AVM TR-064 – Remote Access

Supported by AVM

Author: AVM GmbH
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<td>2011-02-18</td>
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<td>Initial version</td>
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<td>2011-03-03</td>
<td>2</td>
<td>Add chapter Restrictions</td>
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<td>2012-12-03</td>
<td>3</td>
<td>Change description for 2 Prerequisites and 3.3 Access HTTP URLs.</td>
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<td>Add chapter 4.1 Authentication.</td>
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<td>2013-01-23</td>
<td>4</td>
<td>Change chapters 3.2 Execute SOAP Action and 3.3 Access HTTP URLs to clarify the usage of the tr064 prefix.</td>
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<td>Remove HTTP example url. Change prerequisites to current FRITZ!OS version. Change authentication from basic to digest.</td>
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1 Introduction
This document describes the remote access to the TR-064 service.

The remote access includes access to Service descriptions, SOAP Actions and HTTP URL access.

The remote access does not include SSDP and GENA.
2 Prerequisites
To access a TR-064 service the following features have to be enabled:
  • TR-064
  • Fernwartung (HTTPS remote access to WebGUI).
  • Dynamic DNS account or
  • MyFRITZ! (AVM service for managing multiple devices and dynamic DNS).
The TR-064 client needs:
  • Dynamic DNS hostname of the Fritz!Box e.g. fbox.myfritz.net
  • HTTP port, default is 443
  • Username and password of a user with rights to access from WAN
New FRITZ!Box OS versions support configuration of multiple users. If a user has
configuration rights for internet access, it can be used for remote access.

3 Communication
3.1 Retrieve Service Description
The service description can be accessed by an URL like:
  • https://<DynDNS-Hostname>:<HttpsPort>/tr064/tr64desc.xml
  • https://<External-IP>:<HttpsPort>/tr064/tr64desc.xml
  • https://fritz.box:<HttpsPort>/tr064/tr64desc.xml
The HTTPS port has only to be specified if it is not 443.

3.2 Execute SOAP Action
A SOAP action has to use the path prefix /tr064 and the paths in the Service Description
XML files. For the service DeviceInfo the controlURL /upnp/control/deviceinfo has to be
changed to /tr064/upnp/control/deviceinfo for remote access.

Remark
The action GetSecurityPort still returns the port used HTTPS in LAN. This port shall not be
used for remote access.

3.3 Access HTTP URLs
The URLs that have to be accessed with HTTP, can be used without modifications.
The action GetPhonebook may return a URL in the following format:
https://fbox.myfritz.net:488/tr064/phonebook.lua?sid=1234567890123456&pbid=0
This URL can be accessed without modifications.

4 Security
4.1 Authentication
Currently HTTP digest authentication and SOAP digest authentication are supported.

4.2 Encryption
Remote access is only possible with HTTPS using TLS encryption.

5 Restrictions
There are some actions which are not completely supported for the remote access.

5.1 Service DeviceConfig
The action X_AVM-DE_GetConfigFile returns the parameter X_AVM-DE_ConfigFileUrl. The URL within this parameter is only valid in the LAN of the IAD. The URL is not accessible from WAN. An example value for the URL is: http://192.168.178.1:46394/TR064/2036139A

6 Appendix
6.1 References
TR064: DSL Forum, LAN-Side DSL CPE Configuration, 2004