TR-064 Support – X AVM Remote Access

Supported by AVM

Author: AVM GmbH Date: 2022-10-17

History

Date	Version	Changes
2011-10-28	1	Initial version.
2011-10-28	2	Possible values for StatusIPv4 and StatusIPv6.
2011-11-30	3	Changed values for Mode.
2012-02-17	4	Changed values for StatusIPv4 and StatusIPv6.
2012-12-03	5	Description of user related actions for multi user configurations.
2014-01-21	6	Description for NewProviderName and NewUpdateURL in action SetDDNSConfig. Range for state variable Port adapted.
2014-01-21	7	Detailed description for state variable Mode.
2016-06-29	8	Added required rights description to action GetDDNSInfo (S.2)
2017-11-22	9	Add Action SetEnable
2021-10-19	10	Added new state variables LetsEncryptEnabled and LetsEncryptState to GetInfo Added action SetLetsEncryptEnabled
2022-02-14	11	Added required rights for actions
2022-10-17	12	Added ddns_together for Mode

urn:X_AVM-DE_RemoteAccess-com:serviceId:X_AVM-DE RemoteAccess1

For details please refer the TR-064 document at http://www.broadband-forum.org/technical/download/TR-064.pdf.

1 Action List

This chapter contains the supported actions of the service user interface which are listed inclusive arguments.

1.1 GetInfo

The username may be empty if no user has been configured with box configuration rights from internet.

The username may be an email address if configured.

Required rights: App, Phone, NAS or Homeauto

Argument name	Direction	Related state variable	Remarks
NewEnabled	out	Enabled	
NewPort	out	Port	
NewUsername	out	Username	
NewLetsEncryptEnabled	out	LetsEncryptEnabled	
NewLetsEncryptState	out	LetsEncryptState	

Table 1: Argument list of action GetInfo

1.2 SetConfig

Configure one user for remote access from internet.

The user will have box configuration rights from internet on success.

The argument Username may be an username or an email address.

The argument Port value must be in the ranges 1 - 65535.

A disabled user with the matching name will be enabled.

An existing user which has been used last for this service can be renamed by this action.

Argument name	Direction	Related state variable	Remarks
NewEnabled	in	Enabled	
NewPort	in	Port	
NewUsername	in	Username	
NewPassword	In	Password	

Table 2: Argument list of action SetConfig

Return code	Description	Related argument
402	Invalid arguments	Port
820	Internal error	Username already used for a user without configuration rights.
820	Internal error	Username or password are not valid.

Table 3: Return codes of action SetConfig

1.3 GetDDNSInfo

Gets the DDNS Info.

• Required rights: App, Phone, NAS or Homeauto

Argument name	Direction	Related state variable	Remarks
NewDomain	out	Domain	
NewEnabled	out	Enabled	
NewMode	out	Mode	
NewProviderName	out	ProviderName	

Argument name	Direction	Related state variable	Remarks
NewServerIPv4	out	ServerIPv4	
NewServerIPv6	out	ServerIPv6	
NewStatusIPv4	out	StatusIPv4	
NewStatusIPv6	out	StatusIPv6	
NewUpdateURL	out	UpdateURL	
NewUsername	out	Username	

Table 4: Argument list of action GetDDNSInfo

1.4 GetDDNSProviders

Argument name	Direction	Related state variable	Remarks
NewProviderList	out	ProviderList	

Table 5: Argument list of action GetDDNSProviders

The parameter TypeList has the following XML structure:

1.5 SetDDNSConfig

To configure dynamic DNS the value of NewProviderName has to match an existing ProviderName in Item retrieved by GetDDNSProviders.

A user defined configuration uses the localized ProviderName e.g. in German "Benutzerdefiniert".

To use HTTP with SSL the value of NewUpdateURL has to look like

https://<server>:<sslport>/path?arg1=xxx.

If the value of NewUpdateURL does not begin with https:// or http:// HTTP without SSL is used.

The value of NewUpdateURL requires a path containing at least one slash.

Argument name	Direction	Related state variable	Remarks
NewEnabled	in	Enabled	
NewProviderName	in	ProviderName	
NewUpdateURL	in	UpdateURL	
NewServerIPv4	in	ServerIPv4	
NewServerIPv6	in	ServerIPv6	
NewDomain	in	Domain	

Argument name	Direction	Related state variable	Remarks
NewUsername	in	Username	
NewPassword	in	Password	
NewMode	in	Mode	

Table 6: Argument list of action SetDDNSConfig

1.6 SetEnable

Case SetEnable(1):

HTTPS-Port is disabled → HTTPS-Port will be enabled

→ Return random HTTPS-Port

Case SetEnable(1):

No user with internet right \rightarrow Return HTTPS-Port = 0

Case SetEnable(1):

HTTPS-Port is enabled → Return configured HTTPS-Port

Case SetEnable(0): → Return HTTPS-Port

HTTPS-Port is enabled → HTTPS-Port will be disabled

Argument name	Direction	Related state variable	Remarks
NewEnabled	in	Enabled	
NewPort	out	Port	random port

Table 7: Argument list of action SetEnable

Return code	Description	Related argument
402	Invalid arguments	Enabled
606	Action not Authorized	
820	Internal error	Internal read/write errors.

Table 8: Return codes of action SetEnable

1.7 SetLetsEncryptEnable

Enables or disables Lets Encrypt

Required rights: App

Argument name	Direction	Related state variable	Remarks
NewLetsEncryptEnabled	in	LetsEncryptEnabled	

Table 9: Argument list of action SetLetsEncryptEnable

Return code	Description	Related argument
402	Invalid arguments	Enabled
606	Action not Authorized	
820	Internal error	Internal read/write errors.

Table 10: Return codes of action SetLetsEncryptEnable

2 Service States Table

Variable name	Allowed values (* == default)	Data type
Domain		String
Enabled		Boolean
InfoURL		String
LetsEncryptEnabled		Boolean
LetsEncryptState	not_used, get, valid, invalid, unknown (*)	String
Mode	ddns_v4, ddns_v6, ddns_both, ddns_together	String
Password		String
Port	1 - 65535	ui2
ProviderList		XML String
ProviderName		String
ServerIPv4		String
ServerIPv6		String
StatusIPv4	offline, checking, updating, updated, verifying, complete, new address, account-disabled, internet-not-connected, undefined	String
StatusIPv6	offline, checking, updating, updated, verifying, complete, new-address, account-disabled, internet-not-connected, undefined	String
UpdateURL		String
Username		String

Table 11: Variable list

2.1 Mode

Value	Description			
ddns_v4	Update only IPv4 address			
Example userdefined UpdateURL: http://ddns.provider.org/update?hostname= <domain>&myip=<ipaddr></ipaddr></domain>				
ddns_v6	Update only IPv6 address			
Example userdefined UpdateURL: http://ddns.provider.org/update?hostname= <domain>&myip=<ip6addr></ip6addr></domain>				
ddns_both	Update IPv4 and IPv6 address with separate HTTP requests			
Example userdefined UpdateURL (two URLs separated by a space): http://ddns.provider.org/update?hostname= <domain>&myip=<ipaddr>http://ddns.provider.org/update?hostname=<domain>&myip=<ip6addr></ip6addr></domain></ipaddr></domain>				
ddns_both_together	Update IPv4 and IPv6 address with one request			
Example userdefined UpdateURL: http://ddns.provider.org/update?hostname= <domain>&myip=<ipaddr>&myip6=<ip6addr></ip6addr></ipaddr></domain>				

Table 12: Detailed description for values of Mode state variable

2.2 LetsEncryptState

Return value	Description
not_used	Lets Encrypt or MyFRITZ is disabled
get	Creating certificate
valid	The certificate is valid
invalid	The certificate is invalid
unknown	Unknown error

Table 13: Return values for state variable LetsEncryptState