

# tenHsServer Documentation

tenHsServer is a single web page that processes requests specified in the URL, and displays a page (returns html that contains the result of request). Typically, an application running on a PC remote from Homeseer, will request the tenHsServer page and parse the returned html to get the results of the request.

The tenHsServer files should be copied to the Homeseer server at:

```
c:\Program Files\Homeseer 2\html\tenHsServer\
```

There are 3 files to install:

```
C:\Program Files\Homeseer 2\html\tenHsServer\tenHsServer.aspx
```

```
C:\Program Files\Homeseer 2\html\tenHsServer\web.config
```

```
C:\Program Files\Homeseer 2\html\tenHsServer\bin\tenHsServerClass.dll
```

If the ip address of your server is 2.3.4.5 and you are running the Homeseer web server on port 67, then your URL should be:

```
http://2.3.4.5:67/tenHsServer/tenHsServer.aspx?t=xx& followed by your parameters.
```

For example, to get the status of device A1, the URL would look like:

```
http://2.3.4.5:67/tenHsServer/tenHsServer.aspx?t=ab&f=DeviceStatus&d=A1
```

Note: the t= parameter can be anything, but it MUST be there. One suggestion is to change it each time, generally as a random number, to make sure that your request is not cached by the browser.

The f= parameter specifies the nature (function) of the request. The following functions have been implemented so far (not case sensitive):

|                     |   |
|---------------------|---|
| <b>DeviceStatus</b> | Returns the status of one or more devices                     |
| <b>GetDevice</b>    | Returns device information                                    |
| <b>ExecX10</b>      | Performs the Homeseer ExecX10 function                        |
| <b>ToggleDevice</b> | Toggles the devices ON/OFF                                    |
| <b>GetDevices</b>   | Returns, for all devices: DeviceCode,DeviceType,Location,Name |
| <b>GetEvents</b>    | Returns EventNames for Events in the specified Group          |
| <b>RunEvent</b>     | Runs the Event specified by Name                              |

|                       |  |
|-----------------------|--|
| <b>Uptime</b>         | Returns Homeseer SystemUptime                        |
| <b>GetIni</b>         | Returns an entry from an .ini file                   |
| <b>SetIni</b>         | Sets an entry in an .ini file                        |
| <b>Check</b>          | Check for tenHsServer Communications OK              |
| <b>GetValues</b>      | Returns the Value Strings for a Device               |
| <b>SetDeviceValue</b> | Changes a Device's Value                             |
| <b>LoggedInUser</b>   | Returns the logged in HS web user                    |
| <b>ValidateUser</b>   | Verifies if Userid and Password is valid             |
| <b>GetUsers</b>       | Returns list of HS web users and their access rights |

Optionally, tenHsServer can require that a Userid and Password be provided on the URL via the &u and &p parameters. Security is controlled via parameters specified in the following file on the Homeseer server: c:\Program Files\Homeseer 2\Config\tenHsServer.ini

The contents of this file look like this:

```
[Security]
Mode=FullAccess
```

The Mode parameter specifies that the userid in the URL must have a certain level of access for the request to succeed. The valid values for the Mode parameter are:

|                 |  |
|-----------------|--|
| Mode=FullAccess | No userid/password required on the URL                             |
| Mode=Guest      | The URL must contain a Userid/Password with at least Guest access  |
| Mode=Normal     | The URL must contain a Userid/Password with at least Normal access |
| Mode=Admin      | The URL must contain a Userid/Password with Admin access           |

If the tenHsServer.ini file does not exist, it will be created with Mode=FullAccess

The Userid and Password specified in the URL must be defined to Homeseer via Setup/Web Users

These functions use the following URL parameters:

|                     |                               |   |
|---------------------|-------------------------------|---|
| <b>DeviceStatus</b> | f=DeviceStatus<br>d=A1.p3.k14 | literal "DeviceStatus"<br>Device Codes separated by "." |
|---------------------|-------------------------------|---|

Example: ?t=97&f=DeviceStatus&d=p2

Returns: Homeseer numerical device status for each device in the form: d1:s1;d2:s2;d3:s3; where d is the device code and s is the status

|                    |                              |  |
|--------------------|------------------------------|--|
| <b>DeviceValue</b> | f=DeviceValue<br>d=A1.p3.k14 | literal "DeviceValue"<br>Device Codes separated by "." |
|--------------------|------------------------------|--|

Example: ?t=33&f=DeviceValue&d=p2

Returns: Homeseer numerical device value for each device in the form: d1:v1;d2:v2;d3:v3; where d is the device code and v is the value

|                  |                           |              |
|------------------|---------------------------|--------------|
| <b>GetValues</b> | f=GetValues<br>d=a1.p3.]6 | Device Codes |
|------------------|---------------------------|--------------|

Example: ?t=77&f=GetValues&d=b3.d2.^4

Returns: Homeseer Value Strings in the form: d1:vs1;d2:vs2 where d is the device code and v is the Value String

|                 |                           |
|-----------------|---------------------------|
| <b>RunEvent</b> | f=RunEvent<br>d=EventName |
|-----------------|---------------------------|

Example: ?t=12&f=RunEvent&d=LeavingHouse

|              |         |
|--------------|---------|
| <b>Check</b> | f=Check |
|--------------|---------|

Example: ?t=12&f=Check

Returns: tenHsServer OK

**DeviceString**

f=DeviceString  
d=A1.p3.k14

literal "DeviceString"  
Device Codes separated by "."

Example: ?t=33&f=DeviceString&d=p2

Returns: The Device String from the specified devices  
in the form: d1:s1;d2:s2;d3:s3;  
where d is the device code and s is the string

Note: Because the DeviceString result can be html, the result is  
encoded. All special characters are replaced with an escape  
sequence consisting of “%” followed by the 2-digit hex character  
code. For example, “<abc>” will be encoded as:

%3Cabc%3E%0D%0A

You can easily decode this using your languages built-in functions.  
Javascript, for instance, provides the string.unescape built-in  
function.

**SetDeviceValue**

f=SetDeviceValue  
d=a1  
a=75

Device Code  
New Value

Example: ?t=90&f=SetDeviceValue&d=p7&a=100

**GetDevice**

f=GetDevice  
d=A1.p3.k14

literal "GetDevice"  
Device Codes separated by "."

Example: ?t=72&f=GetDevice&d=p2

Returns: Current Device fields in the form:

d:loc:name:type:misc:loc2:dim:status:value:string:time  
where,

d=device code  
loc=location  
name=device name  
type=device type  
misc=misc binary field  
loc2=location 2  
dim=can dim  
status=device status  
value=device value  
string= encoded DeviceString (see DeviceString)  
time=device time (in minutes)

**ExecX10**

f=ExecX10  
d=a1  
a=Off  
s=15  
n=10

literal "ExecX10"  
Device Code  
Device Action  
Parm1  
Parm2

Example: ?t=34&f=ExecX10&d=c13&a=Dim&s=50

Returns: DeviceStatus=nn  
where, nn=Device Status after Device Action

**GetDevices**

f=GetDevices

literal "GetDevices"

Example: ?t=99&f=GetDevices

Returns: multiple device strings, one for each device, separated by ";"  
Each device string is formatted as:

DeviceCode:DeviceType:Location:Name:Location2

An example if only two devices were defined in Homeseer:

a1:Lamp Module:Kitchen:Counter Pucks:loc2;a2:Appliance Module:Den:Ceiling Light:Loc2;

**GetEvents**            f=GetEvents                            literal "GetEvents"  
                          d=group                                group name of Events to retrieve

Example: ?t=4&f=GetEvents&d=default

Returns: Group1;Group2;Groupn;

**Uptime**                f=Uptime

Example: ?t=41&f=Uptime

Returns: SystemUptime, for example:

0 Days 16 Hours 22 Minutes 50 Seconds

**GetIni**                 f=GetIni                                literal "GetIni"  
                          s=MySection                            section name  
                          n=MyFile                                file name  
                          d=MyKey                                 key name

Example: ?t=23&f=GetIni&s=Settings&d=WindowSize&n=MyApp.ini

Returns: Value of section/key in the specified file. File must be in  
Homeseer\config\

**SetIni**                 f=SetIni                                literal "SetIni"  
                          s=MySection                            section name  
                          n=MyFile                                file name  
                          d=MyKey                                 key name  
                          a=NewValue                            value to be stored

Example:

?t=63&f=SetIni&s=Settings&d=WindowSize&a=large&n=MyApp.ini

**ToggleDevice**        f=ToggleDevice                        literal "ToggleDevice"  
                          d=a5.p3.m1                            Device Codes separated by "."

Example: ?t=22&f=ToggleDevice&d=a1.a2

Returns: New DeviceStatus as a1:2;a2:3

Note: If a DeviceStatus was not ON or OFF, then "?" is returned

**LoggedInUser**

f=LoggedInUser

Example: ?t=1213&amp;f=LoggedInUser

Returns: The logged in Web User

**GetUsers**

f=GetUsers

Example: ?t=9375&amp;f=GetUsers

Returns: guest:1;user2:6;user3:4;

1=Guest 2=Admin 8=Normal 4=Local (can be ORed together)

**ValidateUser**

f=ValidateUser

d=user01

a Userid

a=mypassword

a Password

Example: ?t=4375&amp;f=ValidateUser&amp;d=user03&amp;a=mypass

Returns: True if good userid/password False if not

The return values are embedded in the returned html, within a span element as:

```
<span id="Result">2</span>
```

In this case, the returned value (from a DeviceStatus request) is: "2" (On)

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