# MagicClock REST Specification

## July 28, 2012

## **Change History**

 ${f 01.05.2012}$  Added initial updateLocation API

14.06.2012 Added getData API

17.07.2012 Added location-Parameter in updateLocation API, corrected color codes in getData API, Added locations krankenhaus.schwabing, lost.arktis (deprecated! Reason: hand points to AUF\_REISEN) and work.bmw

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## 1 updateLocation API

## 1.1 Call

To update your location access the following URL:

```
http://{server-address}/rest/updateLocation
    ?lon={longitude}
    &lat={latitude}
    &key={key}
    &ans={ans}
```

Alternatively you can use a fake location by sending

```
http://{server-address}/rest/updateLocation
     ?location={location}
     &key={key}
     &ans={ans}
```

## 1.2 Parameters

Name	Value	Use	Description	Example	Default
lon	BigDecimal	required, if	The longitude	11.593704 or	-
	or int	location is not	of the location	11593704	
		set, otherwise	in decimal		
		ignored	degrees or		
			micro degrees.		
lat	BigDecimal	required, if	The latitude of	48.150856 or	-
	or int	location is not	the location in	48150856	
		set, otherwise	decimal degrees		
		ignored	or micro		
			degrees.		
location	String	required, if lon	The location to	uni.amalien	unterwegs
		and lat are not	use in this call.		
		set, otherwise	If this		
		optional	parameter is		
			set, lat and lon		
			will be ignored.		
key	String	required	The key	Fabius,	-
			assigned to you	Frederik	
			(acts like an		
			identifier).		
ans	String	optional	The format in	xml	txt
			which the		
			response should		
			be rendered.		
			One of {xml,		
			txt}		

## 1.2.1 Allowed values for location parameter

- home.john
- ullet uni.amalien
- $\bullet \ \, {\rm sport.hochschulsport}$
- $\bullet$  unterwegs
- $\bullet \ \ prison.stadlheim$
- ullet feiern.glockenbach
- essen.kistenpfennig
- ullet chillen.enggarten

- $\bullet$  aufreisen
- krankenhaus.schwabing
- lost.arktis (deprecated! Reason: hand points to AUF\_REISEN)
- work.bmw

## 1.3 Example

```
http://{server-address}/rest/updateLocation
?lon=12.127075
&lat=50.04303
&key=Claudius
&ans=xml
```

Or

```
http://{server-address}/rest/updateLocation
     ?location=aufreisen
    &key=John
    &ans=xml
```

#### 1.4 Answer

#### 1.4.1 Structure

If call-parameter ans equals xml:

```
<updateLocation
    status="'{status}"
    msg="'{msg}"
    locationOld="'{locationOld}"
    locationNew="'{locationNew}"
/>
```

If call-parameter ans equals txt:

{status}

#### 1.4.2 Attributes

Name	Value	Use	Description	Example
status	Integer	required	The status of the operation.	1
			0 = OK (Location updated	
			successfull)	
			1 = missing required attribute	
			2 = could not update location	
			/ update rejected	
			3 = Server Error	
			(see attribute msg)	
msg	String	required	Additional status informations.	Missing required
			E.g. concrete error messages or	attributes: [lon,
			server errors (see attribute	lat]
			status).	
locationOld	String	required	The location set previous to	Uni
			the update-call. If no location	
			was set this attr will be	
			"Unterwegs".	
locationNew	String	required	The new location.	Unterwegs

## ${\bf 1.4.3}\quad {\bf Answer\ Example}$

If call-parameter ans equals xml:

Success:

```
<updateLocation</pre>
          status="'0"
         msg="Location update successfull."
          locationOld="Uni"
          locationNew=''Unterwegs''
     />
Failure:
     <updateLocation</pre>
          status="2"
         msg="Location update rejected, because location has been set manually."
          locationOld="Gefängnis"
          locationNew="Gefängnis"
     />
If call-parameter ans equals txt:
Success:
Failure:
     1
```

#### 1.4.4 Errors

Errors are indicated by the attributes status and msg. If (other) attributes cannot be filled due to errors they will be omitted.

## 2 getData API

#### 2.1 Call

To receive the data for MagicClock access the following URL:

```
http://{server-address}/rest/getData
```

#### 2.2 Answer

#### 2.2.1 Structure

 ${CC:TT \mid CC:TT \mid CC:TT \mid CC:TT}$ 

 $C{=}ColorID$ 

 $T{=}TimeID$ 

Default values: 00:07 (Color = OFF, Location = UNTERWEGS)

Value	ColorID
RED	01
GREEN	02
BLUE	03
YELLOW	04
WHITE	05
VIOLET	06

Value	TimeID
HOME	01
UNI	02
AM_FEIERN	03
GEFAENGNIS	04
ARBEIT	05
SPORT	06
UNTERWEGS	07
AUF_REISEN	08
AM_CHILLEN	09
KRANKENHAUS	10
BEIM_ESSEN	11

Which clock-hand should be used is indicated by the position in the list. That means, the first pair of ColorID & TimeID Values corresponds to the first clock hand, etc.

### 2.2.2 Answer Example

{05:02|00:07|03:06|00:07}

- The first clock hand has color skyblue and points to uni
- The third clock hand has color green and points to sport
- $\bullet$  The other clock hands (2 and 4) have no values and should point to unterwegs

## **2.2.3** Errors

Errors or unset fields are indicated by 00 at the specific position in the list.