



UGW - WebServices

Documentation

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MBS GmbH | Römerstraße 15 | 47809 Krefeld | Tel. +49 21 51 72 94-0 | info@mbs-software.de

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Description of web services

General Information

Communication via the described WebServices currently takes place unencrypted. From version 1.0 of the Web Interface communication via HTTPS can be done.

Hereafter the current Web services are described including their parameters, examples, answers and error messages. The current version of the documentation as well as the web interface itself is still not final.

Querying system overview - getPlantList.ws

Serviceparameter

Parameter	Required	Format	Comments
uid	Yes		User Login
pwd	Yes		Password

Example

http://10.250.52.58/cgi-bin/getPlantList.ws?uid=ckl&pwd=ckl

Response format

```
<?xml version="1.0" encoding="UTF-8"?>
<Result Name="getPlantList">
  <Plant Id="23" Name="Anlage 1 - Heizung" KeyName="SV-100" />
  <Plant Id="24" Name="Anlage 2 - Lüftung" KeyName="SV-101" />
  <Plant Id="58" Name="Anlage 3 - Keller" KeyName="SV-102" />
  <Plant Id="59" Name="Anlage 4 - Wohnräume 1" KeyName="SV-103" />
  <Plant Id="60" Name="Anlage 4 - Wohnräume 23" KeyName="SV-104" />
  <Plant Id="61" Name="Wasserzähler-TR" KeyName="SV-105" />
  <Plant Id="62" Name="LED Leiste" KeyName="SV-106" />
  <Plant Id="73" Name="Testanlage" KeyName="SV-107" />
  <Plant Id="75" Name="TEST3" KeyName="SV-107" />
</Result>
```

Attribut	Comments
Result.Name	Name of the called services
Plant.Id	Unique ID of the plant
Plant.Name	Name of plant
Plant.KeyName	Unique identifier

Error format

```
<?xml version="1.0" encoding="UTF-8"?>
<Error>Invalid Parameter</Error>
```

Querying plant content - getPlant.ws

Serviceparameter

Parameter	Required	Format	Comments
uid	Yes		User Login
pwd	Yes		Password
id	Yes		Plant address

Example

<http://10.250.52.58/cgi-bin/getPlant.ws?uid=energy&pwd=saver&id=24>

Response format

```
<?xml version="1.0" encoding="UTF-8"?>
<Result name="getPlant">
  <Datapoint Addr="940 bac 222222 AI-100" Name="Geräteinnentemperatur"
    KeyName="AI-Object-100" ActValue="42.000000" Type="Double"
    Setpoint="0" Trend="1" Alarm="0" Unit="°C">
  </Datapoint>
  <Datapoint Addr="940 bac 222222 BI-100" Name="Binärer Eingang"
    KeyName="BI-Object-100" ActValue="1" Type="Int32" Setpoint="0"
    Trend="0" Alarm="1">
    <StateText Value="0" Text="Aus" />
    <StateText Value="1" Text="Ein" />
  </Datapoint>
</Result>
```

Attribut	Comments
Result.name	Name of the called services
Datapoint.Addr	Address of the data point
Datapoint.Name	Name of the datapoint
Datapoint.KeyName	Unique identifier
Datapoint.ActValue	Current value of the datapoint
Datapoint.Type	Type of the datapoint
Datapoint.Setpoint	Setpoint (0 = no setpoint 1 = setpoint)

Attribut	Comments
Datapoint.Trend	Located on trend (0 = no trend; 1 = trend)
Datapoint.Alarm	Outstanding alarm (0 = no alarm; 1 = alarm)
Datapoint.Unit	Unit of the datapoint (- = No unit). (Only for analog values)
StateText.Value	Value for whom the text is allocated. (Only for binary values)
StateText.Text	The value assigned text. (Only for binary values)

Error format

```
<?xml version="1.0" encoding="UTF-8"?>
```

```
<Error>Invalid Parameter</Error>
```

Querying values - getValue.ws

Serviceparameter

Parameter	Required	Format	Comments
uid	Yes		User Login
pwd	Yes		Password
addr	Yes		Datapoint address

Example

http://10.250.52.58/cgi-bin/getValue.ws?uid=energy&pwd=saver&addr=940%20bac%20222222%20AI-100

Response format

```
<?xml version="1.0" encoding="UTF-8"?>
<Result name="getValue">
  <Datapoint Addr="940 bac 222222 AI-100" ActValue="42.000000"
  Type="Double" Setpoint="0" />
</Result>
```

Attribut	Comments
Result.name	Name of the called services
Datapoint.Addr	Address of the data point
Datapoint.ActValue	Current value of the datapoint
Datapoint.Type	Datapoint Type
Datapoint.Setpoint	Setpoint (0 = no setpoint 1 = setpoint)

Error format

```
<?xml version="1.0" encoding="UTF-8"?>
<Error>Invalid Parameter</Error>
```


Set values - setValue.ws

Serviceparameter

Parameter	Required	Format	Comments
uid	Yes		User Login
pwd	Yes		Password
addr	Yes		Datapoint address
value	Yes		Value

Example

http://10.250.52.58/cgi-bin/setValue.ws?uid=energy&pwd=saver&addr=940%20bac%20222222%20AI-100&value=20

Response format

```
<?xml version="1.0" encoding="UTF-8"?>  
<Result name="setValue" errno="0" />
```

Attribut	Comments
Result.name	Name of the called services
Result.errno	Error Code (0 = no error)

Error format

```
<?xml version="1.0" encoding="UTF-8"?>  
<Error>Invalid Parameter</Error>
```

Querying trend data - getTrendData.ws

Serviceparameter

Parameter	Required	Format	Comments
uid	Yes		User Login
pwd	Yes		Password
addr	Yes		Datapoint address
start	Yes	YYYY-MM-DD[HH:MM[:SS]]	Start date
raster	Yes	<p>hour: Display an hour in 5-minute intervals</p> <p>day15: Display one day in 15th minute intervals</p> <p>day60: Display one day in 60th minute intervals</p> <p>week: Display a week in the daily grid</p> <p>week24: Display one week in an hourly grid</p> <p>month: Display of a month in the daily grid</p> <p>quarter: Display of each quarter in the month grid</p> <p>year: Display a year in the month grid</p>	Rastering
mode	Yes	<p>diff: Consumption (difference between end and StartValue in the grid)</p> <p>min: MinimalValue in the grid</p> <p>max: MaximalValue in the grid</p> <p>mid: MittelValue in the grid</p>	Mode

Example

http://10.250.52.58/cgi-bin/getTrendData.ws?uid=energy&pwd=saver&addr=940%20bac%20240766%20AV-117%20&start=2011-02-23%2008:00&raster=day60&mode=mid

Response format

```
<?xml version="1.0" encoding="UTF-8"?>
<Result name="getTrendData" Addr="940 bac 222222 AI-100" Begin="2011-02-23
08:00" End="2011-02-24 08:00" Raster="day60" Type="Double" Num="3">
  <TrendData Timestamp="2011-02-23 08:00:00" Value="---" />
  <TrendData Timestamp="2011-02-23 09:00:00" Value="15" />
  <TrendData Timestamp="2011-02-23 10:00:00" Value="21" />
</Result>
```

Attribut	Comments
Result.Addr	Address of the data point
Result.Begin	Start the trend query
Result.End	End of the trend query
Result.Raster	Rasterization
Result.Type	Datapoint Type
Result.Num	Number of trend lines included
TrendData.Timestamp	Date of trend logging
TrendData.Value	Value of trend logging (--- = no Value)

Register for PushNotifications - registerDevice.ws

Serviceparameter

Parameter	Required	Format	Comments
uid	Yes		User Login
pwd	Yes		Password
deviceToken	Yes	iOS Token, An empty string deletes the registration for Value Changes	iOS DeviceToken
deviceType	Yes	ipad, iphone	Type of device
Sound	No	Name of the alarm sound in remote UGW	Alarmsound

Example

```
http:// 10.250.52.58 /cgi-bin/registerDevice.ws?  
uid=energy&  
pwd=saver&  
deviceToken=987654321&  
deviceType=ipad&  
sound=hallo
```

Response format

```
<?xml version="1.0" encoding="UTF-8"?>  
<Result name="registerDevice" errno="0" />
```

Attribut	Comments
Result.name	Name of the called services
Result.errno	Error Code (0 = no error)

Error format

```
<?xml version="1.0" encoding="UTF-8"?>  
<Error>Invalid Parameter</Error>
```

Query of alarms - getEventInfo

Serviceparameter

Parameter	Required	Format	Comments
uid	Yes		User Login
pwd	Yes		Password
start	No	YYYY-MM-DD HH:MM:SS StandardValue: 1970-01-01 00:00:00	Start date
end	No	YYYY-MM-DD HH:MM:SS StandardValue: actual time	End date

Example

<http://10.250.52.58/cgi-bin/getEventInfo.ws?uid=energy&pwd=saver&start=2011-04-27%2009:00:00.000>

Response format

```
<?xml version="1.0" encoding="UTF-8"?>
<Result name="getEventInfo" Begin="2011-04-27 09:00" End="2011-06-03 16:25">
  <Event Id="179" Addr="940 bac 222222 BI-100"
    Name="Binärer Eingang" KeyName="BI-Object 100"
    TimeStamp="2011-04-27 16:08:45.000" Message="Normal"
    EventType="1" ToState="0" />
  <Event Id="180" Addr="940 bac 222222 BI-100"
    Name="Binärer Eingang" KeyName="BI-Object 100"
    TimeStamp="2011-05-04 07:53:07.000" Message="Alarm"
    EventType="1" ToState="2" />
</Result>
```

Attribut	Comments
Result.name	Name of the called services
Result.Begin	Start of the query range
Result.End	End of the query range
Event.Id	Unique ID of the message

Attribut	Comments
Event.Addr	Address of the data point
Event.Name	Name of the datapoint
Event.KeyName	Unique identifier
Event.TimeStamp	Time of the notification
Event.Message	Additional message of the event
Event.EventType	BACnetEventType ::= {change-of-bitstring (0),change-of-state (1),change-of-value (2),command-failure (3),floating-limit (4),out-of-range (5),change-of-life-safety (8),extended (9),buffer-ready (10),unsigned-range (11),...}
Event.ToState	BACnetEventState ::= ENUMERATED {normal (0),fault (1),offnormal (2),high-limit (3),low-limit (4),life-safety-alarm (5),...}