# **AVM TR-064 - Remote Access**

# Supported by AVM

Author: AVM GmbH Date: 2016-01-04

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# **History**

Date	Version	Changes
2011-02-18	1	Initial version
2011-03-03	2	Add chapter Restrictions
2012-12-03	3	Change description for 2 Prerequisites and 3.3 Access HTTP URLs . Add chapter 4.1 Authentication .
2013-01-23	4	Change chapters 3.2 Execute SOAP Action and 3.3 Access HTTP URLs to clarify the usage of the tr064 prefix.
2016-01-04	5	Remove HTTP example url. Change prerequisites to current FRITZ!OS version. Change authentication from basic to digest.

## 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

UPNP11: UPnP Forum, UPnP Device Architecture version 1.1, 2008