, DPT18, DPT19, DPT20, DPT21, DPT22, DPT26, DPT217, DPT232, DPT235 [DPT1]	Select the datapoint that is used with the object value.

ETS Parameter	Settings [Factory Default]	Comment
Sending configuration	no automatic sending send on received value send on changed value [no automatic sending]	Here, the automatic sending of Group telegrams to KNX can be set.
Receiving configuration	no automatic sending indication on changed value indication on received value [no automatic sending]	Here, the automatic sending of a response on IP side can be set.
Cyclic sending	not active active [not active]	Cyclic sending can be activated here.
Time counter resolution	seconds minutes hours [seconds]	To set the time interval for cyclic sending, configure the range of the time counter.
Time counter	1...255 [1]	Use this number together with the range to set the time interval for cyclic sending.

SIMip

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