



Application Guide | Edge Analytics Appliance

Device Setup

Edge Analytics Appliance
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REA-C1000_AG001
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1. Overview

1.1. Initial Setup

When the device is in the factory default state, the initial setup is required including the following items. The CGI commands for the following setup items are the same as ones for the common settings.

- Language
 - For details about configuration, please see "2.9 System".
- Administrator
 - For details about configuration, please see "2.6 Security".
- Network

1.2. For details about configuration, please see "2.4 Audio

Commands

```
/analytics/inquiry.cgi?inq=baseband  
/analytics/baseband.cgi?<parameter>=<value>[&<parameter>=<value>...]
```

Parameters

```
AnalogAudioDelay  
AnalogAudioVolume  
AudioControl  
AudioSrc1  
AudioSrc2
```

- Network".
- Date & Time
 - For details about configuration, please see "2.9 System".
- System Frequency
 - For details about configuration, please see "2.3 Video".

Please note that HDMI outputs and preview images are not available while the initial setup.

1.3. Unit Setup (Common Settings)

You can configure the common settings of the device on the following menus by using CGI

commands. For details about each menu, please see Operating Instructions.

- Input/Output
- Video
- Audio
- Network
- Security
- Streaming
- License
- System

The following table shows supported video source in the common settings as preview images. Please refer to "HTTP Streaming" technical guide.

Table 1-1 Supported video source (Common Settings)

<source>	Supported
in1	YES
in2	YES
out1	YES (same as in1)
out2	YES (same as in2)
main	NO
sub	NO

2. Related Commands and Parameters

Regarding the descriptions about each parameter and available values, please see "CGI Commands" technical guide for details.

2.1. Checks the behavior states

Commands

```
/analytics/inquiry.cgi?inq=status
```

Parameters

```
BehaviorState
```

Notes

Please refer to "Behavior States" technical guide document.

2.2. Input/Output

Commands

```
/analytics/inquiry.cgi?inq=target-camera  
/analytics/target-camera.cgi?<parameter>=<value> [&<parameter>=<value>...]  
  
/analytics/inquiry.cgi?inq=target-camera-conf  
/analytics/target-camera-conf.cgi?<parameter>=<value> [&<parameter>=<value>...]
```

Parameters

```
CameraNumMax  
SettingCameraNum  
SupportCameraModelName  
SupportCameraModelName2  
  
CameraConfigUpdate  
CameraConfigured  
CameraIPAddress  
CameraLocalName  
CameramodelName
```

2.3. Video

Commands

```
/analytics/inquiry.cgi?inq=baseband  
/analytics/baseband.cgi?<parameter>=<value>[&<parameter>=<value>...]
```

Parameters

```
BoxSystemFormat  
OutputImageSizeFpsHDMI1  
OutputImageSizeFpsHDMI2
```

2.4. Audio

Commands

```
/analytics/inquiry.cgi?inq=baseband  
/analytics/baseband.cgi?<parameter>=<value>[&<parameter>=<value>...]
```

Parameters

```
AnalogAudioDelay  
AnalogAudioVolume  
AudioControl  
AudioSrc1  
AudioSrc2
```

2.5. Network

Commands

```
/command/inquiry.cgi?inq=network  
/command/network.cgi?<parameter>=<value>[&<parameter>=<value>...]  
  
/command/inquiry.cgi?inq=ssl  
/command/ssl.cgi?<parameter>=<value>[&<parameter>=<value>...]
```

Parameters

```
(All parameters for "network.cgi" and "ssl.cgi")
```

2.6. Security

Commands

```
[User (Username, password and access permission)]
/command/inquiry.cgi?inq=user
/command/user.cgi?<parameter>=<value>

[Access (IP address restrictions)]
/command/inquiry.cgi?inq=iplimit
/command/iplimit.cgi?<parameter>=<value>[&<parameter>=<value>...]

[SSL]
/command/inquiry.cgi?inq=ssl
/command/ssl.cgi?<parameter>=<value>[&<parameter>=<value>...]

/command/inquiry.cgi?inq=ssl-cert
/command/ssl-cert.cgi?<parameter>=<value>[&<parameter>=<value>...]

[Referer Check]
/command/inquiry.cgi?inq=auth
/command/auth.cgi?<parameter>=<value>[&<parameter>=<value>...]

[Brute Force Attack Protection]
/command/inquiry.cgi?inq=auth
/command/auth.cgi?<parameter>=<value>[&<parameter>=<value>...]

[IPv4/IPv6 Security function]
/command/inquiry.cgi?inq=filtering
/command/filtering.cgi?<parameter>=<value>[&<parameter>=<value>...]

[DoS defense]
/command/inquiry.cgi?inq=filtering
/command/filtering.cgi?<parameter>=<value>[&<parameter>=<value>...]

[SYN flood protection]
/command/inquiry.cgi?inq=filtering
/command/filtering.cgi?<parameter>=<value>[&<parameter>=<value>...]
```

Parameters

```
[User (Username, password and access permission)]
(All parameters for "user.cgi")

[Access (IP address restrictions)]
(All parameters for "iplimit.cgi")

[SSL]
(All parameters for "ssl.cgi" and "ssl-cert.cgi")

[Referer Check]
```

```
RefererCheck
RcExceptionHostname<n>
RcExceptionNum
RcExceptionPort<n>

[Brute Force Attack Protection]
BruteForceAttackCount
BruteForceAttackProtection
BruteForceAttackReleaseMode
BruteForceAttackReleaseTimer

[IPv4/IPv6 Security function]
V4FilterFunc
V4FilterDefaultRule
V4FilterRule
V6FilterFunc
V6FilterDefaultRule
V6FilterRule

[DoS defense]
DosDefenseRuleNum
V4DosDefenseEnable<n>
V4DosDefenseBurst<n>
V4DosDefenseExpire<n>
V4DosDefenseLimit<n>
V4DosDefensePort<n>
V6DosDefenseEnable<n>
V6DosDefenseBurst<n>
V6DosDefenseExpire<n>
V6DosDefenseLimit<n>
V6DosDefensePort<n>

[SYN flood protection]
V4SynFloodProtection
V4SynFloodBurst
V4SynFloodExpire
V4SynFloodLimit
V6SynFloodProtection
V6SynFloodBurst
V6SynFloodExpire
V6SynFloodLimit
FragmentDeny
```

Notes

The following functions are only available via CGI commands.

- Brute Force Attack Protection
- IPv4/IPv6 Security function
- Dos defense
- SYN flood protection

Please note that you need to send command for each user by specifying only one parameter at one time for setting "User (Username, password and access permission) ".

2.7. Streaming

Commands

```
[Streaming]
/analytics/inquiry.cgi?inq=stream-config
/analytics/stream-config.cgi?<parameter>=<value>[&<parameter>=<value>...]

[Codec]
/analytics/inquiry.cgi?inq=streaming
/analytics/streaming.cgi?<parameter>=<value>[&<parameter>=<value>...]
```

Parameters

```
[Streaming]
RTSPAuthen
RTSPServer
RTSPTimeout
RTSPUcAudioPort1
RTSPUcAudioPort2
RTSPUcVideoPort1
RTSPUcVideoPort2
RTSPPort

[Codec]
AudioBitrate1
AudioBitrate2
FrameRate1
FrameRate2
H264Profile1
H264Profile2
ImageSize1
ImageSize2
StreamingSrc1
StreamingSrc2
CBR1
CBR2
Bitrate1
Bitrate2
IFrameInterval1
IFrameInterval2
```

2.8. License

Commands

```
/analytics/inquiry.cgi?inq=license  
/analytics/license.cgi?<parameter>=<value>[&<parameter>=<value>...]
```

Parameters

```
(All parameters for "license.cgi")
```

2.9. System

Commands

```
[Information]  
/command/inquiry.cgi?inq=system  
  
/analytics/inquiry.cgi?inq=analyticsbox  
/analytics/analyticsbox.cgi?<parameter>=<value>[&<parameter>=<value>...]  
  
[Date & Time]  
/command/inquiry.cgi?inq=system  
/command/system.cgi?<parameter>=<value>[&<parameter>=<value>...]  
  
[Initialize]  
/command/main.cgi?<parameter>=<value>  
  
[Update]  
/analytics/inquiry.cgi?inq=analyticsbox  
/analytics/analyticsbox.cgi?<parameter>=<value>
```

Parameters

```
[Information]  
CameraName  
ModelName  
Serial  
SoftVersion  
  
Lang  
  
[Date & Time]  
DateFormat  
DstMode  
GmTime  
ManualTimeZone  
TimeZone
```

NtpAuto
NtpInterval
NtpServer
NtpService

[Initialize]
FactoryDefault
System

[Update]
Update
UpdateState

Notes

Please note that when setting "Date & Time", it is necessary to send a command by observing a specific sequence and parameter setting order. Please see 3.3 for more details.

3. Procedure

This section shows several examples for some items of common setting.

3.1. Input/Output

Camera configuration

To configure connected camera, please send the following command.

```
http://<device_address>/analytics/target-camera.cgi?SettingCameraNum=1  
http://<device_address>/analytics/target-camera-conf.cgi?CameraLocalName=<camera_name>&CameraIPAddress=<ip_address>&CameraModelName=<model_name>  
http://<device_address>/analytics/target-camera-conf.cgi?CameraConfigUpdate=On  
http://<device_address>/analytics/target-camera-conf.cgi?CameraConfigured=configured
```

Preview image of HDMI input

```
http://<device_address>/image1?src=in1
```

Please refer to "HTTP Streaming" technical guide document for details.

3.2. Video

System Frequency

The following command is an example.

After sending the command, the device will restart automatically. You need to restart the device by using CGI command manually for setting "Initial Setup".

```
http://<device_address>/analytics/baseband.cgi?BoxSystemFormat=59_94Hz
```

Video Output

The following command is an example.

```
http://<device_address>/analytics/baseband.cgi?OutputImageSizeFpsHDMI1=edid
```

3.3. System

Date & Time

The following command is an example.

Please note that it is necessary to send a command by observing a specific sequence and parameter setting order as follows.

[In case of not setting NTP server]

```
http://<device_address>/command/system.cgi?NtpService=off&NtpAuto=off  
http://<device_address>/command/system.cgi?DateFormat=<format>&GmTime=<gmtime>  
&TimeZone=<timezone>&DstMode=<on/off>
```

[In case of setting NTP server]

```
http://<device_address>/command/system.cgi?NtpServer=<NTP_server>&NtpService=o  
n&NtpAuto=off  
http://<device_address>/command/system.cgi?DateFormat=<format>&TimeZone=<timez  
one>&DstMode=<on/off>
```

Revision History

Date	Revision	Description
2019/03/01	1.0.0	First version for firmware Ver.01.00.00
2019/10/01	2.0.0	Second version for firmware Ver.02.00.00
2020/03/01	3.0.0	Third version for firmware Ver.03.00.00
2020/12/04	4.0.0	Forth version for firmware Ver.04.00.00

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