

TR-064 Support – Hosts

Supported by AVM

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1 urn:LanDeviceHosts-com:serviceId:Hosts1

For details please refer the TR-064 document at <http://www.dslforum.org/techwork/tr/TR-064.pdf>.

1.1 History

Date	Version	Changes
2014-12-03	5	Added action: X_AVM-DE_GetGenericHostEntryExt Added parameters: X_AVM-DE_Port X_AVM-DE_Speed
2015-02-23	6	Added action: X_AVM-DE_GetSpecificHostEntryExt X_AVM-DE_HostsCheckUpdate X_AVM-DE_HostDoUpdate Added parameters: X_AVM-DE_UpdateAvailable X_AVM-DE_UpdateSuccessful X_AVM-DE_InfoURL X_AVM-DE_Model
2015-06-02	7	Added parameters: X_AVM-DE_URL
2015-11-19	8	Correct parameter in documentation for X_AVM-DE_SetAutoWakeOnLANByMACAddress
2016-05-18	9	Action added: X_AVM-DE_GetSpecificHostEntryByIp
2016-07-18	10	Action X_AVM-DE_GetHostListPath and parameter NewX_AVM-DE_HostListPath added
2018-04-13	11	Action X_AVM-DE_GetMeshListPath and parameter NewX_AVM-DE_MeshListPath added
2018-08-15	12	Action X_AVM-DE_GetSpecificHostEntryExt and X_AVM-DE_GetSpecificHostEntryExt deleted. It is recommended to use X_AVM-DE_GetHostListPath.
2020-02-20	13	Added new XML-Item "X_AVM-DE_WANAccess" of devicehostlist.lua output file
2020-04-01	14	Added new XML-Item "X_AVM-DE_Disallow" of devicehostlist.lua output file.
2020-07-03	15	Added URL for mesh topology JSON schema by FRITZ!OS version for action X_AVM-DE_GetMeshListPath

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2 Action List

This chapter contains the supported actions of the service Hosts which are listed incl. arguments.

2.1 GetHostNumberOfEntries

Argument name	Direction	Related state variable	Remarks
NewHostNumberOfEntries	in	HostNumberOfEntries	

Table 1: Argument list of action GetHostNumberOfEntries

2.2 GetSpecificHostEntry

Argument name	Direction	Related state variable	Remarks
NewMACAddress	in	MACAddress	
NewIPAddress	out	IPAddress	
NewAddressSource	out	AddressSource	
NewLeaseTimeRemaining	out	LeaseTimeRemaining	
NewInterfaceType	out	InterfaceType	
NewActive	out	Active	
NewHostName	out	HostName	

Table 2: Argument list of action GetSpecificHostEntry

2.3 GetGenericHostEntry

Argument name	Direction	Related state variable	Remarks
NewIndex	in	HostNumberOfEntries	
NewMACAddress	out	MACAddress	
NewIPAddress	out	IPAddress	
NewAddressSource	out	AddressSource	
NewLeaseTimeRemaining	out	LeaseTimeRemaining	
NewInterfaceType	out	InterfaceType	
NewActive	out	Active	
NewHostName	out	HostName	

Table 3: Argument list of action GetGenericHostEntry

2.4 X_AVM-DE_GetChangeCounter

Argument name	Direction	Related state variable	Remarks
NewX_AVM-DE_ChangeCounter	out	X_AVM-DE_ChangeCounter	

Table 4: Argument list of action X_AVM-DE_GetChangeCounter

2.5 X_AVM-DE_GetAutoWakeOnLANByMACAddress

Argument name	Direction	Related state variable	Remarks
NewMACAddress	in	MACAddress	
NewAutoWOLEnabled	out	AutoWOLEnabled	

Table 5: Argument list of action X_AVM-DE_GetAutoWakeOnLANByMACAddress

2.6 X_AVM-DE_SetAutoWakeOnLANByMACAddress

Argument name	Direction	Related state variable	Remarks
NewMACAddress	in	MACAddress	
NewAutoWOLEnabled	in	AutoWOLEnabled	

Table 6: Argument list of action X_AVM-DE_SetAutoWakeOnLANByMACAddress

2.7 X_AVM-DE_SetHostNameByMACAddress

Argument name	Direction	Related state variable	Remarks
NewMACAddress	in	MACAddress	
NewHostName	in	HostName	

Table 7: Argument list of action X_AVM-DE_SetHostNameByMACAddress

2.8 X_AVM-DE_WakeOnLANByMACAddress

Argument name	Direction	Related state variable	Remarks
NewMACAddress	in	MACAddress	

Table 8: Argument list of action X_AVM-DE_WakeOnLANByMACAddress

2.9 X_AVM-DE_GetSpecificHostEntryByIp

Argument name	Direction	Related state variable	Remarks
NewIPAddress	in	IPAddress	
NewMACAddress	out	MACAddress	
NewActive	out	Active	
NewHostName	out	HostName	
NewInterfaceType	out	InterfaceType	
NewX_AVM-DE_Port	out	X_AVM-DE_Port	
NewX_AVM-DE_Speed	out	X_AVM-DE_Speed	
NewX_AVM-DE_UpdateAvailable	out	X_AVM-DE_UpdateAvailable	
NewX_AVM-DE_UpdateSuccessful	out	X_AVM-DE_UpdateSuccessful	
NewX_AVM-DE_InfoURL	out	X_AVM-DE_InfoURL	
NewX_AVM-DE_Model	out	X_AVM-DE_Model	
NewX_AVM-DE_URL	out	X_AVM-DE_URL	

Table 9: Argument list of action X_AVM-DE_GetSpecificHostEntryByIp

Return code	Description	Related argument
714	NoSuchEntryInArray	IPAddress
402	Invalid Args	IPAddress

Table 10: Return codes of action X_AVM-DE_GetSpecificHostEntryByIp

2.10 X_AVM-DE_HostsCheckUpdate

Argument name	Direction	Related state variable	Remarks

Table 11: Argument list of action X_AVM-DE_HostsCheckUpdate

2.11 X_AVM-DE_HostDoUpdate

Argument name	Direction	Related state variable	Remarks
NewMACAddress	in	MACAddress	

Table 12: Argument list of action X_AVM-DE_HostDoUpdate

2.12 X_AVM-DE_GetHostListPath

Gets a path to a lua script file, which generates an XML structured list of hosts. A generated xml example is shown in 4.1 Host List Contents.

- Required rights : PhoneRight, AppRight

Argument name	Direction	Related state variable	Remarks
NewX_AVM-DE_HostListPath	out	X_AVM-DE_HostListPath	Related path to lua script which generates a formatted list

Table 13: Argument list of action X_AVM-DE_GetHostListPath

Return code	Description	Related argument
820	Internal Error	
402	Invalid Args	any

Table 14: Return codes of action X_AVM-DE_GetHostListPath

2.13 X_AVM-DE_GetMeshListPath

Gets a path to a lua script file, which generates an json structured list with mesh topology information.

- Required rights : PhoneRight, AppRight

Argument name	Direction	Related state variable	Remarks
NewX_AVM-DE_MeshListPath	out	X_AVM-DE_MeshListPath	Related path to lua script which generates a formatted list

Table 15: Argument list of action X_AVM-DE_GetMeshListPath

Return code	Description	Related argument
820	Internal Error	
402	Invalid Args	any

Table 16: Return codes of action X_AVM-DE_GetMeshListPath

For details on how to interpret the mesh topology information please refer to the JSON schema matching the corresponding FRITZ!OS version.

FRITZ!OS version	JSON schema URL
07.20	https://avm.de/fileadmin/user_upload/Global/Service/Schnittstellen/mesh_topology/mesh_topology_schema_v1.9.json
07.15, 07.14, 07.13, 07.12, 07.11	https://avm.de/fileadmin/user_upload/Global/Service/Schnittstellen/mesh_topology/mesh_topology_schema_v1.6.json
07.10, 07.08	https://avm.de/fileadmin/user_upload/Global/Service/Schnittstellen/mesh_topology/mesh_topology_schema_v1.5.json

Table 17 JSON schema URLs for mesh topology by FRITZ!OS version

3 Service States Table

Variable name	Send events	Allowed values (* == default)	Data type	Date
Active	no		Boolean	2009-03-06
AddressSource	no		String	2009-03-06
AutoWOLEnabled	no		Boolean	2014-05-26
HostName	no		String	2009-03-06
HostNumberOfEntries	yes		ui2	2009-03-06
InterfaceType	no	"Ethernet", "802.11", "HomePlug", ""	String	2014-12-03
InterfaceType	no		String	2009-03-06
IPAddress	no		String	2009-03-06
LeaseTimeRemaining	no		i4	2009-03-06
MACAddress	no		String	2009-03-06
X_AVM-DE_ChangeCounter	yes		ui4	2013-08-20
X_AVM-DE_Port	no	Port#, beginning with 1; only for InterfaceType 'Ethernet'	ui4	2014-12-03
X_AVM-DE_Speed	no	MBit/s	ui4	2014-12-03
X_AVM-DE_UpdateAvailable	no		Boolean	2015-02-23
X_AVM-DE_UpdateSuccessful	no	"unknown", "failed", "succeeded"	String	2015-02-23
X_AVM-DE_InfoURL	no		String	2015-02-23
X_AVM-DE_Model	no		String	2015-02-23
X_AVM-DE_URL	no		String	2015-06-02
X_AVM-DE_HostListPath	No		String	2016-07-07
X_AVM-DE_MeshListPath	No		String	2018-04-13

Table 18: Variable list

4 XML Document Contents

4.1 Host List Contents

```
<?xml version="1.0" encoding="UTF-8"?>
<List>
  <!-- devicehosts :6 -->
  <Item>
    <Index>1</Index>
    <IPAddress>192.168.178.22</IPAddress>
    <MACAddress>48:0F:CF:33:77:DE</MACAddress>
    <Active>0</Active>
    <HostName>AVM-MBERSCHNEID</HostName>
    <InterfaceType />
    <X_AVM-DE_Port>0</X_AVM-DE_Port>
    <X_AVM-DE_Speed>0</X_AVM-DE_Speed>
    <X_AVM-DE_UpdateAvailable>0</X_AVM-DE_UpdateAvailable>
    <X_AVM-DE_UpdateSuccessful>unknown</X_AVM-DE_UpdateSuccessful>
    <X_AVM-DE_InfoURL />
    <X_AVM-DE_Model />
    <X_AVM-DE_URL />
    <X_AVM-DE_Guest>0</X_AVM-DE_Guest>
    <X_AVM-DE_WANAccess>granted</X_AVM-DE_WANAccess>
    <X_AVM-DE_Disallow>0</X_AVM-DE_Disallow>
  </Item>
  ...
</List>
```

Tag	Type	Description
Active	boolean	'1' if host is active, '0' if host is inactive (currently not connected)
HostName	string	Name of the host device
Index	int	Sequential number for each host
InterfaceType	string	The interface with which the host accesses the F! Box ("Ethernet", "802.11", "HomePlug", "...")
IPAddress	string	The host's ip address
MACAddress	string	The host's MAC address
X_AVM-DE_Guest	boolean	'1' if the host is connected with guest network, '0' if connected with home network
X_AVM-DE_InfoURL	string	Link to a text file which contains the changelog of the last firmware update
X_AVM-DE_Model	string	Model name or number of the F!device
X_AVM-DE_Disallow	Boolean	Flag which represent the WAN access allowed state
X_AVM-DE_Port	ui4	If host is connected via ethernet, it shows the port number
X_AVM-DE_Speed	ui4	Shows the speed in Mbit/s
X_AVM-DE_UpdateAvailable	boolean	'1' if update is available, '0' if no new update is available
X_AVM-DE_UpdateSuccessful	string	Shows the state of the last firmware update process ('unknown', 'failed', 'succeeded')
X_AVM-DE_URL	string	
X_AVM-DE_WANAccess	string	Shows if the landevice has WAN access "granted", "denied", "error"

Table 19: HostList content description