ZIPR-SD3503 Z-Wave Over IP Gateway

ZIPR-SD3503

Z-Wave Over IP Gateway User's Manual

(With Engineering UI)



CONTENTS

1.	INTRODUCTION4
2.	ENGINEERING UI PC APPLICATION SOFTWER INSTALLATION5
2.1	About5
2.2	Installation5
2.3	Using Engineering UI9
2.3.1	Home9
2.3.2	Initialization10
2.3.2.1	Classic10
2.3.2.2	Z/IP Local11
2.3.2.3	Z/IP Portal11
2.3.3	Network Manager13
2.3.4	Controller14
2.3.5	Interfaces15
2.3.5.1	Naming/Location15
2.3.5.2	Basic15
2.3.5.3	Binary Sensor15
2.3.5.4	Multi-Level Sensor15
2.3.5.5	Binary Switch16
2.3.5.6	Multi-level Switch
2.3.5.7	Alarm16
2.3.5.8	Association16
2.3.5.9	Configuration
2.3.5.10	Door Lock
2.3.5.11	Meter
2.3.5.12	Pulse Meter19

2.3.5.13	AV19
2.3.5.14	Battery19
2.3.5.15	User Code20
2.3.5.16	Wake up20
2.3.5.17	Command Queuing20
2.3.5.18	Multi Command21
2.3.5.19	Climate Control Schedule21
2.3.5.20	Clock
2.3.5.21	Indicator
2.3.5.22	Protection
2.3.5.23	Thermostat related interfaces22
2.3.5.24	Firmware24
2.3.5.25	Z/IP Gateway25
2.3.6	Scenes
2.3.6.1	Add or Edit Scene27
2.3.6.2	Edit Scene29
2.3.6.3	Delete Scene
2.3.6.4	Execute (Activate) Scene
2.3.6.5	Update Scene Status
2.3.6.6	Update All Scene Status
2.3.6.7	About32
3	FCC NOTICE TO USERS
4	EU DECLARATION OF CONFORMITY

1. INTRODUCTION

The ZIPR is a low cost Z-Wave over Internet Protocol (Z/IP) Gateway reference design, allowing Ethernet clients to access the Z-Wave Home Area Network (HAN). With the ZIPR connected to an internet router, clients outside the home can connect to it through the internet via the service provider's portal with any AJAX (Asynchronous JavaScript and Hyper Text Markup Language) compatible web browser.



Figure 1: ZIPR with Tethered RJ45 Cable



Figure 2: ZIPR Network Diagram

2. ENGINEERING UI PC APPLICATION SOFTWER INSTALLATION

2.1 About

This section covers the steps for installation, execution and usage of the PC application software, Engineering UI. Engineering UI is a Z-Wave web gateway that acts as a secure Z-Wave static controller on a classic Z-Wave network or a Z-Wave over IP client. As such, it supports Z-Wave certification devices from multiple vendors.

System Requirements

- Windows XP and 7 for 32 & 64 bit PCs
- AJAX capable default browser such as Internet Explorer 8 & 9; Firefox 6.0, Chrome 13.

The diagrams shown in this guide are for Windows XP with Internet Explorer 8 unless otherwise specified.

2.2 Installation

On running ZHCWeb_Setup.exe or ZIPHCWeb_Setup.exe, for the classic or Z/IP versions respectively, the following will be the self explanatory flow of screens with minor differences for the versions.



ense Agreement		
Please read the following important infor	mation before continuing.	(
Please read the following License Agreen agreement before continuing with the ins	ment. You must accept the terms of this stallation.	
SIGMA DESIGNS, IN	IC	-
SOFTWARE LICENSE TERMS for Z-WAVE	E HOST CONTROLLER	
[The following license is just tentative. P	Pending review.]	
These license terms are an agreement b where you live, one of its affiliates) and the software named above, which inclue any. The terms also apply to any Sigma * updates,	etween Sigma Designs, Inc (or based on you. Please read them. They apply to des the media on which you received it, if a Designs	Ŧ
 I accept the agreement 		
I do not accept the agreement		

🔂 Setup - Z-Wave Host Controller	×				
Information Please read the following important information before continuing.					
When you are ready to continue with Setup, dick Next.					
WARNING:					
WARNING: This computer program is protected by copyright law and international treaties. Unauthorized duplication or distribution of this program, or any portion of it, may result in severe civil or criminal penalties and will be prosecuted to the maximum extent possible under the law.					
< <u>B</u> ack <u>N</u> ext > (ancel				
-					

Select Destination Location	
Where should Z-Wave Host Cont	troller be installed?
Setup will install Z-Wave	e Host Controller into the following folder.
To continue, click Next. If you we	ould like to select a different folder, click Browse.
C:\Program Files\Sigma Designs\	Z-Wave Host Controller Browse
At least 2.0 MB of free disk space	e is required.

B Setup - Z-Wave Host Controller	
Select Start Menu Folder Where should Setup place the program's shortcuts?	
Setup will create the program's shortcuts in the following Start	Menu folder.
To continue, click Next. If you would like to select a different folder, clic	k Browse.
Sigma Designs\Z-Wave Host Controller	Browse
<back next=""></back>	Cancel
명 Setup - Z-Wave Host Controller	
Select Additional Tasks Which additional tasks should be performed?	
Select the additional tasks you would like Setup to perform while installi Controller, then click Next.	ng Z-Wave Host
Additional icons:	
Create a desktop icon	
<back next=""></back>	Cancel
all Sature 7 Ways Heat Controller	
B setup - 2-wave nost controller	
Ready to Install Setup is now ready to begin installing Z-Wave Host Controller on your o	computer.
Ready to Install Setup is now ready to begin installing Z-Wave Host Controller on your of Click Install to continue with the Installation, or click Back if you want to change any settings.	review or
Ready to Install Setup is now ready to begin installing Z-Wave Host Controller on your of Click Install to continue with the installation, or click Back if you want to change any settings. Destination location: C:\Program Files\Sigma Designs\Z-Wave Host Controller	review or
Ready to Install Setup is now ready to begin installing Z-Wave Host Controller on your of Click Install to continue with the installation, or click Back if you want to change any settings. Destination location: C:\Program Files\Sigma Designs\Z-Wave Host Controller Start Menu folder: Sigma Designs\Z-Wave Host Controller	review or
Ready to Install Setup is now ready to begin installing Z-Wave Host Controller on your of change any settings. Click Install to continue with the installation, or click Back if you want to change any settings. Destination location: C:\Program Files\Sigma Designs\Z-Wave Host Controller Start Menu folder: Sigma Designs\Z-Wave Host Controller Additional tasks: Additional icons: Create a desktop icon	review or
Ready to Install Setup is now ready to begin installing Z-Wave Host Controller on your of change any settings. Click Install to continue with the installation, or click Back if you want to change any settings. Destination location: C:\Program Files\Sigma Designs\Z-Wave Host Controller Start Menu folder: Sigma Designs\Z-Wave Host Controller Additional tasks: Additional icons: Create a desktop icon «	review or
Ready to Install Setup is now ready to begin installing Z-Wave Host Controller on your of change any settings. Click Install to continue with the installation, or click Back if you want to change any settings. Destination location: C:\Program Files\Sigma Designs\Z-Wave Host Controller Start Menu folder: Sigma Designs\Z-Wave Host Controller Additional tasks: Additional icons: Create a desktop icon	review or



Launching the program can be done from the last step of setup or from the Windows start menu.



By default port 8088 is used. However user can specify the port using the <u>Z-Wave Configuration</u>. Also an advanced user may start multiple servers on different ports using the <u>Z-Wave Host Controller [with port number]</u> option. There is also a facility to reset password to default. The launcher runs the server console (if not already started, shown below) and the default web browser.

Z-Wave	
Z-Wave	Desktop
[Web server]	
Latest requests	
127.0.0.1: /style/style.css	
127.0.0.1: /img/loading.gif	
127.0.0.1: /get_nw_info	
127.0.0.1: /settings.shtml	
127.0.0.1: /utils.js	
127.0.0.1: /langConst.js	
127.0.0.1: /lang.js	
127.0.0.1: /date.js	
127.0.0.1: /zwave.js	
127.0.0.1: /zwNetConst.js	
27.0.0.1: /favicon.ico	
127.0.0.1: /lang	
127.0.0.1: /lang/en_US.js	
127.0.0.1: /style/style.css	
127.0.0.1: /get_curr_op	
27.0.0.1: /get_init	
127.0.0.1: /comm	
.27.0.0.1: /get_init	
27.0.0.1: /comm	
27.0.0.1: /get_curr_op	
127.0.0.1: /get_curr_op	

2.3 Using Engineering UI

The Engineering UI is the most flexible UI, enabling all Z-Wave features.

2.3.1 Home

After successful login, the user can see the Home page if the controller has already been initialized. All web pages have a navigation menu on the left. The home page shows the details of the local controller.

Menu	Z-Wave Host Controller
Home	Home Id CE32F858
Network Manager	Local Node Id 1
Node Controller	Network Role Primary Controller; SUC; SIS;
Scenes	SUC Node Id 1
Settings	
About	
Change Password	
Logout	

The user may log out anytime by clicking "Logout" Menu option. The menu is used to navigate to the other pages described in the following chapters.

2.3.2 Initialization

2.3.2.1 Classic

The settings page shown below allows selecting the serial port to connect to the static controller device.

Settings	
Current Serial Port : None	
Configure Serial Port UZB (COM46)	Refresh Initialize

The serial port must be chosen and initialized, as shown in the diagram below. UZB ports are listed first followed by other COM ports. Refresh shows newly inserted UZBs.

Current Serial Port : N	lone		
Configure Serial Port	ZCom (COM19)	Refresh	Initialize
	Z-Wave Ports		
	ZCom (COM19)		
	ZCom (COM23)		
	Other Ports		
	USB-SERIAL CH340 (COM28)		
	Prolific USB-to-Serial Comm Port (COM6)		
	Communications Port (COM1)		
	More		
	Select Port		

After selection, when Initialize is pressed, the progress is shown by the number of nodes that may need to be rediscovered if previous network state had not been made persistent on this machine.

Initializing network		Nodes completed : 3/5

On successful initialization, the port is shown as "currently configured". Now the other pages will be populated with network information.

Z-Wave N	etwork Initialized!			
Current Serial Port : C	COM19			
Configure Serial Port	ZCom (COM19) - Currently Configure	d 🔻	Refresh	Initialize

2.3.2.2 Z/IP Local

The settings page allows entering/selecting IP address & UDP port to connect to the Z/IP gateway.

Settings Current Z/IP Gateway Name/Address : None	
Configure Z/IP Gateway Name/Address 2011::4 Configure Port for Unsolicited Reports 5678	Refresh Initialize

When 'Refresh' button is pressed, Z/IP gateway discovery is initiated. Upon completion, the new list of gateway addresses is shown.

After Initialize is pressed, on successful initialization, the address is shown as "currently configured" and the port as "busy". Now the other pages will be populated with network information.

Z-Wave Network Initialized!	
Current Z/IP Gateway Name/Address : 2011::4 Current Port for Unsolicited Reports : 7890	
Configure Z/IP Gateway Name/Address 2011::4 - Currently Configured Refresh Initialize Configure Port for Unsolicited Reports 7890 - Busy	

2.3.2.3 Z/IP Portal

The settings page allows the following operations:

- Add a new client
 - $\circ~$ Enter 'Client Id', 'Client PIN', rest of the portal configurations and press 'Add / Update' button
- Update an existing client
 - Select the entry from 'Unregistered Clients' or 'Registered Clients'; update any configuration and press 'Add / Update' button
- Remove a client from 'Unregistered Clients' or 'Registered Clients'
 - o Select the entry from the list and press 'Remove' button corresponding to the list
- Register a client
 - Select it from 'Unregistered Clients' and press '>' button.

- Unregister a client
 - Select it from 'Registered Clients' and press '<' button.

Pressing 'Default' button fills the fields with default settings. Pressing 'Clear' button clears the fields. If a registered client gets initialized to the portal, the corresponding entry under 'Registered Clients' is shown as 'busy'.

Limitation: Contrary to practical scenario, at any given time, only one gateway can remain initialized with the portal. Any subsequent connection requests will be rejected, if a gateway is already initialized. To allow a different gateway to be initialized, any existing initialized gateway must be unregistered.

Settings	
Unregistered Clients	Registered Clients
00-1E-32-FF-FF-20-00-3B	00-1E-32-FF-FF-20-00-1F 00-1E-32-FF-FF-20-00-37 - Busy
Remove	Remove
Client Id 00-1E	-32-FF-FF-20-00-37
Client PIN ABCE	00001
LAN IPv6 Address	
LAN IPv6 Prefix Length 64	
Portal IPv6 Prefix 3000:	1
Portal IPv6 Prefix Length 64	
PAN IPv6 Prefix ::	
Default Gateway IPv6 Address 3000:	1
Unsolicited Destination Address	
Unsolicited Destination Port 4123	
Add / Update	Default Clear

2.3.3 Network Manager

The network manager lists nodes in the network and allows network operations like include/exclude.

The Z-Wave node/vendor/product ID, product types and categories are shown. Further:

- Nodes that support Z-Wave+ are shown with a 'Z+' icon.
- Securely included nodes that are with a lock icon.
- Security capable nodes that were included insecurely are shown with a crossed lock icon.
- Failed nodes are shown in red and can be selected for replace/remove failed node operations.

Z-Wave+ information and version information from the node is also displayed at the bottom when the ">>" icon in the node entry is clicked.

Add Node Remove Node Remove Failed Node Replace Failed Node Initiate Initiate Initiate Initiate Image: Send Node Info Update Node Update Network Reset Node Id Vendor Product Id Product Type Category Image: Send Node Info Update Node Update Network Reset Node Id Vendor Product Id Product Type Category Image: Send Node Info Update Node Update Network Reset Node Id Vendor Product Id Product Type Category Image: Send Node Info Update Node Update Network Reset Image: Send Node Info Update Node Update Network Reset Image: Send Node Info Update Node Update Network Reset Image: Send Node Info Update Node Image: Send Node Image: Send Node Image: Send Node Info Update Node Image: Send Node Image: Send Node Image: Send Node Image: Send Node Type : Central Static Controller Image: Send Node Image: Send Node Image: Send Node Imardware Version : 3 <th>Netwo</th> <th>ork Manager</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	Netwo	ork Manager						
Initiate Imitiate		Add Node	Remove Node	Remove Faile	dNode	Replace Fa	ailed Noc	le
Image: Send Node Info Update Node Update Network Reset Node Id Vendor Product Id Product Type Category 2 1 Sigma Designs (Zensys) 1 1 2 2 IR Sec. & Safety 20556 25419 > 3 Sigma Designs (Zensys) 0 0 > 5 0 0 0 > 5 0 0 0 > 5 0 0 0 > Clibrary Type : Central Static Controller Node Type : Z-Wave+ for IP gateway Library Type : Static Controller Protocol Version : 3.54 Z-Wave Firmware Version : 3.54 Z-Wave Firmware Version : 3.54 Z-Wave Firmware Version : 1 Firmware Version 1 I Firmware Version 1 I Firmware Version 1 I 5 Target Version Sub Version Sub Version 6 0 0 0 0				Initiate				
Node Id Vendor Product Id Product Type Category Z+ 1 Sigma Designs (Zensys) 1 1 2 A 2 IR Sec. & Safety 20556 25419 2 A 3 Sigma Designs (Zensys) 0 0 2 Sigma Designs (Zensys) 0 0 0 2 5 0 0 0 0 2 Sigma Designs (Zensys) 0 0 0 2 5 0 0 0 0 2 Sigma Designs (Zensys) 0 0 0 2 Sigma Designs (Zensys) 0 0 0 2 6 0 0 0 0 2 Role Type : Central Static Controller Node Type : Z-Wave+ for IP gateway 2 2 2 Library Type : Static Controller Protocol Version : 3.54 Z-Wave Firmware Version : 3 3 2 2 Hardware Version : 1 Firmware Version List : 1 1 1 1 1 Gateway Firmware 2 0 2 0 <td></td> <td>Broadcas</td> <td>send Node Info</td> <td>Update Nod</td> <td>e Upda</td> <td>ate Network</td> <td>Reset</td> <td></td>		Broadcas	send Node Info	Update Nod	e Upda	ate Network	Reset	
Induct Id Sigma Designs (Zensys) 1 <		Node Id	Ven	lor Product	ld Produc	t Type C	ategory	
2 IR Sec. & Safety 20556 25419 2 3 Sigma Designs (Zensys) 0 0 2 5 0 0 0 2 Role Type : Central Static Controller Node Type : Z-Wave+ for IP gateway Library Type : Static Controller Protocol Version : 3.54 Z-Wave Firmware Version : 3 Z-Wave Firmware Sub Version : 3 3 Z-Wave Firmware Version : 1 Firmware Version 1 Firmware Version 1 2 Cateway Firmware 2 Cateway Catificates 0	7+	1 S	ama Designs (Zens)	vs)	1	1	utegory	>>
3 Sigma Designs (Zensys) 0 0 0 > 5 0 0 0 0 > > Role Type : Central Static Controller Node Type : Z-Wave+ for IP gateway Library Type : Static Controller Protocol Version : 3.54 Z-Wave Firmware Version : 3 Z-Wave Firmware Sub Version : 80 Hardware Version : 1 Firmware Version List : 3 Target Version Sub Version Gateway Firmware 2 0 Cotoway Continents 0 2 0		2	IR Sec. & Saf	ety 205	56	25419		>>
5 0 0 0 > Role Type : Central Static Controller Node Type : Z-Wave+ for IP gateway Library Type : Static Controller Protocol Version : 3.54 Z-Wave Firmware Version : 3 Z-Wave Firmware Version : 3 Z-Wave Firmware Version : 1 Firmware Version List : 30 Hardware Version : 1 Firmware Version List : Target Version Sub Version Gateway Firmware 2 0	₽ ×	3 S	gma Designs (Zens	ys)	0	0		>>
Role Type : Central Static Controller Node Type : Z-Wave+ for IP gateway Library Type : Static Controller Protocol Version : 3.54 Z-Wave Firmware Version : 3 Z-Wave Firmware Sub Version : 80 Hardware Version : 1 Firmware Version List : Target Version Gateway Firmware 2 Octoway Contificatee 0		5		0	0	0		>>
Z-Wave Firmware Version : 3 Z-Wave Firmware Sub Version : 80 Hardware Version : 1 Firmware Version List : Target Version Sub Version Gateway Firmware 2 0 Gateway Cartification 0			Role Type : C Node Type : Z Library Typ Protoco	entral Static Cor -Wave+ for IP ga be : Static Contro ol Version : 3.54	troller teway ller			
TargetVersionGateway Firmware2Cateway Catificates0			Z-Wave Fi Z-Wave Firm Hardw Firmwa	rmware Version : ware Sub Version vare Version : 1 ire Version List :	: 3 1 : 80			
Gateway Firmware 2 0		Targe	et	Version	Sub V	ersion		
Cotoway Catificates 0 2		Gatev	vay Firmware	2		0		
Gateway Certificates 0 2		Gatev	vay Certificates	0		2		
Gateway Configuration 0 2		Gatev	vay Configuration	0		2		

Network	Manager					
Adding nod	e				Getting detai	led node informatio
		Abor	t			
	Node Id	Vendor	Product Id	Product Type	Category	
	1	Sigma Designs (Zensys)	1	1		>>
	9	Sigma Designs (Zensys)	0	0		>>
	10	Sigma Designs (Zensys)	0	0		>>

Progress information for all operations is shown to give immediate feedback to the user.

The network operations are similar to what the PC Controller software can do, and therefore will not be elaborated here. A quick map of operations to buttons is provided below.

Z-Wave Network Operation	Button(s)
Include nodes	Add Node
Exclude nodes	Remove Node
Include into an existing network	Initiate
Factory Reset	Reset

Network operation buttons are shown based on the role of the attached controller, for e.g. Add Node will not show for a secondary controller.

2.3.4 Controller

This page also lists all the nodes in the network. The selected node's endpoints and device classes; and the selected endpoint's interfaces are shown. Secure interfaces are shown with a lock icon. Clicking the arrow on the interface tab reveals the elements within for specific control.

Node	Controller					
	Node Id	Vendor	Product Id Pro	duct Type Category		
	1	Sigma Designs (Zensys)	1	1 >	>	
	a 2	IR Sec. & Safety	20556	25419 >	>	
		0 IC D			1	
	Endpoint Id Generic Device Clas	s Specific Dev	Ice Class	Name	Location	_
	0	Entry Control S	ecure Keypad Door	Lock Door Lock	Main Entrance	
		Door Lock	Setting			
•		User Code	Setting			
•		Alarm S	etting			
•		Basic Se	etting			
•		Group	Setting			
•		Configu	ration			
		Name/Loca	tion Setting			

2.3.5 Interfaces

2.3.5.1 Naming/Location

The name/location interface always exists, at least on the local machine, even if the device does not support the corresponding command class; and is used to set the name/location strings for easier identification

•	Nam	e/Location Setting	
Name	Light Switch	Location Living Room	Set

2.3.5.2 Basic

The basic interface allows controlling a node in the minimal way. The refresh icon in middle of the header does a get to update the time-stamped state – as with other data interfaces.

▼	Basic Setting
	Current state : 255 Last Updated Time : June 15, 2011 10:50:17 AM
	Level 0 - Set

2.3.5.3 Binary Sensor

▼ Binary Sensor Setting
Current state : Event detected
Last Idle Time : June 15, 2011 11:05:08 AM
Last Event Detected Time : June 15, 2011 11:05:13 AM

2.3.5.4 Multi-Level Sensor

The type and unit of the measurement(s) are also indicated.

▼	Multilevel Sensor Setting
	Sensor Type : Temperature
	Current state : 25.000000 °C
Last Upd	ated Time : June 15, 2011 11:32:10 AM

2.3.5.5 Binary Switch



2.3.5.6 Multi-level Switch

Depending on the command class version, the control elements may vary.

•	Multilevel Switch Setting
	Current level : 16
	Last Updated Time : June 15, 2011 11:10:43 AM
	Level Off/Disable 👻 Set
	Level Change Direction Up Start Level Current level Start

2.3.5.7 Alarm



2.3.5.8 Association

The user can add or remove node or endpoints (depending on interface support) to any group supported by the interface limited by its storage.

Group configuration of a node that doesn't support Association Group Information (AGI) is shown below.



Group configuration of a node that supports Association Group Information (AGI) is shown below.



2.3.5.9 Configuration

Configuration is a manufacturer specific setting which requires referring to the product manual. 'Size' can be specified explicitly or as the minimum size needed for the given value.

•	Configuration 🗘		
	Parameter Number:1 Current Value:-2 Last Updated Time : April 01, 2013 8:55:50 PM		
	Parameter Number 1 Value -2 Size Minimum - Default Set		

2.3.5.10 Door Lock

▼ Door Lock Setting 🗘		
Door Lock Mode : Door Secured		
Outside Door Handles Mode : Handle-1:Active; Handle-2:Inactive; Handle-3:Inactive; Handle-4:Inactive		
Inside Door Handles Mode : Handle-1:Inactive; Handle-2:Active; Handle-3:Active; Handle-4:Inactive		
Door Condition : Door Open; Bolt Unlocked; Latch Open		
Remaining Lock Timeout : Not Supported		
Last Opdated Time 15, 2011 11:22:33 AM		
Door Lock Mode Door Unsecured Set		
Operation Type : Constant		
Outside Door Handles State : Handle-1:Enabled; Handle-2:Disabled; Handle-3:Disabled; Handle-4:Disabled		
inside Door Handles State : Handle-1:Disabled; Handle-2:Enabled; Handle-3:Enabled; Handle-4:Disabled Configurad Look Timports / Net Superstad		
Last Undetad Time - Lune 15, 2011 11-22-23 AM		
Operation Type Constant -		
Outside Door Handles State Inside Door Handles State		
Handle-1 Handle-1		
Handle-2 Handle-2		
Handle-3		
Handle-4		
Lock Timeout 0 minute 👻 0 second 👻 🔲 Not Supported		
Set		

2.3.5.11 Meter

If the interface supports it, the monitor and configuration elements are shown as well.

▼ Meter S	Setting 🗘
Supported Meter Ty	pe : Electric Meter
Supported Units :	Pulse count 👻
Meter Type : Electric Meter	
Current state : 2	54 Pulse count
Rate Type	: Export
Delta : U	nknown
Previous : -2 Pulse count	
Last Updated Time : Jun	e 15, 2011 11:50:13 AM
Current Point Administra	ation Number : ABCEF
Customer	D : efghip
Point Administration Number	Set

2.3.5.12 Pulse Meter



2.3.5.13 AV

Only supported buttons are shown.

▼ Audio/Video Setting
Commands Play Stop Pause
Set Down Set Up

2.3.5.14 Battery

Battery level can be monitored form this interface.

•	Battery Setting	
	Current level : 36%	
	Last Updated Time : October 13, 2011 2:18:50 PM	

2.3.5.15 User Code

▼ U	ser Code Setting 🗘
	User Id : 5
User Id St	atus : Status not available
Use	er Code : 12345678
Last Updated Tir	me : June 15, 2011 11:47:33 AM
	User Id 5 👻
User Id Status	Available 🔹
User Code	e Set

2.3.5.16 Wake up

It is strongly recommended that this controller be set as the notified node. Otherwise it will not be able to de-queue commands for this node.

Wakeup Setting	
Current Interval : 67 s	
Notified Node : All (Broadcast)	
Last Updated Time : June 15, 2011 11:08:08 AM	
Notified Node All - Set	
t	

2.3.5.17 Command Queuing

Command queuing is an advanced function. Only just after including a sleep-capable node, it is to be turned off for configuration and turned on afterwards. Otherwise it is strongly recommended to leave it on and command queuing works transparently.

For failure cases e.g. when the controller is not notified on a node's wake up and the command in the queue is never removed, this UI allows removal of commands from the queue.

▼	Command Settings
Con	nmand Queuing State : Enabled
Command	Queuing
	Multi-level Sensor Get 🔺
	Group Supported Get
	Group Active Get
	Configuration Get
	Ŧ
	Cancel

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2.3.5.18 Multi Command

For nodes supporting multi command, this setting is enabled by default. When it is enabled the commands to be sent in immediate succession are combined to be sent as a multi command. When it is disabled the commands are not combined.

▼	Command Settings
	Multi Command State : Enabled
Multi command <a> Enable Disable Set	

2.3.5.19 Climate Control Schedule



2.3.5.20 Clock

▼	Clock Settings
Current state: Monday 3:09 PM Last Updated Time : April 16, 2012 3:08:59 PM	
	Clock Monday A BPM A 09 A 00 A 0
Set	

2.3.5.21 Indicator



2.3.5.22 Protection

▼ Protection Settings C
Current Local State : Unprotected Current RF State: No RF Response Last Updated Time : April 16, 2012 3:56:34 PM
Local State Unprotected -
RF State No RF Response ▼
Set
Current Exclusive Control Node : 1 Last Updated Time : April 16, 2012 3:56:35 PM
Exclusive Control Node 1 -
Set
Current Timeout : 32 seconds Last Updated Time : April 16, 2012 3:56:16 PM
Timeout 32 seconds -
Set

2.3.5.23 Thermostat related interfaces

Thermostat fan

If both the interfaces below are available, they will be shown combined in a single frame.

▼ Th	hermostat Fan Settings 🗘
C	Current Fan Mode : High
	Fan Off / : Yes
Last Updated	d Time : April 16, 2012 11:26:01 AM
E M-d-	
Fan Wode	High 👻 M Off
	Set

•	Thermostat Fan Settings 🗘
	Current Fan State : Running High Last Updated Time : April 16, 2012 11:37:59 AM

Thermostat mode & state

If both interfaces below are available, they will be shown combined in a single frame.

▼ 1 CL Last Updated	T <mark>hermostat Settings ♥</mark> irrent Mode : Moist Air Time : April 16, 2012 12:01:28 PM
Mode	Moist Air Set
-	
1	hermostat Settings 🖓
Curre Last Updated	ent Operating State : Idle Time : April 16, 2012 12:10:58 PM

Thermostat Setback & Setpoint

Thermostat Setback Settings Q	
Current Setback Type: Temporary Override	
Current Setback: 0.50 K/°C (0.90 °F)	
Last Updated Time : April 16, 2012 2:12:13 PM	
Setback Type Temporary Override	
Setback Setback Temperature 0.50 K/°C	
Set	
▼ Thermostat Setpoint Settings 🗘	
Setpoint Type: Heating #1	
Current Setopint: 26 °C	
Last Updated Time : April 16, 2012 12:33:16 PM	
Setpoint Heating #1 -	
Setpoint 26 °C - Set	

2.3.5.24 Firmware

Interface to upgrade firmware (Z-Wave chip or others) in the node. This can also be used to push security certificates and network configurations to the node.

Limitation: Instead of uploading the firmware files from the web client (browser), these files must be placed under 'data' folder at (platform specific) application data area shown.

▼ Firmware Settings			
Manufacturer : Sigma Designs (Zensys)			
Z-Wave Firmware ID : Z-Wave Chip Firmware			
Z-Wave Firmware Checksum : 0x0000			
Maximum Fragment Size : 400			
Z-Wave Firmware Upgradeable : No			
Firmware ID List			
Target Firmware ID			
1 Gateway Firmware			
2 Gateway Certificates			
3 Gateway Configuration			
Last Updated Time : April 23, 2013 4:56:50 PM			
Target 1 -			
Firmware ID : Gateway Firmware			
Firmware file name			
Firmware file to be placed in Server under the 'data' folder at /var/local/lib/PortalHCWeb	o/		
Update Firmware			

2.3.5.25 Z/IP Gateway

Interface to configure Z/IP gateway with peer name, peer IP address and peer port number. Unsolicited destination address and port number can also be configured. 'Set to Local' button allows to set the locally reachable IP address and local listening port number as unsolicited destination.

▼ Gateway Settings	
Mode : Portal Peer IP Address 10.40.30.159 Peer Name : zip-gateway.sigmadesigns.com Peer Port : 44123 Last Updated Time : April 23, 2013 4:51:08 PM Mode Portal ▼	
Peer IP Address 10.40.30.159	
Peer Name zip-gateway.sigmadesigns.com	
Peer Port 44123 Set	
Configuration Parameters	
Lock O Unlock	
Show O Hide	
Configuration Parameter controls does not indicate the current state of these settings	
Unsolicited Destination Address 2050::40 Unsolicited Destination Port : 5678 Last Updated Time : April 23, 2013 4:51:07 PM Local Address 3000::1 Local Port : 4123	
Unsolicited Destination Address 2050::40	
Unsolicited Destination Port 5678	
Set Set to Local	

2.3.6 Scenes

Scenes can be used to create a set of Actions which could be executed (activated) by any of the following triggers

- 1) Manual A user can manually execute a Scene by using the "Execute Scene" button on Scene webpage
- 2) ScheduleA schedule can be added to a Scene which can be used to execute a Scene on a preset time
- 3) Events

Device events (unsolicited reports) from Sensor devices can be used to execute a Scene

Menu			Z-Wave Host Con	troller	
Home Network Manager Node Controller Scenes Settings Change Password Logout	Scenes	Name No scenes configured + Add New Scene	Status Scene	Last Updated Time	
			Actions		
			Schedules		
			Events		

The main features of Scenes are:

1) Actions

The Device Actions are the collection of commands to perform some operation on a device. A scene may contain a single Action or many of them. A Device Action uses Z-Wave SET command to accomplish the operation.

2) Schedules

A schedule can be set to execute a Scene on any or every day of the week at a preset time. The Schedule remains active till it is disabled or deleted.

3) Events

Devices such as motions sensors can be used to execute a Scene by having Events trigger as part of the Scene.

4) Persistence

A Z-Wave Scene is saved to a persistent storage and is loaded back when the Webs server starts again.

5) Scene status

If the current state of Z-Wave devices matches the desired state as listed in Scene Actions, then a Scene is considered "Active". If any of the Actions does not match with the current state of a device then the Scene becomes "Inactive". Initially the status of a Scene is shown as "Unknown". When a Scene status is known (either Active or Inactive), the Action that match with the current state of the device are shown in Green while others are shown in Orange color. If the status of an Action is unknown then it is shown in default black color.

6) Scene Addition and Deletion Scene addition can be done by using the "Add New Scene" button on Z-Wave Scene webpage while deletion can be done by using the "Delete Scene" button on Z-Wave Scene webpage.

2.3.6.1 Add or Edit Scene

A new Scene can be added by clicking "Add New Scene" button and then adding Scene Name, Actions, Schedules (optional) and Events (optional).

An existing Scene can be edited by clicking "Scene Edit" button. The Scene Edit screen looks exactly like the "Add New Scene" screen except that the Scene information (e.g. Scene name, Actions, Schedules and Events) is already populated. Any information about the Scene (including its name) could be changed freely although the Scene ID (not visible to the user) remains the same.

Scene		
Name Scene - Lock Close		
Actions		
Node 7/3 - Door Lock - Door Lock Settings - Door Lock Made: Door Secured X		
Node 1 - undefined - Sigma Designs (Zensys)		
Node 7 - undefined - Sigma Designs (Zensys)		
Endpoint 0 - PC Controller		
Endpoint 1 - Routing Multilevel Sensor Endpoint 2 - Routing Binary Sensor		
Endpoint 3 - Door Lock		
Basic Settings: Level 0 v Add		
Door Lock Settings: Door Lock Mode Door Secured		
Schedules		
ON Saturday AT 22:30 × 🛇		
🗌 Everyday 🗌 Sunday 🗌 Monday 🗌 Tuesday 🗌 Wednesday 🗌 Thursday 🗌 Friday 🧭 Saturday		
10 PM v 30 v		
Add		
Events		
Node 1 - undefined - Sigma Designs (Zensys)		
Rode 7 - underined - sigma Designs (Zensys)		
Endpoint 1 - Routing Multilevel Sensor		
Endpoint 2 - Routing Binary Sensor		
Binane Sancer Sattinge: State C Event detected		
binary Sensor Settings. State Vehic detected Aud		
Composition of the Composition o		

Action (Mandatory)

	Actions
Node 3 - Mul	tilevel Power Switch - Multilevel Switch Settings - Level: Off/Disable $ imes$
	Node 1 - undefined - Sigma Designs (Zensys)
	Endpoint 0 - Multilevel Power Switch 🔻
	Basic Settings: Level 0 v Add
N	lultilevel Switch Settings: Level Off/Disable 💌 Add

Schedules (Optional)



Events (Optional)



Enable/Disable Scene Schedules and Events

The Scene Schedules and Events can be enabled or disabled at the time of a new Scene creation or while editing an existing Scene.



The disabled Scene Schedule or Event is shown in orange colour. The disabled Scene Schedules and Events do not trigger a Scene even if the condition specified in the disabled Schedule or Event is met.



2.3.6.2 Edit Scene

A scene can be deleted using the "Edit Scene" button.



2.3.6.3 Delete Scene

A scene can be deleted using the "Delete Scene" button.

X Q >	Scene
ぷ Delete Scene	Name : Scene - Lock Close Status : Unknown
	Last Updated Time : March 11, 2013 6:21:14 PM
	Last Activation Trigger : None
	Last Activation Time : None

2.3.6.4 Execute (Activate) Scene

A scene can be executed using the "Execute Scene" button.

★ × Q	Scene
NT Execute Scene	Name : Scene - Lock Close
Execute Seene	Status : Unknown
	Last Updated Time : March 11, 2013 6:21:14 PM
	Last Activation Trigger : None
	Last Activation Time : None

2.3.6.5 Update Scene Status

The status of a Scene can be updated using "Update Scene" button.

🖊 🗙 🖏 🕨 👘	Scene
∂Update	Scene Name : Scene - Lock Close Status : Unknown Last Updated Time : March 11, 2013 6:21:14 PM Last Activation Trigger : None Last Activation Time : None

If all the Actions of a Scene match with the current state of Z-Wave devices then the Scene is supposed to be in an "Active" state. The "Active" Actions are shown in green colour.

X Ø 🕨 👘	Scene
	Name : MultiLevel On
	Status : Active
	Last Updated Time : January 17, 2013 5:17:40 PM
	Last Activation Trigger : None
	Last Activation Time : None
	Actions
	Node 3 - Multilevel Power Switch - Multilevel Switch Settings - Level: On/Enable
	Schedules
	ON Monday AT 4:00
	Events

The "Inactive" Actions are shown in orange colour.

×ē	Scene
	Name : MultiLevel Off
	Status : Inactive
	Last Updated Time : January 17, 2013 5:17:40 PM
	Last Activation Trigger : None
	Last Activation Time : None
	Actions
	Node 3 - Multilevel Power Switch - Multilevel Switch Settings - Level: Off/Disable
	Schedules
	ON Friday AT 22:00
	Events

2.3.6.6 Update All Scene Status

The Scene list panel contains a list of all available Scenes and their status. Status of all available Scenes can be update using "Update All Scenes" button.

Name	Status 🕄	Last Updated Time
MultiLevel On	Unknown d	None
MultiLevel Off	Unknown Update	All Scenes
+ Add New Scene		

After the update, different Scenes may have different status.

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Name	Status ()	Last Updated Time
MultiLevel On	Active 😽	January 17, 2013 5:22:12 PM
MultiLevel Off	Inactive Up	date All Scenes 7, 2013 5:22:12 PM
+ Add New Scene		

2.3.6.7 About

The About page displays the information obtained from the server by using zw_info API. The information is categorised into two different tables namely General and Version information as shown below.

General Information		
Vendor	Sigma Designs	
Product	ZWave HCWeb	
Server Platform	Windows	
Server Status	Initialized	
Username		
Home Id	EC192E4C	
Local Node Id	1	
Current Serial Port	COM9	
Server IP Address	127.0.0.1	
Client IP Address	127.0.0.1	
Version Information	3.10	
Z-Wave Host Controller API		
Z-Wave Host Controller API Z-Wave Host Controller Web Server	1.41	
Z-Wave Host Controller API Z-Wave Host Controller Web Server Z-Wave App UI Engineering	1.41 1.00	
Z-Wave Host Controller API Z-Wave Host Controller Web Server Z-Wave App UI Engineering Z-Wave App UI STB/TV	1.41 1.00 1.91c	
Z-Wave Host Controller API Z-Wave Host Controller Web Server Z-Wave App UI Engineering Z-Wave App UI STB/TV Z-Wave App UI PC/Tablet	1.41 1.00 1.91c Unavailable	

3 FCC NOTICE TO USERS

Federal Communication Commission Interference Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

4 EU DECLARATION OF CONFORMITY

EU Declaration of Conformity

This device complies with the essential requirements of the R&TTE Directive 1999/5/EC. The following test methods have been applied in order to prove presumption of conformity with the essential requirements of the R&TTE Directive 1999/5/EC:

- EN 60950-1: 2006/A12: 2011

Safety of Information Technology Equipment

EN 300 220-1/-2 V2.4.1 (2012-05)
 Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD);

Radio equipment to be used in the 25 MHz to 1 000 MHz frequency range with power levels

- EN 301 489-1 V1.9.2 (2011-09)

Electromagnetic compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements

- EN 301 489-3 V1.4.1: (2002)

Electromagnetic compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 3: Specific conditions for Short-Range

- EN 62479: 2010

Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz

€0560

េ©Česky [Czech]	[<i>Jméno výrobce</i>] tímto prohlašuje, že tento [<i>typ zařízení</i>] je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
[₫] aDansk [Danish]	Undertegnede [fabrikantens navn] erklærer herved, at følgende udstyr [udstyrets typebetegnelse] overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
通Deutsch [German]	Hiermit erklärt [Name des Herstellers], dass sich das Gerät [Gerätetyp] in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.

et Eesti [Estonian]	Käesolevaga kinnitab [tootja nimi = name of manufacturer] seadme [seadme tüüp = type of equipment] vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
en English	Hereby, [name of manufacturer], declares that this [type of equipment] is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Español [Spanish]	Por medio de la presente [nombre del fabricante] declara que el [clase de equipo] cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
ાંΕλληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ [name of manufacturer] ΔΗΛΩΝΕΙ ΟΤΙ [type of equipment] ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.
Imation Français [French]	Par la présente [nom du fabricant] déclare que l'appareil [type d'appareil] est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
italiano [Italian]	Con la presente [nome del costruttore] dichiara che questo [tipo di apparecchio] è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Latviski [Latvian]	Ar šo [name of manufacturer / izgatavotāja nosaukums] deklarē, ka [type of equipment / iekārtas tips] atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
Lietuvių [Lithuanian]	Šiuo <i>[manufacturer name]</i> deklaruoja, kad šis <i>[equipment type]</i> atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
메Nederlands [Dutch]	Hierbij verklaart [<i>naam van de fabrikant</i>] dat het toestel [<i>type van toestel</i>] in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
Int Malti [Maltese]	Hawnhekk, <i>[isem tal-manifattur]</i> , jiddikjara li dan <i>[il-mudel tal-prodott]</i> jikkonforma mal- ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.
뉀Magyar [Hungarian]	Alulírott, [gyártó neve] nyilatkozom, hogy a [típus] megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.

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뎬Polski [Polish]	Niniejszym [nazwa producenta] oświadcza, że [nazwa wyrobu] jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
Português [Portuguese]	[Nome do fabricante] declara que este [tipo de equipamento] está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
ा Slovensko [Slovenian]	[Ime proizvajalca] izjavlja, da je ta [tip opreme] v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
Slovensky [Slovak]	[Meno výrobcu] týmto vyhlasuje, že [typ zariadenia] spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
편Suomi [Finnish]	[Valmistaja = manufacturer] vakuuttaa täten että [type of equipment = laitteen tyyppimerkintä] tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Svenska [Swedish]	Härmed intygar [företag] att denna [utrustningstyp] står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.