

TR-064 Support – Hosts

Supported by AVM

Author: AVM GmbH

Date: 2024-07-02

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
2021-06-04	16	Added parameters for X_AVM-DE_GetSpecificHostEntryByIP: X_AVM-DE_IsMeshable Added parameter for Host List Contents: X_AVM-DE_IsMeshable
2021-06-22	17	Added parameters for X_AVM-DE_GetSpecificHostEntryByIP: X_AVM-DE_Priority Added parameter for Host List Contents: X_AVM-DE_Priority Action added: X_AVM-DE_SetPrioritizationByIP
2021-08-27	18	Added parameters for X_AVM-DE_GetSpecificHostEntryByIP: X_AVM-DE_RequestClient
2021-09-09	19	Added parameters for X_AVM-DE_GetSpecificHostEntryByIP: X_AVM-DE_MACAddressList Added parameter for Host List Contents: X_AVM-DE_MACAddressList
2021-11-04	20	Add parameters for X_AVM-DE_GetSpecificHostEntryByIP: X_AVM-DE_FriendlyName Added parameter for Host List Contents: X_AVM-DE_FriendlyName Add Action X_AVM-DE_GetFriendlyName / X_AVM-DE_SetFriendlyName
2022-02-15	21	Added required rights for actions
2022-05-16	22	Added parameter for X_AVM-DE_GetSpecificHostEntryByIP: X_AVM-DE_FriendlyNameIsWriteable Added parameter for Host List Contents: X_AVM-DE_FriendlyNameIsWriteable
2022-10-13	23	Added actions X_AVM-DE_GetInfo, X_AVM-DE_SetFriendlyNameByIP and X_AVM-DE_SetFriendlyNameByMAC with correspondig state variables Added required rights for X_AVM-DE_SetFriendlyName
2023-03-31	24	Added Links to the mesh topology documents
2023-08-01	25	GetHostNumberOfEntries fix direction of parameter
2024-07-02	26	X_AVM-DE_GetSpecificHostEntryByIp -> X_AVM-DE_GetSpecificHostEntryByIP

Inhaltsverzeichnis

1	urn:LanDeviceHosts-com:serviceId:Hosts1.....	1
1.1	History.....	1
2	Action List.....	2
2.1	GetHostNumberOfEntries.....	2
2.2	GetSpecificHostEntry.....	3
2.3	GetGenericHostEntry.....	3
2.4	X_AVM-DE_GetInfo.....	3
2.5	X_AVM-DE_GetChangeCounter.....	4
2.6	X_AVM-DE_GetAutoWakeOnLANByMACAddress.....	4
2.7	X_AVM-DE_SetAutoWakeOnLANByMACAddress.....	4
2.8	X_AVM-DE_SetHostNameByMACAddress.....	4
2.9	X_AVM-DE_WakeOnLANByMACAddress.....	4
2.10	X_AVM-DE_GetSpecificHostEntryByIP.....	4
2.11	X_AVM-DE_HostsCheckUpdate.....	5
2.12	X_AVM-DE_HostDoUpdate.....	5
2.13	X_AVM-DE_SetPrioritizationByIP.....	6
2.14	X_AVM-DE_GetHostListPath.....	6
2.15	X_AVM-DE_GetMeshListPath.....	6
2.16	X_AVM-DE_GetFriendlyName.....	7
2.17	X_AVM-DE_SetFriendlyName.....	7
2.18	X_AVM-DE_SetFriendlyNameByIP.....	8
2.19	X_AVM-DE_SetFriendlyNameByMAC.....	8
3	Service States Table.....	9
4	XML Document Contents.....	11
4.1	Host List Contents.....	11

2 Action List

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

2.1 GetHostNumberOfEntries

Required rights: None

Argument name	Direction	Related state variable	Remarks
NewHostNumberOfEntries	out	HostNumberOfEntries	

Table 1: Argument list of action GetHostNumberOfEntries

2.2 GetSpecificHostEntry

Required rights: None

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

Required rights: None

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_GetInfo

Required rights: None

Argument name	Direction	Related state variable	Remarks
NewX_AVM-DE_FriendlynameMinChars	out	X_AVM-DE_FriendlynameMinChars	
NewX_AVM-DE_FriendlynameMaxChars	out	X_AVM-DE_FriendlynameMaxChars	
NewX_AVM-DE_HostnameMinChars	out	X_AVM-DE_HostnameMinChars	
NewX_AVM-DE_HostnameMaxChars	out	X_AVM-DE_HostnameMinChars	
NewX_AVM-DE_HostnameAllowedChars	out	X_AVM-DE_HostnameAllowedChars	

Table 4: Argument list of action X_AVM-DE_GetInfo

2.5 X_AVM-DE_GetChangeCounter

Required rights: None

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

Table 5: Argument list of action X_AVM-DE_GetChangeCounter

2.6 X_AVM-DE_GetAutoWakeOnLANByMACAddress

Required rights: None

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

Table 6: Argument list of action X_AVM-DE_GetAutoWakeOnLANByMACAddress

2.7 X_AVM-DE_SetAutoWakeOnLANByMACAddress

Required rights: None

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

Table 7: Argument list of action X_AVM-DE_SetAutoWakeOnLANByMACAddress

2.8 X_AVM-DE_SetHostNameByMACAddress

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

Table 8: Argument list of action X_AVM-DE_SetHostNameByMACAddress

2.9 X_AVM-DE_WakeOnLANByMACAddress

Argument name	Direction	Related state variable	Remarks
NewMACAddress	in	MACAddress	

Table 9: Argument list of action X_AVM-DE_WakeOnLANByMACAddress

2.10 X_AVM-DE_GetSpecificHostEntryByIP

Required rights: App or Phone

A description for each state variable is given in 4.1 Host List Contents

Argument name	Direction	Related state variable	Remarks
NewIPAddress	in	IPAddress	

Argument name	Direction	Related state variable	Remarks
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_MACAddressList	out	X_AVM-DE_MACAddressList	
NewX_AVM-DE_Model	out	X_AVM-DE_Model	
NewX_AVM-DE_URL	out	X_AVM-DE_URL	
NewX_AVM-DE_Guest	out	X_AVM-DE_Guest	
NewX_AVM-DE_RequestClient	out	X_AVM-DE_RequestClient	
NewX_AVM-DE_VPN	out	X_AVM-DE_VPN	
NewX_AVM-DE_WANAccess	out	X_AVM-DE_WANAccess	
NewX_AVM-DE_Disallow	out	X_AVM-DE_Disallow	
NewX_AVM-DE_IsMeshable	out	X_AVM-DE_IsMeshable	
NewX_AVM-DE_Priority	out	X_AVM-DE_Priority	
NewX_AVM-DE_FriendlyName	out	X_AVM-DE_FriendlyName	
NewX_AVM-DE_FriendlyNameIsWriteable	out	X_AVM-DE_FriendlyNameIsWriteable	

Table 10: Argument list of action X_AVM-DE_GetSpecificHostEntryByIP

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

Table 11: Return codes of action X_AVM-DE_GetSpecificHostEntryByIP

2.11 X_AVM-DE_HostsCheckUpdate

Required rights: App

Argument name	Direction	Related state variable	Remarks

Table 12: Argument list of action X_AVM-DE_HostsCheckUpdate

2.12 X_AVM-DE_HostDoUpdate

Required rights: App

Argument name	Direction	Related state variable	Remarks
NewMACAddress	in	MACAddress	

Table 13: Argument list of action X_AVM-DE_HostDoUpdate

2.13 X_AVM-DE_SetPrioritizationByIP

Activate or deactivate the realtime priority for the host with the given IP address

Required rights: App or Phone

Argument name	Direction	Related state variable	Remarks
NewIPAddress	in	IPAddress	
NewX_AVM-DE_Priority	In	X_AVM-DE_Priority	

Table 14: Argument list of action X_AVM-DE_SetPrioritizationByIP

2.14 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 : App or Phone

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 15: Argument list of action X_AVM-DE_GetHostListPath

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

Table 16: Return codes of action X_AVM-DE_GetHostListPath

2.15 X_AVM-DE_GetMeshListPath

Gets a path to a lua script file, which generates an json structured list with mesh topology information. Further information can be found in the mesh topology documents on <https://avm.de/service/schnittstellen/> at the “Mesh-Topologie” section.

Required rights : App or Phone

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 17: Argument list of action X_AVM-DE_GetMeshListPath

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

Table 18: Return codes of action X_AVM-DE_GetMeshListPath

2.16 X_AVM-DE_GetFriendlyName

Gets the own friendly name of the requesting client

Required rights : None

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

Table 19: Argument list of action X_AVM-DE_GetFriendlyName

Return code	Description	Related argument
820	Internal Error	

Table 20: Return codes of action X_AVM-DE_GetFriendlyName

2.17 X_AVM-DE_SetFriendlyName

Sets the own friendly name only if the current friendly name was auto generated (e.g. PC-192.168.178.20) or from type android-123456789abcdef.

Required rights : App, Phone, NAS or HomeAutomation

Argument name	Direction	Related state variable	Remarks
NewX_AVM-DE_FriendlyName	in	X_AVM-DE_FriendlyName	

Table 21: Argument list of action X_AVM-DE_SetFriendlyName

Return code	Description	Related argument
402	Invalid Args	
820	Internal Error	

Table 22: Return codes of action X_AVM-DE_SetFriendlyName

2.18 X_AVM-DE_SetFriendlyNameByIP

Sets the friendly name for device with given IP

Required rights : App

Argument name	Direction	Related state variable	Remarks
NewIPAddress	in	IPAddress	
NewX_AVM-DE_FriendlyName	in	X_AVM-DE_FriendlyName	

Table 23: Argument list of action X_AVM-DE_SetFriendlyNameByIP

Return code	Description	Related argument
402	Invalid Args	
820	Internal Error	

Table 24: Return codes of action X_AVM-DE_SetFriendlyNameByIP

2.19 X_AVM-DE_SetFriendlyNameByMAC

Sets the friendly name for device with given IP

Required rights : App

Argument name	Direction	Related state variable	Remarks
NewMACAddress	in	MACAddress	
NewX_AVM-DE_FriendlyName	in	X_AVM-DE_FriendlyName	

Table 25: Argument list of action X_AVM-DE_SetFriendlyNameByMAC

Return code	Description	Related argument
402	Invalid Args	
820	Internal Error	

Table 26: Return codes of action X_AVM-DE_SetFriendlyNameByMAC

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_Disallow	no		Boolean	2021-05-17
X_AVM-DE_FriendlynameMaxChars	no	64	ui2	2022-10-13
X_AVM-DE_FriendlynameMinChars	no	1	ui2	2022-10-13
X_AVM-DE_Guest	no		Boolean	2021-05-17
X_AVM-DE_HostListPath	No		String	2016-07-07
X_AVM-DE_HostnameAllowedChars	no	0123456789ABCDEF GHIJKLMNOPQRSTU VWXYZabcdefghijklmnopqrstuvwxyz	String	2022-10-13
X_AVM-DE_HostnameMaxhars	no	0	ui2	2022-10-13
X_AVM-DE_HostnameMinChars	no	63	ui2	2022-10-13
X_AVM-DE_InfoURL	no		String	2015-02-23
X_AVM-DE_IsMeshable	no		Boolean	2021-06-04
X_AVM-DE_MACAddressList	no		String	2021-09-09
X_AVM-DE_MeshListPath	no		String	2018-04-13
X_AVM-DE_Model	no		String	2015-02-23
X_AVM-DE_Port	no	Port#, beginning with 1; only for InterfaceType 'Ethernet'	ui4	2014-12-03
X_AVM-DE_Priority	no		Boolean	2021-06-22
X_AVM-DE_RequestClient	no		Boolean	2021-08-27
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

Variable name	Send events	Allowed values (* == default)	Data type	Date
X_AVM-DE_URL	no		String	2015-06-02
X_AVM-DE_VPN	no		Boolean	2021-05-17
X_AVM-DE_WANAccess	no	*unknown, error, granted, denied	String	2021-05-17
X_AVM-DE_FriendlyName	no		String	2021-11-04
X_AVM-DE_FriendlyNameIsWriteable	No		Boolean	2022-05-16

Table 27: Variable list

4 XML Document Contents

4.1 Host List Contents

```
<List>
  <!-- devicehosts :8 -->
  <!-- users :2 -->
  <Item>
    <Index>1</Index>
    <IPAddress>192.168.178.24</IPAddress>
    <MACAddress>2A:B3:66:30:08:87</MACAddress>
    <Active>0</Active>
    <HostName>PC-192-168-178-24</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_MACAddressList/>
    <X_AVM-DE_Model/>
    <X_AVM-DE_URL/>
    <X_AVM-DE_Guest>0</X_AVM-DE_Guest>
    <X_AVM-DE_RequestClient>0</X_AVM-DE_RequestClient>
    <X_AVM-DE_VPN>0</X_AVM-DE_VPN>
    <X_AVM-DE_WANAccess>granted</X_AVM-DE_WANAccess>
    <X_AVM-DE_Disallow>0</X_AVM-DE_Disallow>
    <X_AVM-DE_IsMeshable>0</X_AVM-DE_IsMeshable>
    <X_AVM-DE_Priority>0</X_AVM-DE_Priority>
    <X_AVM-DE_FriendlyName>PC-192-168-178-24</X_AVM-DE_FriendlyName>
    <X_AVM-DE_FriendlyNameIsWriteable>0</X_AVM-DE_FriendlyNameIsWriteable>
  </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_Disallow	Boolean	Flag which represents the WAN access allowed state
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_IsMeshable	Boolean	Flag which shows if the landevice can be part of a "Mesh"
X_AVM-DE_MACAddressList	String	Comma separated list with device MAC Addresses e.g. different interfaces. Only AVM devices have this list, other devices have an empty tag.

X_AVM-DE_Model	string	Model name or number of the device
X_AVM-DE_Port	ui4	If host is connected via ethernet, it shows the port number
X_AVM-DE_Priority	Boolean	Flag which shows if the device has realtime priority
X_AVM-DE_RequestClient	Boolean	Flag which shows if this device was sending the request
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_VPN	Boolean	Flag which shows if the device is a VPN device
X_AVM-DE_WANAccess	string	Shows if the device has WAN access "granted", "denied", "error" or "unknown"
X_AVM-DE_FriendlyName	string	The host's friendly name
X_AVM-DE_FriendlyNameIsWriteable	Boolean	"1" if the friendly name can be changed, "0" if not

Table 28: HostList content description