Controller Message Protocol

Version 0.17.04.12

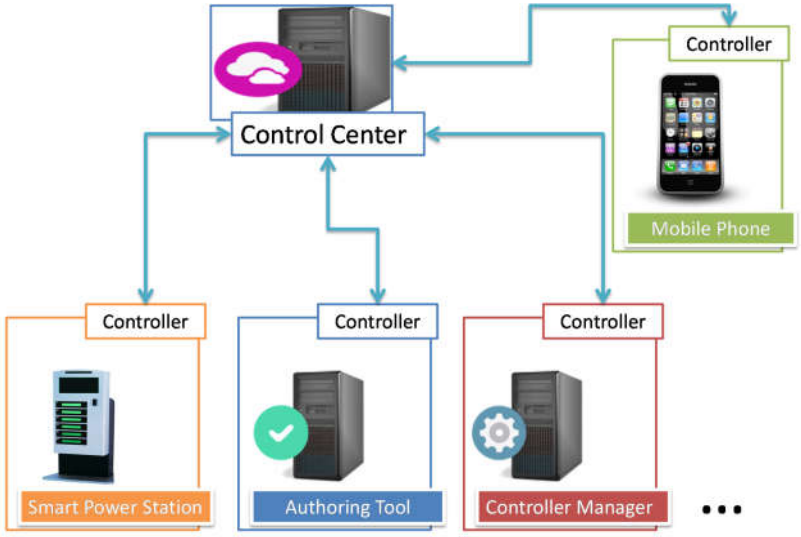
2016.11.30

Table of Contents

1. Introduction

1.1. Overview

Controller Message Protocol (CMP)主要提供前端與後端做為一個快速溝通與訊息傳遞的通訊協定，Device 端透過 CMP 可以傳送與接收 Server 端送來的指令與服務。



1.2. Glossary

API	Application Programming Interface
MSB	Most Significant Bit
CMP	Control Message Protocol
CMPS	Control Message Protocol Server
PDU	Protocol Data Unit
HEADER	Leading portion of the CMP message, common to all CMP PDUs
SPS	Smart Power Station
MDM	Mobile Device Manager
SER	Social Event Radar

2. Controller Message Protocol

The Controller Message Protocol (CMP) is designed to provide a flexible data communications interface for transfer of message data between a server and client.

CMP is based on the exchange of request and response protocol data units (PDUs) between the client and the server over an underlying TCP/IP network connection.

2.1. CMP PDU Type and Format Definitions

Integer	An unsigned value with the defined number of octets. The octets will always be transmitted MSB first (Big Endian).
C-Octet String	A series of ASCII characters terminated with the NULL character.
C-Octet String (Decimal)	A series of ASCII characters, each character representing a decimal digit (0 - 9) and terminated with the NULL character.
C-Octet String (Hex)	A series of ASCII characters, each character representing a Hexadecimal digit (0 - F) and terminated with the NULL character.
Octet String	A series of octets, not necessarily NULL terminated.
Octet String (Decimal)	A series of ASCII characters, each character representing a decimal digit (0 - 9) and not necessarily NULL terminated.

2.2. CMP PDU Format

PDU Header (Mandatory)				PDU Body (Optional)
Command Length	Command Id	Command Status	Sequence Number	PDU Body
4 octets	Length = (Command Length value - 4) Octets			

2.3. CMP PDU Layout

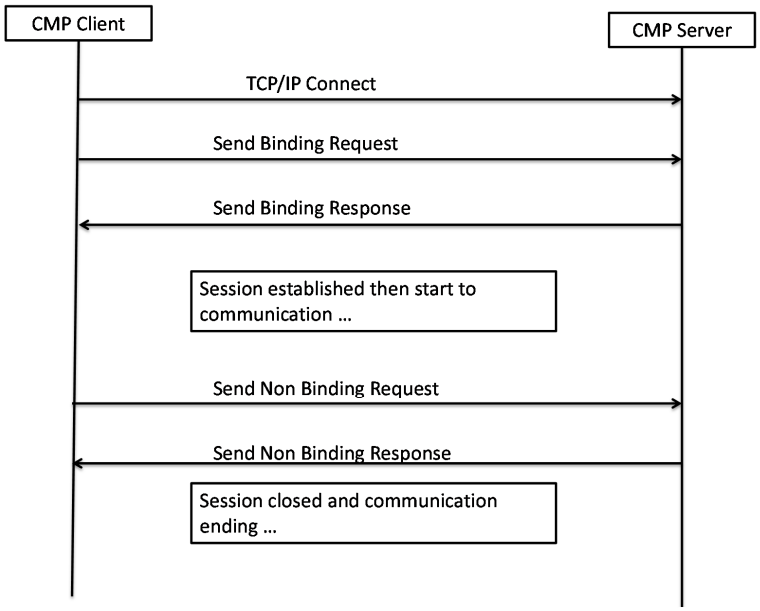
	CMP PDU Field	Size Octets	Type	Description
H E	command length	4	Integer	The command length field defines the total octet

A D E R				length of the CMP PDU packet including the length field.
	command id	4	Integer	The command id field identifies the particular CMP PDU. A unique command identifier is allocated to each CMP request PDU in the range: 0x00000000 to 0x000000 FF A unique command identifier is also allocated to each CMP response PDU in the range: 0x80000000 to 0x800000FF The complete list of CMP command codes is defined in 3.1.1.2
	command status	4	Integer	The command status field indicates the success or failure of a CMP request. It is relevant only in the CMP response PDU and it must contain a NULL value in a CMP request PDU. The complete list of CMP Error codes is defined in 3.1.1.4
	sequence number	4	Integer	This field contains a sequence number which allows CMP requests and responses to be associated for correlation purposes. The use of sequence numbers for message correlation allows CMP PDUs to be exchanged asynchronously. The sequence number should be increased monotonically for each request PDU and must be preserved in the associated CMP response PDU. The sequence number may range from: 0x00000001 to

				0x7FFFFFFF.
B O D Y	Mandatory Parameters	Var.	mixed	A list of mandatory parameters corresponding to that CMP PDU defined in the command id field.
	Optional Parameters	Var.	mixed	A list of Optional Parameters corresponding to that CMP PDU defined in the command id field.

2.4. CMP Session Description

A CMP session between a server and a client is initiated by the client first establishing a network connection with the server and then issuing a CMP Bind request to open a CMP session.



CMP Client and CMP Server entire communication process, mainly divided into Bind, Commands, Unbind three parts.

2.5. CMP PDU Definition

2.5.1.1. Bind request syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to the binding request.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated bind response PDU will echo the same sequence number.	3.1.1.5
BODY	Id	Var.	C-Octet String	Mandatory Parameter. JSON Data Format. Collection： (name/value data type) id/string	

2.5.1.2. Bind response syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to the binding response.	3.1.1.2
	command status	4	Integer	Indicates the status of the original request.	3.1.1.4
	sequence number	4	Integer	Set to the sequence number of original bind request.	3.1.1.5
BODY					

2.5.1.3. Initial request syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to overall length of PDU	3.1.1.1
	command id	4	Integer	Value corresponding to initial request	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated initial response PDU should echo the same sequence number.	3.1.1.5
BODY	Service Type	4	Integer	Mandatory Parameter. Reference Service type.	3.2.1.1

2.5.1.4. Initial response syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	Value corresponding to initial response	3.1.1.2
	command status	4	Integer	Indicates the status of the original request.	3.1.1.4
	sequence number	4	Integer	Set to the same sequence number of original initial requests PDU	3.1.1.5
BODY	Initial Data	Var.	C-Octet String	Mandatory Parameter. Information of initial.	3.2.1.2

2.5.1.5. Sign up request syntax

H	Field Name	Size	Type	Description	Ref.

E A D E R		octets			
	command length	4	Integer	Set to overall length of PDU	3.1.1.1
	command id	4	Integer	Value corresponding to sign up request	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated sign up response PDU should echo the same sequence number.	3.1.1.5
B O D Y	Service Type	4	Integer	Mandatory Parameter. Reference Service type.	3.2.1.1
	Sign up Data	Var.	C-Octet String	Mandatory Parameter. JSON Data of sign up.	

2.5.1.6. Sign up response syntax

	Field Name	Size octets	Type	Description	Ref.
H E A D E R	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	Value corresponding to sign up response	3.1.1.2
	command status	4	Integer	Indicates the status of the original request.	3.1.1.4
	sequence number	4	Integer	Set to the same sequence number of original sign up requests PDU	3.1.1.5
B O D Y					

2.5.1.7. Authentication request syntax

	Field Name	Size octets	Type	Description	Ref.
H E A D E R	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	Value corresponding to authentication request	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence	3.1.1.5

				number. The associated authentication response PDU will echo this sequence number.	
BODY	Service Type	4	Integer	Mandatory Parameter. Reference Service type.	3.2.1.1
	Authentication Data	Var.	C-Octet String	Mandatory Parameter. Information of authentication.	

2.5.1.8. Authentication response syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	Value corresponding to authentication response	3.1.1.2
	command status	4	Integer	Indicates the status of the original request.	3.1.1.4
	sequence number	4	Integer	Set to the sequence number of original authentication request PDU.	3.1.1.5
BODY					

2.5.1.9. Access log request syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to overall length of PDU	3.1.1.1
	command id	4	Integer	Value corresponding to access logs request	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated access log response PDU should echo the same sequence number.	3.1.1.5
BOD	Service Type	4	Integer	Mandatory Parameter. Reference Service type.	3.2.1.1
	Access log Data	Var.	C-Octet	Mandatory Parameter.	

Y			String		

2.5.1.10. Access log response syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	Value corresponding to access log response	3.1.1.2
	command status	4	Integer	Indicates the status of the original request.	3.1.1.4
	sequence number	4	Integer	Set to the same sequence number of original access logs requests PDU	3.1.1.5
BODY					

2.5.1.11. Enquire link request syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to enquire link request.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated enquire link response PDU should echo the same sequence number.	3.1.1.5
BODY					

2.5.1.12. Enquire link response syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to enquire link response.	3.1.1.2
	command status	4	Integer	Indicates the status of the original request.	3.1.1.4
	sequence number	4	Integer	Set to the same sequence number of original inquiry link requests PDU.	3.1.1.5
BODY					

2.5.1.13. Unbind request syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to unbind request.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated unbind response PDU should echo the same sequence number.	3.1.1.5
BODY					

2.5.1.14. Unbind response syntax

HE	Field Name	Size octets	Type	Description	Ref.

A D E R	command length	4	Integer	Set to overall length of PDU	3.1.1.1
	command id	4	Integer	Value corresponding to unbind response	3.1.1.2
	command status	4	Integer	Indicates the status of the original request.	3.1.1.4
	sequence number	4	Integer	Set to the same sequence number of original unbinds request PDU.	3.1.1.5
B O D Y					

2.5.1.15. Update request syntax

	Field Name	Size octets	Type	Description	Ref.
H E A D E R	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to update request.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated update response PDU should echo the same sequence number.	3.1.1.5
B O D Y					

2.5.1.16. Update response syntax

	Field Name	Size octets	Type	Description	Ref.
H E A D E R	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to update response.	3.1.1.2
	command status	4	Integer	Indicates the status of the original request.	3.1.1.4
	sequence number	4	Integer	Set to the same sequence number of original update request PDU.	3.1.1.5

BODY					

2.5.1.17. Reboot request syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to reboot request.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated reboot response PDU should echo the same sequence number.	3.1.1.5
BODY					

2.5.1.18. Reboot response syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to reboot response.	3.1.1.2
	command status	4	Integer	Indicates the status of the original request.	3.1.1.4
	sequence number	4	Integer	Set to the same sequence number of original reboot request PDU.	3.1.1.5
BODY					

2.5.1.19.Configuration request syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	Value corresponding to configuration request.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU should echo the same sequence number.	3.1.1.5
BODY	Configuration item	Var.	C-Octet String	Mandatory Parameter. Item of Configuration.	錯誤! 找不到參照來源。
	Configuration value	Var.	C-Octet String	Mandatory Parameter. The value of Configuration.	錯誤! 找不到參照來源。

2.5.1.20.Configuration response syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	Value corresponding to configuration response.	3.1.1.2
	command status	4	Integer	Indicates the status of the original request.	3.1.1.4
	sequence number	4	Integer	Set to the same sequence number of the original configuration request PDU.	3.1.1.5
BODY	Configuration result	1	Octet String	Mandatory Parameter. “Y”：success “N”：fail	錯誤! 找不到參照來源。

2.5.1.21. Power port setting request syntax

This syntax is defined for smart charge station.

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to power port setting request.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU should echo the same sequence number.	3.1.1.5
BODY	Wire number	4	Integer	Mandatory Parameter.	錯誤! 找不到參照來源。
	Port number	4	Integer	Mandatory Parameter.	錯誤! 找不到參照來源。
	Power State	1	Octet String (Decimal)	Mandatory Parameter. '0'：Power Off '1'：Power On	錯誤! 找不到參照來源。
	Controller ID	Var.	C-Octet String	Optional Parameter. Set to a unique recognition ID.	

2.5.1.22. Power port setting response syntax

This syntax is defined for smart charge station.

HE	Field Name	Size octets	Type	Description	Ref.

A D E R	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to power port setting response.	3.1.1.2
	command status	4	Integer	Indicates the status of the original request.	3.1.1.4
	sequence number	4	Integer	Set to the same sequence number of original power port setting request PDU.	3.1.1.5
B O D Y					

2.5.1.23. Power port state requests syntax

This syntax is defined for smart charge station.

	Field Name	Size octets	Type	Description	Ref.
H E A D E R	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to power port status request.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU should echo the same sequence number.	3.1.1.5
B O D Y	Wire number	4	Integer	Mandatory Parameter.	**錯誤! 找不到參照來源。**
	Controller ID	Var.	C-Octet String	Optional Parameter. Set to a unique recognition ID.	

2.5.1.24. Power port state response syntax

This syntax is defined for smart charge station.

H E A	Field Name	Size octets	Type	Description	Ref.
	command length	4	Integer	Set to the overall length of	3.1.1.1

D E R				PDU.	
	command id	4	Integer	The value corresponding to power port status response.	3.1.1.2
	command status	4	Integer	Indicates the status of the original request.	3.1.1.4
	sequence number	4	Integer	Set to the same sequence number of original power port setting request PDU.	3.1.1.5
B O D Y	Power port status	Var.	C-Octet String	Mandatory Parameter.	錯誤! 找不到參照來源。

2.5.1.25.SER API Sign in requests syntax

	Field Name	Size octets	Type	Description	Ref.
H E A D E R	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to ser api sign in request.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU should echo the same sequence number.	3.1.1.5
B O D Y	Account	Var.	C-Octet String	Mandatory Parameter.	
	Password	Var.	C-Octet String	Mandatory Parameter.	

2.5.1.26.SER API Sign in response syntax

	Field Name	Size octets	Type	Description	Ref.
H E A D E R	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to ser api sign in response.	3.1.1.2
	command status	4	Integer	Indicates the status of the original request.	3.1.1.4

	sequence number	4	Integer	Set to the same sequence number of original ser api sign in request PDU.	3.1.1.5
BODY	Token	Var.	C-Octet String	Mandatory Parameter.	
	App ID	Var.	C-Octet String	Mandatory Parameter.	

2.5.1.27.RDM Login requests syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to SER MDM Login request.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU should echo the same sequence number.	3.1.1.5
BODY	Login Data	Var.	C-Octet String	Mandatory Parameter. JSON Data Format. Collection： (name/value data type) account/string password/string id/string device/integer (Ref.3.2.1.4) gcmid/string model/string Example： {"account":"akado", "password\":"oxymoron", "id":"000c29d0013c", "device":0, "gcmid":"xxxxxx", "model":"HM2LTU84P"}	

2.5.1.28.RDM Login response syntax

H	Field Name	Size	Type	Description	Ref.

E A D E R		octets			
	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to SER MDM Login response.	3.1.1.2
	command status	4	Integer	Indicates the status of the original request.	3.1.1.4
	sequence number	4	Integer	Set to the same sequence number of original SER MDM Login request PDU.	3.1.1.5
B O D Y	Login Result	Var.	C-Octet String	Mandatory Parameter. JSON Data Format. Collection： (name/value data type) result/integer (Ref.3.2.1.3) Example： {"result":0}	3.2.1.3

2.5.1.29.RDM Logout requests syntax

	Field Name	Size octets	Type	Description	Ref.
H E A D E R	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to SER MDM Login request.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU should echo the same sequence number.	3.1.1.5

B O D Y	Login Data	Var.	C-Octet String	Mandatory Parameter.
				JSON Data Format.
				Collection：
				(name/value data type)
				id/string
				
				Example：
				{
				"id":"000c29d0013c"
				}	

2.5.1.30. RDM Logout response syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to SER MDM Login response.	3.1.1.2
	command status	4	Integer	Indicates the status of the original request.	3.1.1.4
	sequence number	4	Integer	Set to the same sequence number of original SER MDM Login request PDU.	3.1.1.5
BODY					

2.5.1.31. RDM Operate requests syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to SER MDM Operate request.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU should echo the same sequence number.	3.1.1.5
BODY	id	Var.	C-Octet String	Mandatory Parameter. JSON Data Format. Collection： (name/value data type) id/string Example： {	

				"id":"000c29d0013c" }	

2.5.1.32. RDM Operate response syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to SER MDM Operate response.	3.1.1.2
	command status	4	Integer	Indicates the status of the original request.	3.1.1.4
	sequence number	4	Integer	Set to the same sequence number of original SER MDM Operate request PDU.	3.1.1.5

BODY	RDM Operation	Var.	C-Octet String	Mandatory Parameter.
				JSON Data Format.
				Collection：
				(name/value data type)
				result/integer (Ref.3.2.1.3)
				control/(JSON Object)
				list/integer (array under control)
				
				control：
				count/integer (list count)
				list (JSON Array)
				
				list：
				type/integer(control type)
				
				Example：
				{
				"result": 0,
				"control": {
				"count": 2,
				"list": [{
				"type": 3,
				"count": 2,
					3.3.1.1

				"list":[
				
				{"app-URL":"http://54.199.198.94/app/android/papago.apk"},
				{"app-URL":"http://54.199.198.94/app/android/AliceInWonderland.apk"}
				]
				},{
				"type": 4,
				"count": 1,
				"list": [
				{
				"app-packageName": "app.sensor.tester"
				}
				]
				}]
				}
				}	

2.5.1.33. RDM State requests syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to RDM State request.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU should echo the same sequence number.	3.1.1.5
BODY	id	Var.	C-Octet String	Mandatory Parameter. JSON Data Format. Collection： (name/value data type) count/integer (list count) list/ (JSON Array) list： type/integer(control type)	3.3.1.2

				Example：
				{
				"id": "000c29d0013c",
				"count": 2,
				"list": [{
				"type": 0,
				"??": 0
				}, {
				"type": 1,
				"??": 1,
				"??": "xxxx"
				}]
				
				}	

2.5.1.34.RDM State response syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to RDM State response.	3.1.1.2
	command status	4	Integer	Indicates the status of the original request.	3.1.1.4
	sequence number	4	Integer	Set to the same sequence number of original SER MDM Operate request PDU.	3.1.1.5
BODY					

2.5.1.35.Semantic requests syntax

HEADE	Field Name	Size octets	Type	Description	Ref.
	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to	3.1.1.2

R				SER MDM Operate request.	
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU should echo the same sequence number.	3.1.1.5

BODY	Text	Var.	C-Octet String	Mandatory Parameter.
				JSON Data Format.
				Collection：
				(name/value data type)
				type/integer value
				0：not defined
				1：會話
				2：指令
				words/string value
				local/integer value
				0：not defined
				1：英文
				2：中文
				Example：
				{
				"type": 0,
				"local": 0,
				"words": "Ivy Hello"
				}
					3.3.1

2.5.1.36.Semantic response syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to Semantic response.	3.1.1.2
	command status	4	Integer	Indicates the status of the original request.	3.1.1.4
	sequence number	4	Integer	Set to the same sequence number of original Semantic request PDU.	3.1.1.5
BO	Semantic	Var.	C-Octet String	Mandatory Parameter. JSON Data Format.	

D
Y
				Collection：
				(name/value data type)
				result/integer (Ref.3.2.1.3)
				type/integer value
				0：not defined
				1：會話
				2：指令
				Example：
				{
				"result": 0,
				"type": 0,
				"local": 0,
				"words": "how are you"
				}	

2.5.1.37. AMX Control requests syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to AMX Control Command request.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU should echo the same sequence number.	3.1.1.5

BODY	Text	Var.	C-Octet String	Mandatory Parameter.
				JSON Data Format.
				Collection：
				Ext:
				{
				"function": 1,
				"device": 0,
				"control": 1
				}
					3.3.1.3

2.5.1.38. AMX Control response syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to AMX Control Command response.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU should echo the same sequence number.	3.1.1.5
BOD					

Y					

2.5.1.39. AMX Status requests syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to AMX Status Command request.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU should echo the same sequence number.	3.1.1.5

BODY	Text	Var.	C-Octet String	Mandatory Parameter.
				JSON Data Format.
				Collection：
				{
				“function”:1,
				“device”:0,
				“request-status”:1
				
				}
					3.3.1.4

2.5.1.40. AMX Status response syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to AMX Status Command response.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU should echo the same	3.1.1.5

				sequence number.	

2.5.1.41. AMX Broadcast Status Request syntax (Controller Send)

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to AMX Broadcast Status Command response.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU should echo the same sequence number.	3.1.1.5

BODY	Text	Var.	C-Octet String	Mandatory Parameter.
				JSON Data Format.
				Collection：
				{
				“function”:1,
				“device”:0,
				“status”:1
				}
					3.3.1.4

2.5.1.42. AMX Broadcast Status Response syntax (Device Send)

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to AMX Broadcast Status Command response.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU	3.1.1.5

				should echo the same sequence number.	

2.5.1.43. Firebase Cloud Messaging ID Register Command Request syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to Firebase Cloud Messaging ID Register Command request.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU should echo the same sequence number.	3.1.1.5
BODY	Text	Var.	C-Octet String	Mandatory Parameter. JSON Data Format.	0

2.5.1.44. Firebase Cloud Messaging ID Register Command Response syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to Firebase Cloud Messaging ID Register Command response.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU should echo the same sequence number.	3.1.1.5

2.5.1.45.Smart Building QR-Code Token Command Request syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to Smart Building QR-Code Token Command request.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU should echo the same sequence number.	3.1.1.5
BODY	Text	Var.	C-Octet String	Mandatory Parameter. JSON Data Format.	3.3.1.7

2.5.1.46.Smart Building QR-Code Token Command Response syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to Smart Building QR-Code Token Command response.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU should echo the same sequence number.	3.1.1.5
BODY	Text	Var.	C-Octet String	Mandatory Parameter. JSON Data Format.	3.3.1.8

2.5.1.47.Smart Building APP Version Command Request syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to Smart Building APP Version Command request.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU should echo the same sequence number.	3.1.1.5

2.5.1.48.Smart Building APP Version Command Response syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to Smart Building APP Version Command response.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU should echo the same sequence number.	3.1.1.5
BODY	Text	Var.	C-Octet String	Mandatory Parameter. JSON Data Format.	3.3.1.8

2.5.1.49.Smart Building Get Meeting Data Command Request syntax

	Field Name	Size octets	Type	Description	Ref.
HEADE	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to	3.1.1.2

R				Smart Building Get Meeting Data Command request.	
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU should echo the same sequence number.	3.1.1.5
BODY	Text	Var.	C-Octet String	Mandatory Parameter. JSON Data Format.	3.3.1.9

2.5.1.50.Smart Building Get Meeting Data Command Response syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to Smart Building Get Meeting Data Command response.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU should echo the same sequence number.	3.1.1.5
BODY	Text	Var.	C-Octet String	Mandatory Parameter. JSON Data Format.	3.3.1.10

2.5.1.51.Smart Building AMX Control Access Command Request syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to Smart Building AMX Control Access Command request.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence	3.1.1.5

				number. The associated configuration response PDU should echo the same sequence number.	
BODY	Text	Var.	C-Octet String	Mandatory Parameter. JSON Data Format.	3.3.1.11

2.5.1.52.Smart Building AMX Control Access Command Response syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to Smart Building AMX Control Access Command response.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU should echo the same sequence number.	3.1.1.5
BODY	Text	Var.	C-Octet String	Mandatory Parameter. JSON Data Format.	3.3.1.12

2.5.1.53.Smart Building Wireless Power Charge Command Request syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to Smart Building Wireless Power Charge Command request.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU	3.1.1.5

				should echo the same sequence number.	
BODY	Text	Var.	C-Octet String	Mandatory Parameter. JSON Data Format.	3.3.1.13

2.5.1.54. Smart Building Wireless Power Charge Command Response syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to Smart Building Wireless Power Charge Command response.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU should echo the same sequence number.	3.1.1.5
BODY	Text	Var.	C-Octet String	Mandatory Parameter. JSON Data Format.	4

2.5.1.55. Facebook Token Command Request syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to Facebook Token Command request.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated	3.1.1.5

				configuration response PDU should echo the same sequence number.	
BODY	Text	Var.	C-Octet String	Mandatory Parameter. JSON Data Format.	3.3.1.15

2.5.1.56. Facebook Token Command Response syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to Facebook Token Command response.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU should echo the same sequence number.	3.1.1.5
BODY	Text	Var.	C-Octet String	Mandatory Parameter. JSON Data Format.	3.3.1.16

2.5.1.57. Long Data Command Request syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to Facebook Token Command response.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU should echo the same	3.1.1.5

				sequence number.	
BODY	Text	Var.	C-Octet String	Mandatory Parameter. JSON Data Format.	3.3.1.16

2.5.1.58.Long Data Command Response syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to Facebook Token Command response.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU should echo the same sequence number.	3.1.1.5

2.5.1.59.Semantic Word requests syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to Semantic Word request.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated response PDU should echo the same sequence number.	3.1.1.5
BODY	JSON	Var.	C-Octet String	Mandatory Parameter. JSON Data Format.	

2.5.1.60.Semantic Word response syntax

	Field Name	Size octets	Type	Description	Ref.
HEADER	command length	4	Integer	Set to the overall length of PDU.	3.1.1.1
	command id	4	Integer	The value corresponding to Semantic Word response.	3.1.1.2
	command status	4	Integer	Set to STATUS_ROK.	3.1.1.4
	sequence number	4	Integer	Set to a unique sequence number. The associated configuration response PDU should echo the same sequence number.	3.1.1.5
BODY	JSON	Var.	C-Octet String	Mandatory Parameter. JSON Data Format.	

3. CMP Parameter Definition

This section describes the parameters which can be specified in a CMP command.

3.1. Command Header Parameters

3.1.1.1. Command length

The command length parameter indicates the length in octets of the CMP message. The CMP message header (including the command length field itself), the mandatory parameters and the optional parameters are all considered.

3.1.1.2. Command id

The command id field identifies the type of message the CMP PDU represents, for example, bind request, bind response etc.

3.1.1.3.CMP Command set

The complete set of Packet Command IDs and their associated values are defined in the following table.

Command ID	Value
Generic nack	0x80000000
Bind request	0x00000001
Bind response	0x80000001
Authentication request	0x00000002
Authentication response	0x80000002
Access log request	0x00000003
Access log response	0x80000003
Initial request	0x00000004
Initial response	0x80000004
Sign up request	0x00000005
Sign up response	0x80000005
Enquire link request	0x00000015
Enquire link response	0x80000015
Unbind request	0x00000006
Unbind response	0x80000006
Update request	0x00000007
Update response	0x80000007
Long Data request	0x00000008
Long Data response	0x80000008
Reboot request	0x00000010
Reboot response	0x80000010
Configuration request	0x00000011
Configuration response	0x80000011
Power port setting request	0x00000012
Power port setting response	0x80000012
Power port state request	0x00000013
Power port state response	0x80000013
SER API Sign in request	0x00000014
SER API Sign in response	0x80000014
RDM Login request	0x00000016
RDM Login response	0x80000016
RDM Operate request	0x00000017
RDM Operate response	0x80000017
RDM Logout request	0x00000018
RDM Logout response	0x80000018
RDM State request	0x00000019
RDM State response	0x80000019
Semantic request	0x00000030
Semantic response	0x80000030
AMX Control Command request	0x00000040

AMX Control Command response	0x80000040
AMX Status Command request	0x00000041
AMX Status Command response	0x80000041
AMX Broadcast Status Command request	0x00000042
AMX Broadcast Status Command response	0x80000042
Firebase Cloud Messaging ID Register Command request	0x00000044
Firebase Cloud Messaging ID Register Command response	0x80000044
Facebook Token Command request	0x00000045
Facebook Token Command response	0x80000045
Smart Building QR-Code Token Command request	0x00000050
Smart Building QR-Code Token Command response	0x80000050
Smart Building APP Version Command request	0x00000051
Smart Building APP Version Command response	0x80000051
Smart Building Get Meeting Data Command request	0x00000052
Smart Building Get Meeting Data Command response	0x80000052
Smart Building AMX Control Access Command request	0x00000053
Smart Building AMX Control Access Command response	0x80000053
Smart Building Wireless Power Charge Command request	0x00000055
Smart Building Wireless Power Charge Command response	0x80000055
Smart Building Door Control request	0x00000056
Smart Building Door Control response	0x80000056
Semantic Word request	0x00000057
Semantic Word response	0x80000057

3.1.1.4. Command status

The command status field of a CMP message response indicates the success or failure of a CMP request.

It is relevant only in the CMP response message and should be set to NULL in CMP request messages.

The complete set of CMP Error Codes and their associated values are defined in the following table.

Error Code	Value	Description
STATUS_ROK	0x00000000	No Error
STATUS_RINVMSGLEN	0x00000001	Message Length is invalid
STATUS_RINVCMDLEN	0x00000002	Command Length is invalid
STATUS_RINVCMDID	0x00000003	Invalid Command ID
STATUS_RINVBNDSTS	0x00000004	Incorrect BIND Status for given command
STATUS_RALYBND	0x00000005	Already in Bound State
Reserved	0x00000007	Reserved
STATUS_RSYSERR	0x00000008	System Error
Reserved	0x00000009 ~ 0x0000000F	Reserved
STATUS_RBINDFAIL	0x00000010	Bind Failed
STATUS_RINVBODY	0x00000040	Invalid Packet Body Data
STATUS_RINVCTRLID	0x00000041	Invalid Controller ID
STATUS_RINVJSON	0x00000042	Invalid JSON Data

3.1.1.5. Sequence number

A sequence number allows a response PDU to be correlated with a request PDU.

The associated CMP response PDU must preserve this field.

The allowed sequence number range is from 0x00000001 to 0x7FFFFFFF.

3.2. Mandatory CMP Parameters

3.2.1.1. Service Type

Type	Service
1	Mobile Device Tracker
2	Smart Charging Station
3	MORE SDK Service
4	Tracker Service
5	Appliance Tracker
6	Toy Tracker

7	IOT Tracker

3.2.1.2. Initial Data

Type	Data Format (JSON)

1	{
	"server": [{
	"id": 0,
	"name": "startTrack",
	"ip": "54.199.198.94",
	"port": 6607
	}, {
	"id": 1,
	"name": "tracker",
	"ip": "54.199.198.94",
	"port": 6607
	}]
	}

2	

3.2.1.3. Result Table

Result	Description
0	Success
1	Fail，System Exception
2	Fail，Invalid Parameter
3	Fail，System Busy
4	Fail，Unknown Error
5	Fail，Invalid Authorization

3.2.1.4. Device Type Table

Result	Description
0	Android
1	IOS
2	家電
3	玩具
4	物聯網

3.3. Optional Parameter

Optional Parameters are fields, which may be optionally included in a CMP packet. Optional Parameters must always appear at the end of a packet.

3.3.1.1. MDM Operation

MDM Operate Command Type

Type	Description
1	Camera
2	Screen
3	Install
4	Uninstall
5	Mobile Content
6	Mute
7	Wi-Fi
8	Record
9	Restore

Ext：
相機 鎖定 json 格式

值	數值	說明
value	0	解鎖
value	1	上鎖

ex:

```
{
    "type": 1,
    "value": 0
}
```

螢幕 鎖定 json 格式

值	數值	說明
value	0	解鎖，解鎖時會清除密碼鎖

value	1	上鎖
password	string	密碼
lock-now	1	馬上上鎖

ex:

```
{
    "type": 2,
    "value": 1,
    "password" :"xxxx",
    "lock-now":1
}
```

APP 安裝 json 格式

值	數值	說明
count	int	安裝 APP URL count 數
list	arrary	安裝 App URL Array
app-URL	string	安裝 App URL

ex:

```
{
    "type": 3,
    "count": 1,
    "list":[
    {"app-URL":"http://54.199.198.94/app/android/AppSensorTester.apk"}
    ]
}
```

APP 解除安裝 json 格式

值	數值	說明
count	int	解除安裝 APP count 數
list	arrary	解除安裝 App Array
app-URL	string	解除安裝 App packageName

ex:

```
{
    "type": 4,
    "count": 2,
    "list":[
    {"app-packageName":"com.comic.test1"},
    {"app-packageName":"com.ggooc.test2"}
    ]
}
```

Content Control json 格式

值	數值	說明
content-URL	string	行動內容網址

ex:

```
{
    "type": 5,
    "content-
URL":"http://54.199.198.94/ideas/sdk/download/doc/android/MORE_Tracker_SDK_
Android.pdf"
}
```

Mute Control json 格式

值	數值	說明
value	0	解除靜音
value	1	開啟靜音

ex:

```
{
    "type": 6,
    "value": 0
}
```

WIFI Control json 格式

值	數值	說明
ssid	string	ssid
password	string	密碼
encryption-type	1	加密機制，NO_PASSWORD
encryption-type	2	加密機制，WEP
encryption-type	3	加密機制，WPA /WPA2 PSK

ex:

```
{
    "type": 7,
    "ssid": "New Time Capsule",
    "password":"google123!",
    "encryption-type":3
}
```

Record Control json 格式

ex:

```
{
    "type": 8
}
```

Restore Control json 格式

ex:

```
{
    "type": 9
```

}

3.3.1.2. MDM State Updater Type

Type	Description
1	Power
2	Storage Space
3	GPS
4	App State

Ext:
*****電量 json******

```
{
   "type": 1,
   "level": "36.0"
}
```

*****儲存空間 json******

```
{
   "type": 2,
   "availablememory": "45.65"
}
```

*****經緯度 json******

```
{
   "type": 3,
   "lat": "25.0585396",
   "lng": "121.5546918"
}
```

*****使用者 App 追蹤 json******


```
{
   "type": 4,
   "addlistcount": 2,
   "addlist": [
      {
         "packagename": "org.iii.aliceinwonderland",
         "appname": "艾莉絲夢遊仙境"
      },
      {
         "packagename": "com.soohoobook.papago",
         "appname": "PAPAGO"
      }
   ],
   "removelistcount": 1,
   "removelist": [
      {
         "packagename": "app.sensor.tester",
         "appname": "APPSensor Tester"
      }
   ]
}
```


3.3.1.3. AMX Control Command Type

Ext:

```
{
   "function": 1,
   "device": 0,
   "control": 1
}
```

function	
名稱	數值
系統電源	1
模式切換	2
影像切換	3
投影機	4
音量	5
窗簾	6
燈光	7
藍光 DVD	8

function	device	
名稱	名稱	數值
模式切換	演講模式	1
模式切換	簡報模式	2
模式切換	劇院模式	3
投影機	左	1
投影機	中	2
投影機	右	3
音量	無線 Mic(紅)	1
音量	無線 Mic(黃)	2
音量	無線 Mic(藍)	3
音量	無線 Mic(綠)	4
音量	面板 Mic1	5
音量	面板 Mic2	6
音量	影音音源	7
音量	中控室	8
音量	視訊輸入	9
音量	主喇叭	10
音量	吸頂喇叭	11

音量	導播台	12
音量	視訊輸出	13
燈光	白板燈(右)	1
燈光	後方筒燈	2
燈光	白板燈(左)	3
燈光	講台間照	4
燈光	後方間照	5
燈光	講台筒燈	6
燈光	白板燈(中)	7
燈光	**簡報燈光**	**8**
燈光	全部燈光	99

control	
名稱	數值
ON	1
OFF	2
Mute	3
Unmute	4
Up(可能代表聲音、銀幕、窗簾等)	5
Down(可能代表聲音、銀幕、窗簾等)	6
Project_HDMI	7
Project_VGA	8
Matrix_input_1	9
Matrix_input_2	10
Matrix_input_3	11
Matrix_input_4	12
Matrix_input_5	13
Matrix_input_6	14
Matrix_input_7	15
Matrix_input_8	16
BD_POWER	**17**
BD_OPEN	18
BD_PLAY	19
BD_STOP	20
BD_PAUSE	21
BD_NEXT	22
BD_PREVIEW	23
BD_FORWARD	24
BD_REVIEW	25
BD_UP	26
BD_DOWN	27
BD_LEFT	28

BD_RIGHT	29
BD_OK	30
BD_BACK	31
BD_MENU	32
BD_TOPMENU	33
BD_HOME	34
BD_SUBTITLE	35

中文名稱	Control Command	Json 格式

開啟系統電源	CTL_SYSTEM_ON	{
		"function": 1,
		"device": 0,
		"control": 1
		}

關閉系統電源	CTL_SYSTEM_OFF	{
		"function": 1,
		"device": 0,
		"control": 2
		}

演講模式	CTL_MODE_SPEECH	{
		"function": 2,
		"device": 1,
		"control": 0
		}

簡報模式	CTL_MODE_BRIEF	{
		"function": 2,
		"device": 2,
		"control": 0
		}

劇院模式	CTL_MODE_CINEMA	{
		"function": 2,
		"device": 3,
		"control": 0
		}

影像切換:中控 VGA	CTL_MATRIX_INPUT1	{
		"function": 3,
		"device": 0,
		"control": 9
		}

影像切換:視訊 VGA	CTL_MATRIX_INPUT2	{
		"function": 3,
		"device": 0,
		"control": 10
		}

影像切換:中控室 HDMI1	CTL_MATRIX_INPUT3	{
		"function": 3,
		"device": 0,
		"control": 11
		}

影像切換:中控室 HDMI2	CTL_MATRIX_INPUT4	{
		"function": 3,
		"device": 0,
		"control": 12
		}

影像切換:DVD	CTL_MATRIX_INPUT5	{
		"function": 3,
		"device": 0,
		"control": 13
		}

影像切換:input6	CTL_MATRIX_INPUT6	{
		"function": 3,
		"device": 0,
		"control": 14
		}

影像切換:講台牆壁外接插座	CTL_MATRIX_INPUT7	{
		"function": 3,
		"device": 0,
		"control": 15
		}

影像切換:input8	CTL_MATRIX_INPUT8	{
		"function": 3,
		"device": 0,
		"control": 16
		}

左投影機開啟	CTL_PROJ_ON_LEFT	{
		"function": 4,
		"device": 1,
		"control": 1
		}

左投影機關閉	CTL_PROJ_OFF_LEFT	{ "function": 4, "device": 1, "control": 2

		}

左投影機 HDMI	CTL_PROJ_HDMI_LEFT	{
		"function": 4,
		"device": 1,
		"control": 7
		}

左投影機 VGA	CTL_PROJ_VGA_LEFT	{
		"function": 4,
		"device": 1,
		"control": 8
		}

左投影機黑畫面	CTL_PROJ_MUTE_LEFT	{
		"function": 4,
		"device": 1,
		"control": 3
		}

左投影機黑畫面取消	CTL_PROJ_UNMUTE_LEFT	{
		"function": 4,
		"device": 1,
		"control": 4
		}

左電動銀幕上升	CTL_SCREEN_UP_LEFT	{
		"function": 4,
		"device": 1,
		"control": 5
		}

左電動銀幕下降	CTL_SCREEN_DOWN_LEFT	{
		"function": 4,
		"device": 1,
		"control": 6
		}

中投影機開啟	CTL_PROJ_ON_CENTER	{
		"function": 4,
		"device": 2,
		"control": 1
		}

中投影機關閉	CTL_PROJ_OFF_CENTER	{
		"function": 4,
		"device": 2,
		"control": 2
		}

中投影機 HDMI	CTL_PROJ_HDMI_CENTER	{
		"function": 4,
		"device": 2,
		"control": 7
		}

中投影機 VGA	CTL_PROJ_VGA_CENTER	{ "function": 4, "device": 2,

		"control": 8 }

中投影機黑畫面	CTL_PROJ_MUTE_CENTER	{
		"function": 4,
		"device": 2,
		"control": 3
		}

中投影機黑畫面取消	CTL_PROJ_UNMUTE_CENTER	{
		"function": 4,
		"device": 2,
		"control": 4
		}

中電動銀幕上升	CTL_SCREEN_UP_CENTER	{
		"function": 4,
		"device": 2,
		"control": 5
		}

中電動銀幕下降	CTL_SCREEN_DOWN_CENTER	{
		"function": 4,
		"device": 2,
		"control": 6
		}

右投影機開啟	CTL_PROJ_ON_RIGHT	{
		"function": 4,
		"device": 3,
		"control": 1
		}

右投影機關閉	CTL_PROJ_OFF_RIGHT	{
		"function": 4,
		"device": 3,
		"control": 2
		}

右投影機 HDMI	CTL_PROJ_HDMI_RIGHT	{
		"function": 4,
		"device": 3,
		"control": 7
		}

右投影機 VGA	CTL_PROJ_VGA_RIGHT	{
		"function": 4,
		"device": 3,
		"control": 8
		}

右投影機黑畫面	CTL_PROJ_MUTE_RIGHT	{
		"function": 4,
		"device": 3,
		"control": 3
		}

右投影機黑畫面取消	CTL_PROJ_UNMUTE_RIGHT	{ "function": 4,

		"device": 3, "control": 4 }

右電動銀幕上升	CTL_SCREEN_UP_RIGHT	{
		"function": 4,
		"device": 3,
		"control": 5
		}

右電動銀幕下降	CTL_SCREEN_DOWN_RIGHT	{
		"function": 4,
		"device": 3,
		"control": 6
		}

無線 Mic(紅) 音量增加	CTL_INPUT1_VOL_UP	{
		"function": 5,
		"device": 1,
		"control":5
		}

無線 Mic(紅) 音量減少	CTL_INPUT1_VOL_DOWN	{
		"function": 5,
		"device": 1,
		"control":6
		}

無線 Mic(紅) 靜音	CTL_INPUT1_MUTE	{
		"function": 5,
		"device": 1,
		"control":3
		}

無線 Mic(紅) 靜音取消	CTL_INPUT1_UNMUTE	{
		"function": 5,
		"device": 1,
		"control":4
		}

無線 Mic(黃) 音量增加	CTL_INPUT2_VOL_UP	{
		"function": 5,
		"device": 2,
		"control":5
		}

無線 Mic(黃) 音量減少	CTL_INPUT2_VOL_DOWN	{
		"function": 5,
		"device": 2,
		"control":6
		}

無線 Mic(黃) 靜音	CTL_INPUT2_MUTE	{
		"function": 5,
		"device":2,
		"control":3
		}

無線 Mic(黃) 靜音取消	CTL_INPUT2_UNMUTE	{
		"function": 5,
		"device": 2,
		"control":4
		}

無線 Mic(藍) 音量增加	CTL_INPUT3_VOL_UP	{
		"function": 5,
		"device": 3,
		"control":5
		}

無線 Mic(藍) 音量減少	CTL_INPUT3_VOL_DOWN	{
		"function": 5,
		"device": 3,
		"control":6
		}

無線 Mic(藍) 靜音	CTL_INPUT3_MUTE	{
		"function": 5,
		"device": 3,
		"control":3
		}

無線 Mic(藍) 靜音取消	CTL_INPUT3_UNMUTE	{
		"function": 5,
		"device": 3,
		"control":4
		}

無線 Mic(綠) 音量增加	CTL_INPUT4_VOL_UP	{
		"function": 5,
		"device": 4,
		"control":5
		}

無線 Mic(綠) 音量減少	CTL_INPUT4_VOL_DOWN	{
		"function": 5,
		"device": 4,
		"control":6
		}

無線 Mic(綠) 靜音	CTL_INPUT4_MUTE	{
		"function": 5,
		"device": 4,
		"control":3
		}

無線 Mic(綠) 靜音取消	CTL_INPUT4_UNMUTE	{
		"function": 5,
		"device": 4,
		"control":4
		}

面板 Mic1 音量增加	CTL_INPUT5_VOL_UP	{

		"function": 5, "device": 5, "control":5 }

面板 Mic1 音量減少	CTL_INPUT5_VOL_DOWN	{
		"function": 5,
		"device": 5,
		"control":6
		}

面板 Mic1 靜音	CTL_INPUT5_MUTE	{
		"function": 5,
		"device": 5,
		"control":3
		}

面板 Mic1 靜音取消	CTL_INPUT5_UNMUTE	{
		"function": 5,
		"device": 5,
		"control":4
		}

面板 Mic2 音量增加	CTL_INPUT6_VOL_UP	{
		"function": 5,
		"device": 6,
		"control":5
		}

面板 Mic2 音量減少	CTL_INPUT6_VOL_DOWN	{
		"function": 5,
		"device": 6,
		"control":6
		}

面板 Mic2 靜音	CTL_INPUT6_MUTE	{
		"function": 5,
		"device": 6,
		"control":3
		}

面板 Mic2 靜音取消	CTL_INPUT6_UNMUTE	{
		"function": 5,
		"device": 6,
		"control":4
		}

影音音源 音量增加	CTL_INPUT7_VOL_UP	{
		"function": 5,
		"device": 7,
		"control":5
		}

影音音源 音量減少	CTL_INPUT7_VOL_DOWN	{ "function": 5, "device": 7,

		"control":6 }

影音音源 靜音	CTL_INPUT7_MUTE	{
		"function": 5,
		"device": 7,
		"control":3
		}

影音音源 靜音取消	CTL_INPUT7_UNMUTE	{
		"function": 5,
		"device":7,
		"control":4
		}

中控室 音量增加	CTL_INPUT9_VOL_UP	{
		"function": 5,
		"device": 8,
		"control":5
		}

中控室 音量減少	CTL_INPUT9_VOL_DOWN	{
		"function": 5,
		"device": 8,
		"control":6
		}

中控室 靜音	CTL_INPUT9_MUTE	{
		"function": 5,
		"device": 8,
		"control":3
		}

中控室 靜音取消	CTL_INPUT9_UNMUTE	{
		"function": 5,
		"device": 8,
		"control":4
		}

視訊輸入 音量增加	CTL_INPUT10_VOL_UP	{
		"function": 5,
		"device": 9,
		"control":5
		}

視訊輸入 音量減少	CTL_INPUT10_VOL_DOWN	{
		"function": 5,
		"device": 9,
		"control":6
		}

視訊輸入 靜音	CTL_INPUT10_MUTE	{
		"function": 5,
		"device": 9,
		"control":3
		}

視訊輸入 靜音取消	CTL_INPUT10_UNMUTE	{
		"function": 5,
		"device": 9,
		"control":4
		}

主喇叭 音量增加	CTL_OUTPUT1_VOL_UP	{
		"function": 5,
		"device": 10,
		"control":5
		}

主喇叭 音量減少	CTL_OUTPUT1_VOL_DOWN	{
		"function": 5,
		"device": 10,
		"control":6
		}

主喇叭 靜音	CTL_OUTPUT1_MUTE	{
		"function": 5,
		"device": 10,
		"control":3
		}

主喇叭 靜音取消	CTL_OUTPUT1_UNMUTE	{
		"function": 5,
		"device": 10,
		"control":4
		}

吸頂喇叭 音量增加	CTL_OUTPUT2_VOL_UP	{
		"function": 5,
		"device": 11,
		"control":5
		}

吸頂喇叭 音量減少	CTL_OUTPUT2_VOL_DOWN	{
		"function": 5,
		"device": 11,
		"control":6
		}

吸頂喇叭 靜音	CTL_OUTPUT2_MUTE	{
		"function": 5,
		"device": 11,
		"control":3
		}

吸頂喇叭 靜音取消	CTL_OUTPUT2_UNMUTE	{
		"function": 5,
		"device": 11,
		"control":4
		}

導播台 音量增加	CTL_OUTPUT3_VOL_UP	{

		"function": 5, "device": 12, "control":5 }

導播台 音量減少	CTL_OUTPUT3_VOL_DOWN	{
		"function": 5,
		"device": 12,
		"control":6
		}

導播台 靜音	CTL_OUTPUT3_MUTE	{
		"function": 5,
		"device": 12,
		"control":3
		}

導播台 靜音取消	CTL_OUTPUT3_UNMUTE	{
		"function": 5,
		"device": 12,
		"control":4
		}

視訊輸出 音量增加	CTL_OUTPUT6_VOL_UP	{
		"function": 5,
		"device": 13,
		"control":5
		}

視訊輸出 音量減少	CTL_OUTPUT6_VOL_DOWN	{
		"function": 5,
		"device": 13,
		"control":6
		}

視訊輸出 靜音	CTL_OUTPUT6_MUTE	{
		"function": 5,
		"device": 13,
		"control":3
		}

視訊輸出 靜音取消	CTL_OUTPUT6_UNMUTE	{
		"function": 5,
		"device": 13,
		"control":4
		}

窗簾上升	CTL_CURTAIN_UP	{
		"function": 6,
		"device": 0,
		"control":5
		}

窗簾下降	CTL_CURTAIN_DOWN	{ "function": 6, "device": 0,

		"control":6 }

白板燈(右) 開	CTL_LIGHT1_ON	{
		"function": 7,
		"device": 1,
		"control":1
		}

白板燈(右) 關	CTL_LIGHT1_OFF	{
		"function": 7,
		"device": 1,
		"control":2
		}

後方筒燈 開	CTL_LIGHT2_ON	{
		"function": 7,
		"device": 2,
		"control":1
		}

後方筒燈 關	CTL_LIGHT2_OFF	{
		"function": 7,
		"device": 2,
		"control":2
		}

白板燈(左) 開	CTL_LIGHT3_ON	{
		"function": 7,
		"device": 3,
		"control":1
		}

白板燈(左) 關	CTL_LIGHT3_OFF	{
		"function": 7,
		"device": 3,
		"control":2
		}

講台間照 開	CTL_LIGHT4_ON	{
		"function": 7,
		"device": 4,
		"control":1
		}

講台間照 關	CTL_LIGHT4_OFF	{
		"function": 7,
		"device": 4,
		"control":2
		}

後方間照 開	CTL_LIGHT5_ON	{
		"function": 7,
		"device": 5,
		"control":1
		}

後方間照 關	CTL_LIGHT5_OFF	{ "function": 7, "device": 5,

		"control":2 }

講台筒燈 開	CTL_LIGHT6_ON	{
		"function": 7,
		"device": 6,
		"control":1
		}

講台筒燈 關	CTL_LIGHT6_OFF	{
		"function": 7,
		"device": 6,
		"control":2
		}

白板燈(中) 開	CTL_LIGHT7_ON	{
		"function": 7,
		"device": 7,
		"control":1
		}

白板燈(中) 關	CTL_LIGHT7_OFF	{
		"function": 7,
		"device": 7,
		"control":2
		}

燈光全開	CTL_LIGHT_ALL_ON	{
		"function": 7,
		"device": 99,
		"control":1
		}

燈光全關	CTL_LIGHT_ALL_OFF	{
		"function": 7,
		"device": 99,
		"control":2
		}

簡報燈光	**CTL_LIGHT_BRIEF**	**{ "function": 7, "device": 8, "control":0 }**
藍光 DVD 電源開關	**CTL_BD_POWER**	**{ "function": 8, "device": 0, "control":17 }**

藍光 DVD 退片按鈕	CTL_BD_OPEN	{
		"function": 8,
		"device": 0,
		"control":18
		}

藍光 DVD 開始播放	CTL_BD_PLAY	{

		"function": 8, "device": 0, "control":19 }

藍光 DVD 停止播放	CTL_BD_STOP	{
		"function": 8,
		"device": 0,
		"control":20
		}

藍光 DVD 暫停播放	CTL_BD_PAUSE	{
		"function": 8,
		"device": 0,
		"control":21
		}

藍光 DVD >>|	CTL_BD_NEXT	{
		"function": 8,
		"device": 0,
		"control":22
		}

藍光 DVD |<<	CTL_BD_PREVIEW	{
		"function": 8,
		"device": 0,
		"control":23
		}

藍光 DVD >>	CTL_BD_FORWARD	{
		"function": 8,
		"device": 0,
		"control":24
		}

藍光 DVD <<	CTL_BD_REVIEW	{
		"function": 8,
		"device": 0,
		"control":25
		}

藍光 DVD 上	CTL_BD_UP	{
		"function": 8,
		"device": 0,
		"control":26
		}

藍光 DVD 下	CTL_BD_DOWN	{
		"function": 8,
		"device": 0,
		"control":27
		}

藍光 DVD 左	CTL_BD_LEFT	{
		"function": 8,
		"device": 0,
		"control":28
		}

藍光 DVD 右	CTL_BD_RIGHT	{

		"function": 8, "device": 0, "control":29 }

藍光 DVD OK	CTL_BD_OK	{
		"function": 8,
		"device": 0,
		"control":30
		}

藍光 DVD 返回	CTL_BD_BACK	{
		"function": 8,
		"device": 0,
		"control":31
		}

藍光 DVD 選單	CTL_BD_MENU	{
		"function": 8,
		"device": 0,
		"control":32
		}

藍光 DVD 主選單	CTL_BD_TOPMENU	{
		"function": 8,
		"device": 0,
		"control":33
		}

藍光 DVD 首頁	CTL_BD_HOME	{
		"function": 8,
		"device": 0,
		"control":34
		}

藍光 DVD 字幕	CTL_BD_SUBTITLE	{
		"function": 8,
		"device": 0,
		"control":35
		}

3.3.1.4. AMX Status Command Type

Request:
{
“function”:1,
“device”:0,
“request-status”:1

}

Response

{

“function”:1,

“device”:0,

“status”:1

}

function	
名稱	數值
系統電源	1
模式切換	2
影像切換	3
投影機	4
音量	5
窗簾	6
燈光	7
藍光 DVD	8

function	**device**	
名稱	**名稱**	**數值**
投影機	左	1
投影機	中	2
投影機	右	3
音量	無線 Mic(紅)	1
音量	無線 Mic(黃)	2
音量	無線 Mic(藍)	3
音量	無線 Mic(綠)	4
音量	面板 Mic1	5
音量	面板 Mic2	6
音量	影音音源	7
音量	中控室	8
音量	視訊輸入	9
音量	主喇叭	10
音量	吸頂喇叭	11

音量	導播台	12
音量	視訊輸出	13
燈光	白板燈(右)	1
燈光	後方筒燈	2
燈光	白板燈(左)	3
燈光	講台間照	4
燈光	後方間照	5
燈光	講台筒燈	6
燈光	白板燈(中)	7

request-status	
名稱	數值
Power	1
Signal	2
Mute	3
Matrix	4
Level~~Level~~	5~~5~~

已註解 [R1]: 新增 level request-status

status	
名稱	數值
ON	1
OFF	2
Mute	3
Unmute	4
Project_HDMI	7
Project_VGA	8
Matrix_input_1	9
Matrix_input_2	10
Matrix_input_3	11
Matrix_input_4	12
Matrix_input_5	13
Matrix_input_6	14
Matrix_input_7	15
Matrix_input_8	16

level	
名稱	數值
	-40~12

已註解 [R2]: 新增 level 之 key

Request

Request Status Command	Json 格式

STATUS_SYSTEM	{
	"function": 1,
	"device": 0,
	" request-status ": 1
	}

STATUS_MATRIX	{
	"function": 3,
	"device": 0,
	" request-status ": 4
	}

STATUS_PROJ_POWER_LEFT	{
	"function": 4,
	"device": 1,
	" request-status ": 1
	}

STATUS_PROJ_SIGNAL_LEFT	{
	"function": 4,
	"device": 1,
	" request-status ": 2
	}

STATUS_PROJ_MUTE_LEFT	{
	"function": 4,
	"device": 1,
	" request-status ": 3
	}

STATUS_PROJ_POWER_CENTER	{
	"function": 4,
	"device": 2,
	" request-status ": 1
	}

STATUS_PROJ_SIGNAL_CENTER	{
	"function": 4,
	"device": 2,
	" request-status ": 2
	}

STATUS_PROJ_MUTE_CENTER	{ "function": 4,

	"device": 2, " request-status ": 3 }

STATUS_PROJ_POWER_RIGHT	{
	"function": 4,
	"device": 3,
	" request-status ": 1
	}

STATUS_PROJ_SIGNAL_RIGHT	{
	"function": 4,
	"device": 3,
	" request-status ": 2
	}

STATUS_PROJ_MUTE_RIGHT	{
	"function": 4,
	"device": 3,
	" request-status ": 3
	}

STATUS_INPUT1_MUTE	{
	"function": 5,
	"device":1,
	" request-status ": 3
	}

STATUS_INPUT2_MUTE	{
	"function": 5,
	"device":2,
	" request-status ": 3
	}

STATUS_INPUT3_MUTE	{
	"function": 5,
	"device":3,
	" request-status ": 3
	}

STATUS_INPUT4_MUTE	{
	"function": 5,
	"device":4,
	" request-status ": 3
	}

STATUS_INPUT5_MUTE	{
	"function": 5,
	"device":5,
	" request-status ": 3
	}

STATUS_INPUT6_MUTE	{
	"function": 5,
	"device":6,
	" request-status ": 3
	}

STATUS_INPUT7_MUTE	{
	"function": 5,
	"device":7,
	" request-status ": 3
	}

STATUS_INPUT9_MUTE	{
	"function": 5,
	"device":8,
	" request-status ": 3
	}

STATUS_INPUT10_MUTE	{
	"function": 5,
	"device":9,
	" request-status ": 3
	}

STATUS_OUTPUT1_MUTE	{
	"function": 5,
	"device":10,
	" request-status ": 3
	}

STATUS_OUTPUT2_MUTE	{
	"function": 5,
	"device":11,
	" request-status ": 3
	}

STATUS_OUTPUT3_MUTE	{
	"function": 5,
	"device":12,
	" request-status ": 3
	}

STATUS_OUTPUT6_MUTE	{
	"function": 5,
	"device":13,
	" request-status ": 3
	}

STATUS_INPUT1_VOL	{
	"function": 5,
	"device":1,
	" request-status ": 5
	}

STATUS_INPUT2_VOL	{
	"function": 5,
	"device":2,
	" request-status ": 5
	}

STATUS_INPUT3_VOL	{ "function": 5, "device":3, " request-status ": 5

已註解 [R3]: 新增音量查詢

	}

STATUS_INPUT4_VOL	{
	"function": 5,
	"device":4,
	" request-status ": 5
	}

STATUS_INPUT5_VOL	{
	"function": 5,
	"device":5,
	" request-status ": 5
	}

STATUS_INPUT6_VOL	{
	"function": 5,
	"device":6,
	" request-status ": 5
	}

STATUS_INPUT7_VOL	{
	"function": 5,
	"device":7,
	" request-status ": 5
	}

STATUS_INPUT9_VOL	{
	"function": 5,
	"device":8,
	" request-status ": 5
	}

STATUS_INPUT10_VOL	{
	"function": 5,
	"device":9,
	" request-status ": 5
	}

STATUS_OUTPUT1_VOL	{
	"function": 5,
	"device":10,
	" request-status ": 5
	}

STATUS_OUTPUT2_VOL	{
	"function": 5,
	"device":11,
	" request-status ": 5
	}

STATUS_OUTPUT3_VOL	{
	"function": 5,
	"device":12,
	" request-status ": 5
	}

STATUS_OUTPUT6_VOL	{ "function": 5, "device":13, " request-status ": 5

	}

STATUS_LIGHT1	{
	"function": 7,
	"device": 1,
	" request-status ": 1
	}

STATUS_LIGHT2	{
	"function": 7,
	"device": 2,
	" request-status ": 1
	}

STATUS_LIGHT3	{
	"function": 7,
	"device": 3,
	" request-status ": 1
	}

STATUS_LIGHT4	{
	"function": 7,
	"device": 4,
	" request-status ": 1
	}

STATUS_LIGHT5	{
	"function": 7,
	"device": 5,
	" request-status ": 1
	}

STATUS_LIGHT6	{
	"function": 7,
	"device": 6,
	" request-status ": 1
	}

STATUS_LIGHT7	{
	"function": 7,
	"device": 7,
	" request-status ": 1
	}

STATUS_BD_POWER	{
	"function": 8,
	"device": 0,
	" request-status ": 1
	}

Response

Response Status Command	Json 格式
STATUS_SYSTEM_ON	{ “function”:1, “device”:0,

	“status”:1 }

STATUS_SYSTEM_OFF	{
	“function”:1,
	“device”:0,
	“status”:2
	}

STATUS_MATRIX_INPUT1	{
	“function”:3,
	“device”:0,
	“status”:9
	}

STATUS_MATRIX_INPUT2	{
	“function”:3,
	“device”:0,
	“status”:10
	}

STATUS_MATRIX_INPUT3	{
	“function”:3,
	“device”:0,
	“status”:11
	}

STATUS_MATRIX_INPUT4	{
	“function”:3,
	“device”:0,
	“status”:12
	}

STATUS_MATRIX_INPUT5	{
	“function”:3,
	“device”:0,
	“status”:13
	}

STATUS_MATRIX_INPUT6	{
	“function”:3,
	“device”:0,
	“status”:14
	}

STATUS_MATRIX_INPUT7	{ “function”:3, “device”:0, “status”:15

	}

STATUS_MATRIX_INPUT8	{
	“function”:3,
	“device”:0,
	“status”:16
	}

STATUS_PROJ_ON_LEFT	{
	“function”:4,
	“device”:1,
	“status”:1
	}

STATUS_PROJ_OFF_LEFT	{
	“function”:4,
	“device”:1,
	“status”:2
	}

STATUS_PROJ_HDMI_LEFT	{
	“function”:4,
	“device”:1,
	“status”:7
	}

STATUS_PROJ_VGA_LEFT	{
	“function”:4,
	“device”:1,
	“status”:8
	}

STATUS_PROJ_MUTE_LEFT	{
	“function”:4,
	“device”:1,
	“status”:3
	}

STATUS_PROJ_UNMUTE_LEFT	{
	“function”:4,
	“device”:1,
	“status”:4
	}

STATUS_PROJ_ON_CENTER	{ “function”:4, “device”:2, “status”:1

	}

STATUS_PROJ_OFF_CENTER	{
	“function”:4,
	“device”:2,
	“status”:2
	}

STATUS_PROJ_HDMI_CENTER	{
	“function”:4,
	“device”:2,
	“status”:7
	}

STATUS_PROJ_VGA_CENTER	{
	“function”:4,
	“device”:2,
	“status”:8
	}

STATUS_PROJ_MUTE_CENTER	{
	“function”:4,
	“device”:2,
	“status”:3
	}

STATUS_PROJ_UNMUTE_CENTER	{
	“function”:4,
	“device”:2,
	“status”:4
	}

STATUS_PROJ_ON_RIGHT	{
	“function”:4,
	“device”:3,
	“status”:1
	}

STATUS_PROJ_OFF_RIGHT	{
	“function”:4,
	“device”:3,
	“status”:2
	}

STATUS_PROJ_HDMI_RIGHT	{
	“function”:4,
	“device”:3,
	“status”:7
	}

STATUS_PROJ_VGA_RIGHT	{
	“function”:4,
	“device”:3,
	“status”:8
	}

STATUS_PROJ_MUTE_RIGHT	{
	“function”:4,
	“device”:3,
	“status”:3
	}

STATUS_PROJ_UNMUTE_RIGHT	{
	“function”:4,
	“device”:3,
	“status”:4
	}

STATUS_INPUT1_MUTE	{
	“function”:5,
	“device”:1,
	“status”:3
	}

STATUS_INPUT1_UNMUTE	{
	“function”:5,
	“device”:1,
	“status”:4
	}

STATUS_INPUT2_MUTE	{
	“function”:5,
	“device”:2,
	“status”:3
	}

STATUS_INPUT2_UNMUTE	{
	“function”:5,
	“device”:2,
	“status”:4
	}

STATUS_INPUT3_MUTE	{
	“function”:5,
	“device”:3,
	“status”:3
	}

STATUS_INPUT3_UNMUTE	{
	“function”:5,
	“device”:3,
	“status”:4
	}

STATUS_INPUT4_MUTE	{
	“function”:5,
	“device”:4,
	“status”:3
	}

STATUS_INPUT4_UNMUTE	{
	“function”:5,
	“device”:4,
	“status”:4
	}

STATUS_INPUT5_MUTE	{
	“function”:5,
	“device”:5,
	“status”:3
	}

STATUS_INPUT5_UNMUTE	{
	“function”:5,
	“device”:5,
	“status”:4
	}

STATUS_INPUT6_MUTE	{
	“function”:5,
	“device”:6,
	“status”:3
	}

STATUS_INPUT6_UNMUTE	{
	“function”:5,
	“device”:6,
	“status”:4
	}

STATUS_INPUT7_MUTE	{
	“function”:5,
	“device”:7,
	“status”:3
	}

STATUS_INPUT7_UNMUTE	{
	“function”:5,
	“device”:7,
	“status”:4
	}

STATUS_INPUT9_MUTE	{
	“function”:5,
	“device”:8,
	“status”:3
	}

STATUS_INPUT9_UNMUTE	{
	“function”:5,
	“device”:8,
	“status”:4
	}

STATUS_INPUT10_MUTE	{
	“function”:5,
	“device”:9,
	“status”:3
	}

STATUS_INPUT10_UNMUTE	{
	“function”:5,
	“device”:9,
	“status”:4
	}

STATUS_OUTPUT1_MUTE	{
	“function”:5,
	“device”:10,
	“status”:3
	}

STATUS_OUTPUT1_UNMUTE	{
	“function”:5,
	“device”:10,
	“status”:4
	}

STATUS_OUTPUT2_MUTE	{
	“function”:5,
	“device”:11,
	“status”:3
	}

STATUS_OUTPUT2_UNMUTE	{
	“function”:5,
	“device”:11,
	“status”:4
	}

STATUS_OUTPUT3_MUTE	{
	“function”:5,
	“device”:12,
	“status”:3
	}

STATUS_OUTPUT3_UNMUTE	{
	“function”:5,
	“device”:12,
	“status”:4
	}

STATUS_OUTPUT6_MUTE	{
	“function”:5,
	“device”:13,
	“status”:3
	}

STATUS_OUTPUT6_UNMUTE	{
	“function”:5,
	“device”:13,
	“status”:4
	}

STATUS_LIGHT1_ON	{
	“function”:7,
	“device”:1,
	“status”:1
	}

STATUS_LIGHT1_OFF	{
	“function”:7,
	“device”:1,
	“status”:2
	}

STATUS_LIGHT2_ON	{
	“function”:7,
	“device”:2,
	“status”:1
	}

STATUS_LIGHT2_OFF	{
	“function”:7,
	“device”:2,
	“status”:2
	}

STATUS_LIGHT3_ON	{
	“function”:7,
	“device”:3,
	“status”:1
	}

STATUS_LIGHT3_OFF	{
	“function”:7,
	“device”:3,
	“status”:2
	}

STATUS_LIGHT4_ON	{
	“function”:7,
	“device”:4,
	“status”:1
	}

STATUS_LIGHT4_OFF	{
	“function”:7,
	“device”:4,
	“status”:2
	}

STATUS_LIGHT5_ON	{
	“function”:7,
	“device”:5,
	“status”:1
	}

STATUS_LIGHT5_OFF	{ “function”:7, “device”:5, “status”:2

	}

STATUS_LIGHT6_ON	{
	“function”:7,
	“device”:6,
	“status”:1
	}

STATUS_LIGHT6_OFF	{
	“function”:7,
	“device”:6,
	“status”:2
	}

STATUS_LIGHT7_ON	{
	“function”:7,
	“device”:7,
	“status”:1
	}

STATUS_LIGHT7_OFF	{
	“function”:7,
	“device”:7,
	“status”:2
	}

STATUS_BD_POWER_ON	{
	“function”:8,
	“device”:0,
	“status”:1
	}

STATUS_BD_POWER_OFF	{
	“function”:8,
	“device”:0,
	“status”:2
	}

STATUS_INPUT1_VOL	{
	“function”:5,
	“device”:1,
	“level”:?
	}

STATUS_INPUT2_VOL	{
	“function”:5,
	“device”:2,
	“level”:?
	}

STATUS_INPUT3_VOL	{
	“function”:5,
	“device”:3,
	“level”:?
	}

STATUS_INPUT4_VOL	{ “function”:5,

已註解 [R4]: 音量大小 Status Response

	“device”:4, “level”:? }

STATUS_INPUT5_VOL	{
	“function”:5,
	“device”:5,
	“level”:?
	}

STATUS_INPUT6_VOL	{
	“function”:5,
	“device”:6,
	“level”:?
	}

STATUS_INPUT7_VOL	{
	“function”:5,
	“device”:7,
	“level”:?
	}

STATUS_INPUT9_VOL	{
	“function”:5,
	“device”:8,
	“level”:?
	}

STATUS_INPUT10_VOL	{
	“function”:5,
	“device”:9,
	“level”:?
	}

STATUS_OUTPUT1_VOL	{
	“function”:5,
	“device”:10,
	“level”:?
	}

STATUS_OUTPUT2_VOL	{
	“function”:5,
	“device”:11,
	“level”:?
	}

STATUS_OUTPUT3_VOL	{
	“function”:5,
	“device”:12,
	“level”:?
	}

STATUS_OUTPUT6_VOL	{
	“function”:5,
	“device”:13,
	“level”:?
	}

3.3.1.5. Firebase Cloud Messaging ID Register Request Command JSON

Example

欄位名稱	欄位說明	欄位型態
FCM_ID	Firebase Cloud Messaging 推播 ID	String
APP_ID	MORE APP ID	String
USER_ID	APP User 唯一識別碼	String

Ex:

{
"FCM_ID": "fSk3qfqUxRk:APA91bHPz9WAsR5vxX9hNE-zoaKHwXVs2BJKW4V9guXnGWO1gSFh-EwjhJpZ00Y0DgOvGhVEg8u5iNDXC-ff6E14nuWzyuSq33H8SZPFbgUpIPiEggQYIbCnt1ZlZEjplZnU33akmPW+",
"APP_ID": "1484537462214",
"USER_ID": "d56e0b12-db99-11e6-bf26-cec0c932ce01"
}

3.3.1.6. Smart Building QR-Code Token Command Request Command JSON

Example

欄位名稱	欄位說明	欄位型態	註
QRCODE_TOKEN	QR-Code 掃描到的 token	String	
USER_ID	APP User UUID	String	當 USER_ID =null 時，請傳 String

			Type NULL

Ex:
{
"QRCODE_TOKEN":
"wWOoQaMc3bk0aKlFlKvCOBNS/QpXXxW9EztCVQHghDfTm7hgSHb9P8xjG3b
tILjpaDcaRymw9ckvgIoZKiydY3ceeSDzSiwtYT1/5SOqzdBMOwQYpkshP5Rf21O
oUxVkAXWchywRXQ8ZYjazpcB42EPWwImDFY0HTyqwlqxrQBVxTNz1VGOW
eIKU4HhGq6cvglShzHG0uF9C0KddPg1gL9UD5+CYoedDId90h723/7SvSOwcaxO
I9t/HRTnM1GLTYwz7/jxjvkgh3xjwRHlRVGUWU3UoX5H",
"USER_ID": "d56e0b12-db99-11e6-bf26-cec0c932ce01"
}

Ex:
{
"QRCODE_TOKEN":
"wWOoQaMc3bk0aKlFlKvCOBNS/QpXXxW9EztCVQHghDfTm7hgSHb9P8xjG3b
tILjpaDcaRymw9ckvgIoZKiydY3ceeSDzSiwtYT1/5SOqzdBMOwQYpkshP5Rf21O
oUxVkAXWchywRXQ8ZYjazpcB42EPWwImDFY0HTyqwlqxrQBVxTNz1VGOW
eIKU4HhGq6cvglShzHG0uF9C0KddPg1gL9UD5+CYoedDId90h723/7SvSOwcaxO
I9t/HRTnM1GLTYwz7/jxjvkgh3xjwRHlRVGUWU3UoX5H",
"USER_ID": "null"
}

3.3.1.7. Smart Building QR-Code Token Command Response Command JSON

Example

欄位名稱	欄位說明	欄位型態
QRCODE_TYPE	回傳 QR-Code 掃描到型態	String
MESSAGE	JSON Data 對應 QR-Code Type	JSON

QRCODE_TYPE = 0 時 為 無法辨識 QR-CODE 資訊
MESSAGE JSON 欄位為

欄位名稱	欄位說明	欄位型態

RESULT_MESSAGE	QR-CODE 資訊	String

Ex:


```
{
  "QRCODE_TYPE": "0",
  "MESSAGE ": {
    "RESULT_MESSAGE": "Unknown this QR-Code Type"
  }
}
```


QRCODE_TYPE = 1 時，為 會議通知

MESSAGE JSON 欄位為

欄位名稱	欄位說明	欄位型態
USER_ID	此 User ID	String

Ex:


```
{
  "QRCODE_TYPE": "1",
  "MESSAGE ": {
    " USER_ID ": " d56e0b12-db99-11e6-bf26-cec0c932ce01"
  }
}
```


QRCODE_TYPE = 2 時 為 智慧簽到

MESSAGE JSON 欄位為

欄位名稱	欄位說明	欄位型態	註
RESULT	是否今日有能力做簽到	Boolean	當此人今日無會議場合時，RUSULT 會回傳 false
RESULT_MESSAGE	簽到資訊	String	

Ex:


```
{
  "QRCODE_TYPE": "2",
  "MESSAGE ": {
    " RESULT ": true,
" RESULT_MESSAGE ":" XXXXX"
```

```
   }
}
```

QRCODE_TYPE = 3 時 為 門禁開鎖
MESSAGE JSON 欄位為

欄位名稱	欄位說明	欄位型態	註
RESULT	是否有能力開鎖	Boolean	
RESULT_MESSAGE	開鎖資訊	String	

Ex:

```
{
   "QRCODE_TYPE": "3",
   "MESSAGE ": {
      " RESULT ": true,
" RESULT_MESSAGE ":" XXXXX"
   }
}
```

3.3.1.8. Smart Building APP Version Command Response Command JSON

Example

欄位名稱	欄位說明	欄位型態
VERSION	APP 版本	String
APP_DOWNLOAD_URL	APP 下載網址	String

Ex:

```
{
   "VERSION": "1.0",
   "APP_DOWNLOAD_URL":
"http://XXX/ideas/sdk/download/libs/android/XXX.apk"
}
```

3.3.1.9. Smart Building Get Meeting Data Command Request JSON Example

欄位名稱	欄位說明	欄位型態
USER_ID	APP User UUID	String

Ex:

```
{
  "USER_ID": "d56e0b12-db99-11e6-bf26-cec0c932ce01"
}
```

3.3.1.10. Smart Building Get Meeting Data Command Response JSON Example

欄位名稱	欄位說明	欄位型態
USER_ID	APP User UUID	String
MEETING_DATA	會議資訊	JSON Array
MEETING_ID	會議 ID	String
SUPJECT	會議名稱/目的	String
START_TIME	會議開始時間	String
END_TIME	會議結束時間	String
ROOM_ID	會議室名稱	String
OWNER	會議負責人	String
OWNER_EMAIL	會議負責人電郵	String

Ex:

```
{
  "USER_ID": "d56e0b12-db99-11e6-bf26-cec0c932ce01",
    “USER_NAME”:”李二二”,
  "MEETING_DATA": [
    {
      "MEETING_ID": "a46595d0-fbcd-4d56-8bdc-3d8fa659b6a1",
      "SUPJECT": "XXX 公司會議",
      "START_TIME": "2016-06-30 09:30:00",
      "END_TIME": "2016-06-30 12:30:00",
      "ROOM_ID": "ITES_101",
      "OWNER": "王一二",
      "OWNER_EMAIL": "qwer1234@iii.org.tw"
    },
    {
```

```
        "MEETING_ID": "95999b7e-f56f-46b0-b0c0-00eede1afd78",
        "SUPJECT": "促進 XXX 發展計畫",
        "START_TIME": "2016-07-30 09:30:00",
        "END_TIME": "2016-06-30 12:30:00",
        "ROOM_ID": "ITES_102",
        "OWNER": "王二一",
        "OWNER_EMAIL": "qoiu1234@iii.org.tw"
    },
{
        "MEETING_ID": "95999b7e-f56f-46b0-b0c0-00eede1ass78",
        "SUPJECT": "促進 YYY 發展計畫",
        "START_TIME": "2016-08-30 09:30:00",
        "END_TIME": "2016-08-30 12:30:00",
        "ROOM_ID": "ITES_102",
        "OWNER": "王二日",
        "OWNER_EMAIL": "qoiu1234222@iii.org.tw"
    }

  ]
}
```


3.3.1.11.Smart Building AMX Control Access Command Request JSON

Example

欄位名稱	欄位說明	欄位型態
USER_ID	APP User UUID	String
ROOM_ID	控制哪間會議室	String

Ex:


```
{
  "USER_ID": "d56e0b12-db99-11e6-bf26-cec0c932ce01",
    " ROOM_ID ":" ITES_101"
}
```


3.3.1.12. Smart Building AMX Control Access Command Response JSON

Example

欄位名稱	欄位說明	欄位型態	註
USER_ID	APP User UUID	String	
RESULT	是否能控制 AMX 設備	Boolean	
ROOM_IP	控制那間會議室 IP	String	
ROOM_PORT	控制那間會議室 Port	int	
ROOM_TOKEN	控制那間會議室 Token	String	Token 為控制會議室依據，會依時間而過期

當 Result = false 時，IP 為""，Port 為-1

Ex:

```
{
   "USER_ID": "d56e0b12-db99-11e6-bf26-cec0c932ce01",
   " RESULT": false
}
```

3.3.1.13.Smart Building Wireless Power Charge Command Request

欄位名稱	欄位說明	欄位型態
APP_ID	MORE APP ID	String
USER_ID	APP User UUID	String
CHARGE_PLACE	充電位置	String

Ex:

```
{
   "APP_ID": "1484537462214",
   "USER_ID": "d56e0b12-db99-11e6-bf26-cec0c932ce01",
   "CHARGE_ PLACE ": "ITES_FLOOR_1"
}
```

3.3.1.14.Smart Building Wireless Power Charge Command Response

欄位名稱	欄位說明	欄位型態

CHARGE_LOCATION	充電指定位置	String

Ex:

```
{
  "CHARGE_LOCATION ": "1"
}
```

3.3.1.15.Facebook Token Command Request

欄位名稱	欄位說明	欄位型態
FACEBOOK_TOKEN	Facebook Token	String
FACEBOOK _APP_ID	Facebook APP ID	String
FACEBOOK_USER_ID	Facebook User ID	String
APP_ID	APP 使用的 ID	String
USER_ID	APP 的 USER ID	String

Ex:

```
{
    "FACEBOOK_TOKEN":"xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx",
    "FACEBOOK _APP_ID":"xxxxxxxxxx",
    "FACEBOOK_USER_ID":"131324643413",
  "APP_ID": "1484537462214",
  "USER_ID": "d56e0b12-db99-11e6-bf26-cec0c932ce01"
}
```

3.3.1.16.Long Data Command Request & Response

欄位名稱	欄位說明	欄位型態
COMMAND_ID	命令 ID	int
DATA	內容資料， 自訂欄位，可超過 2K Byte 限制	JSON

Ex:

```
{
    " COMMAND_ID ":2,
    " DATA ":
    {
        "test":"xxxx",
    "test2":"xxxx"
    }
```

}

3.3.1.17.Semantic Word Request PDU Body Format

JSON Data Format

Name	Value Data Type	Description
id	Integer	文字內容編號，多個文字內容封包傳送時，編號會相同。 1：啟始值
type	Integer	文字內容類型： 0：無定義(由 server 判斷) 1：控制 2：會話 3：紀錄
word	Octet String	文字內容 當文字內容過長，超過 2048byte 時，將切成多個封包傳送
total	Integer	多個內容封包的切割數 0：單一封包，無切割
number	Integer	內容封包編號： 0：無切割 1：啟始值

Example：

```
{
    "id": 0,
    "type": 0,
    "word": "小汁女",
    "total": 0,
    "number": 0
}
```

3.3.1.18.Semantic Word Response PDU Body Format

JSON Data Format

Name	Value Data Type	Description
id	Integer	與 Request 文字內容編號相同
type	Integer	執行類型：

		0：無定義(server 無法判斷請求) 1：Spotify 音樂 2：故事播放 3：TTS 4：Local 音樂
music	JSON Object	如果 type=1 或 4 時出現 Ref.3.3.1.18.1
story	JSON Object	如果 type=2 時出現 Ref.
tts	Octet String	如果 type=3 時出現 前端要播的字串

3.3.1.18.1. Semantic Word Response PDU music JSON Format

JSON music Format

Name	Value Data Type	Description
source	Integer	0：無定義 1：Local 2：Spotify
album	Octet String	專輯
artist	Octet String	歌手
song	Octet String	歌名
id	Octet String	歌曲 ID
host	Octet String	歌曲來源網址
file	Octet String	歌曲檔案名

Example：

```
{
    "source": 2,
    "album": "altars of madness",
    "artist": "morbid angel",
    "song": "immortal rites",
    "id": "xxxxxxxxxxxxxxxxxxxxxx"
}
Or
{
    "source": 1,
    "album": "altars of madness",
    "artist": "morbid angel",
```

```
    "song": "immortal rites",
    "host":"https://iiideasmartbuilding.sytes.net/story/",
    "file": "tokyoHot.mp3"
}
```


3.3.1.18.2. Semantic Word Response PDU story JSON Format

JSON music Format

Name	Value Data Type	Description
story	Octet String	故事名稱
host	Octet String	故事來源網址
file	Octet String	故事檔案名

Example：


```
{
    "story": "玉圃團",
    "host":"https://iiideasmartbuilding.sytes.net/story/",
    "file": "happy_sod.mp3"
}
```


4. Notes