

How to download firmware via NET-SNMP (DES-3200)



Genmgt.mib

Download Firmware “DES-3200_v1.20.b011.had” from TFTP server 10.90.90.199

```
#snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.1.2.1.1.3.1 a 10.90.90.199
1.3.6.1.4.1.171.12.1.2.1.1.4.1 i 2 1.3.6.1.4.1.171.12.1.2.1.1.5.1 s DES-3200_v1.20.b011.had
1.3.6.1.4.1.171.12.1.2.1.1.7.1 i 3 1.3.6.1.4.1.171.12.1.2.1.1.8.1 i 3
1.3.6.1.4.1.171.12.1.2.1.1.10.1 i 1
```

1.3.6.1.4.1.171.12.1.2.1.1.3.1 a **10.90.90.199** TFTP IP address

1.3.6.1.4.1.171.12.1.2.1.1.5.1 s **DES-3200_v1.20.b011.had** F/W name

1.3.6.1.4.1.171.12.1.2.1.1.10.1 i **1** Image ID 0 = image ID 1 1 = Image ID2

The image shows two screenshots of a network management tool's MIB browser. The top screenshot shows the 'agentBscSwFileTable' MIB node selected. The right pane displays its properties: Object name: agentBscSwFileTable, Object ID: 1.3.6.1.4.1.171.12.1.2.1, Module: AGENT-GENERAL-MIB, Base syntax: Sequence Of agentBscSwFileEntry, Access: Not_Accessible, Status: Current, and Sequence: 1:agentBscSwFileIndex - Integer, 2:agentBscSwFileDscr - Octet String, 3:agentBscSwFileAddr - IP Address, 4:agentBscSwFileTransferType - Integer, 5:agentBscSwFile - Octet String, 6:agentBscSwFileLocateId - Integer, 7:agentBscSwFileLoadType - Integer, 8:agentBscSwFileCtrl - Integer, 9:agentBscSwFileBIncrement - Integer, 10:agentBscSwFileCtrlID - Integer, 11:agentBscSwFileCtrlUnitID - Octet String, 12:agentBscSwFileIPv6Addr - Octet String, 13:agentBscSwFileBootUpImage - Integer, 14:agentBscSwFileForceAgree - Integer, 15:agentBscSwFileInterfaceName - Octet String. The bottom screenshot shows the 'agentBscSwFileEntry' MIB node selected. The right pane displays its properties: Object name: agentBscSwFileEntry, Object ID: 1.3.6.1.4.1.171.12.1.2.1.1, Module: AGENT-GENERAL-MIB, Base syntax: Sequence, Access: Not_Accessible, Status: Current, Index: 1.agentBscSwFileIndex, Parent node: agentBscSwFileTable, First child: agentBscSwFileIndex, and Description: A basic configuration entry containing objects describing a particular MIB supported by this agent.

<pre> nBasicConfig agentBscSwFileTable agentBscSwFileEntry agentBscSwFileIndex agentBscSwFileDscr agentBscSwFileAddr agentBscSwFileTransferType agentBscSwFile agentBscSwFileLocateId agentBscSwFileLoadType agentBscSwFileCtrl agentBscSwFileBlIncrement agentBscSwFileCtrlID agentBscSwFileCtrlUnitID agentBscSwFilePvGAddr agentBscSwFileBootUpImage agentBscSwFileForceAgree agentBscSwFileInterfaceName agentFileTransfer </pre>	<pre> Object name agentBscSwFileIndex Object ID 1.3.6.1.4.1.171.12.1.2.1.1.1 Module AGENT-GENERAL-MIB Base syntax Integer Composed syntax Integer32 Access Read-Only Status Current Parent node agentBscSwFileEntry First child None Description The table index for the file entry </pre>
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<pre> nBasicConfig agentBscSwFileTable agentBscSwFileEntry agentBscSwFileIndex agentBscSwFileDscr agentBscSwFileAddr agentBscSwFileTransferType agentBscSwFile agentBscSwFileLocateId agentBscSwFileLoadType agentBscSwFileCtrl agentBscSwFileBlIncrement agentBscSwFileCtrlID agentBscSwFileCtrlUnitID agentBscSwFilePvGAddr agentBscSwFileBootUpImage agentBscSwFileForceAgree agentBscSwFileInterfaceName </pre>	<pre> Object name agentBscSwFileDscr Object ID 1.3.6.1.4.1.171.12.1.2.1.1.2 Module AGENT-GENERAL-MIB Base syntax Octet String Composed syntax DisplayString Access Read-Write Status Current Value list 1 : 0..64 Parent node agentBscSwFileEntry First child None Description The description of the purpose of the software file in this entry. Note: For systems which do not support change of this object, setting a value to this object will cause the system to return bad-value error messages. </pre>
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<pre> nBasicConfig agentBscSwFileTable agentBscSwFileEntry agentBscSwFileIndex agentBscSwFileDscr agentBscSwFileAddr agentBscSwFileTransferType agentBscSwFile agentBscSwFileLocateId agentBscSwFileLoadType agentBscSwFileCtrl agentBscSwFileBlIncrement agentBscSwFileCtrlID agentBscSwFileCtrlUnitID agentBscSwFilePvGAddr agentBscSwFileBootUpImage agentBscSwFileForceAgree agentBscSwFileInterfaceName </pre>	<pre> Object name agentBscSwFileAddr Object ID 1.3.6.1.4.1.171.12.1.2.1.1.3 Module AGENT-GENERAL-MIB Base syntax IP Address Composed syntax IpAddress Access Read-Write Status Current Parent node agentBscSwFileEntry First child None Description The IP address where the file to be downloaded is located, or the IP address where the file will be uploaded to. </pre>
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<pre> nBasicConfig agentBscSwFileTable agentBscSwFileEntry agentBscSwFileIndex agentBscSwFileDscr agentBscSwFileAddr agentBscSwFileTransferType agentBscSwFile agentBscSwFileLocateId agentBscSwFileLoadType agentBscSwFileCtrl agentBscSwFileBlIncrement agentBscSwFileCtrlID agentBscSwFileCtrlUnitID agentBscSwFilePvGAddr agentBscSwFileBootUpImage agentBscSwFileForceAgree agentBscSwFileInterfaceName </pre>	<pre> Object name agentBscSwFileTransferType Object ID 1.3.6.1.4.1.171.12.1.2.1.1.4 Module AGENT-GENERAL-MIB Base syntax Integer Composed syntax INTEGER Access Read-Write Status Current Value list 1 : other(1) 2 : network-load(2) 3 : out-of-band-load(3) Parent node agentBscSwFileEntry First child None Description The channel through which the file will be downloaded or uploaded. Note: For systems which do not support all channels, setting a value to the unsupported channel will cause the system to return bad-value error messages. </pre>
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nBasicConfig agentBscSwFileTable agentBscSwFileEntry agentBscSwFileInde: agentBscSwFileDscr agentBscSwFileAddr agentBscSwFileTran agentBscSwFile agentBscSwFileLoca agentBscSwFileLoac agentBscSwFileCtrl agentBscSwFileBlnc agentBscSwFileCtrlC agentBscSwFileCtrlU agentBscSwFilePv6 agentBscSwFileBoot agentBscSwFileForc agentBscSwFileInterl	Object name agentBscSwFile Object ID 1.3.6.1.4.1.171.12.1.2.1.1.5 Module AGENT-GENERAL-MIB	
	Base syntax Octet String Composed syntax DisplayString Access Read-Write Status Current Value list 1 : 0..128	Parent node agentBscSwFileEntry First child None Description The name of the file to be downloaded from the TFTP server, or to be uploaded to.

nBasicConfig agentBscSwFileTable agentBscSwFileEntry agentBscSwFileInde: agentBscSwFileDscr agentBscSwFileAddr agentBscSwFileTran agentBscSwFile agentBscSwFileLoca agentBscSwFileLoac agentBscSwFileCtrl agentBscSwFileBlnc agentBscSwFileCtrlC agentBscSwFileCtrlU agentBscSwFilePv6 agentBscSwFileBoot agentBscSwFileForc agentBscSwFileInterl agentFileTransfer	Object name agentBscSwFileLocateId Object ID 1.3.6.1.4.1.171.12.1.2.1.1.6 Module AGENT-GENERAL-MIB	
	Base syntax Integer Composed syntax INTEGER Access Read-Write Status Current Value list 1 : 1..16	Parent node agentBscSwFileEntry First child None Description This object describes the type of the file. runtime-code(1), log-file(2), cfg-file(3) Note: For systems which do not support change of this object, setting a value to this object will cause the system to return bad-value error messages.

nBasicConfig agentBscSwFileTable agentBscSwFileEntry agentBscSwFileInde: agentBscSwFileDscr agentBscSwFileAddr agentBscSwFileTran agentBscSwFile agentBscSwFileLoca agentBscSwFileLoad agentBscSwFileCtrl agentBscSwFileBlnc agentBscSwFileCtrlC agentBscSwFileCtrlU agentBscSwFilePv6 agentBscSwFileBoot agentBscSwFileForc agentBscSwFileInterl agentFileTransfer agentSystemReset	Object name agentBscSwFileLoadType Object ID 1.3.6.1.4.1.171.12.1.2.1.1.7 Module AGENT-GENERAL-MIB	
	Base syntax Integer Composed syntax INTEGER Access Read-Write Status Current Value list 1 : other(1) 2 : upload(2) 3 : download(3)	Parent node agentBscSwFileEntry First child None Description This object provides the user with a choice of uploading or downloading the selected file. Note: For systems which do not support change of this object, setting a value to this object will cause the system to return bad-value error messages.

nBasicConfig agentBscSwFileTable agentBscSwFileEntry agentBscSwFileInde: agentBscSwFileDscr agentBscSwFileAddr agentBscSwFileTran agentBscSwFile agentBscSwFileLoca agentBscSwFileLoadType agentBscSwFileCtrl agentBscSwFileBlnc agentBscSwFileCtrlC agentBscSwFileCtrlU agentBscSwFilePv6 agentBscSwFileBoot agentBscSwFileForc agentBscSwFileInterl agentFileTransfer agentSystemReset agentRs232PortConfig agentOutDBandBaudRateC agentSaveCfg swMultiImageInfoTable swMultiImageInfoEntry swMultiImageInfoID swMultiImageVersion swMultiImageSize	Object name agentBscSwFileCtrl Object ID 1.3.6.1.4.1.171.12.1.2.1.1.8 Module AGENT-GENERAL-MIB	
	Base syntax Integer Composed syntax INTEGER Access Read-Write Status Current Value list 1 : other(1) 2 : inactive(2) 3 : start(3) 4 : delete(4) 5 : config-as-bootup(5) 6 : apply(6)	Parent node agentBscSwFileEntry First child None Description This object gives the user the option to download runtime software. The setting will take effect when the system restarts. See Note(1) below Note: For systems which do not support change of this object, setting a value to this object will cause the system to return bad-value error messages. start - activate firmware. delete(4) - delete the firmware by indicated firmware ID. config-as-bootup(5) - configured as bootup firmware by indicated firmware(ID). apply(6) - apply the configuration to be the active configuration by indicated config ID.

nBasicConfig agentBscSwFileTable agentBscSwFileEntry agentBscSwFileInde: agentBscSwFileDscr agentBscSwFileAddr agentBscSwFileTran agentBscSwFile agentBscSwFileLoac agentBscSwFileLoac agentBscSwFileCtrl agentBscSwFileBInc agentBscSwFileCtrlID agentBscSwFileCtrlU agentBscSwFileIPv6 agentBscSwFileBoot agentBscSwFileForc agentBscSwFileInterl	Object name	agentBscSwFileBIncrement
	Object ID	1.3.6.1.4.1.171.12.1.2.1.1.9
	Module	AGENT-GENERAL-MIB
	Base syntax	Integer
	Composed syntax	TruthValue
	Access	Read-Write
	Status	Current
	Value list	1 : true(1) 2 : false(2)
	Parent node	agentBscSwFileEntry
	First child	None
	Description	This object indicates whether the previous configuration will remain valid or not after downloading the configuration file. True : keep valid False : erase.

nBasicConfig agentBscSwFileTable agentBscSwFileEntry agentBscSwFileInde: agentBscSwFileDscr agentBscSwFileAddr agentBscSwFileTran agentBscSwFile agentBscSwFileLoac agentBscSwFileLoac agentBscSwFileCtrl agentBscSwFileBInc agentBscSwFileCtrlID agentBscSwFileCtrlU agentBscSwFileIPv6 agentBscSwFileBoot agentBscSwFileForc agentBscSwFileInterl	Object name	agentBscSwFileCtrlID
	Object ID	1.3.6.1.4.1.171.12.1.2.1.1.10
	Module	AGENT-GENERAL-MIB
	Base syntax	Integer
	Composed syntax	INTEGER
	Access	Read-Write
	Status	Current
	Parent node	agentBscSwFileEntry
	First child	None
	Description	The section ID of firmware image or configuration file. A value of 0 indicates the bootup firmware image or configuration file.

nBasicConfig agentBscSwFileTable agentBscSwFileEntry agentBscSwFileInde: agentBscSwFileDscr agentBscSwFileAddr agentBscSwFileTran agentBscSwFile agentBscSwFileLoac agentBscSwFileLoac agentBscSwFileCtrl agentBscSwFileBInc agentBscSwFileCtrlID agentBscSwFileCtrlU agentBscSwFileIPv6 agentBscSwFileBoot agentBscSwFileForc agentBscSwFileInterl	Object name	agentBscSwFileCtrlUnitID
	Object ID	1.3.6.1.4.1.171.12.1.2.1.1.11
	Module	AGENT-GENERAL-MIB
	Base syntax	Octet String
	Composed syntax	UnitList
	Access	Read-Write
	Status	Current
	Value list	1 : 0..3
	Parent node	agentBscSwFileEntry
	First child	None
	Description	Specifies to which unit of the switch stack the firmware image will be downloaded. One or more units can be set to this list. Each bit from left to right represents the switch from unit ID 1 to unit ID 12. A NULL entry in this field denotes all switches in the switch stack.

nBasicConfig agentBscSwFileTable agentBscSwFileEntry agentBscSwFileInde: agentBscSwFileDscr agentBscSwFileAddr agentBscSwFileTran agentBscSwFile agentBscSwFileLoac agentBscSwFileLoac agentBscSwFileCtrl agentBscSwFileBInc agentBscSwFileCtrlID agentBscSwFileCtrlU agentBscSwFileIPv6Addr agentBscSwFileBoot agentBscSwFileForc agentBscSwFileInterl	Object name	agentBscSwFileIPv6Addr
	Object ID	1.3.6.1.4.1.171.12.1.2.1.1.12
	Module	AGENT-GENERAL-MIB
	Base syntax	Octet String
	Composed syntax	IPv6Address
	Access	Read-Write
	Status	Current
	Value list	1 : 16..16
	Parent node	agentBscSwFileEntry
	First child	None
	Description	The IPv6 address where the file is to be downloaded or uploaded.

<pre> nBasicConfig agentBscSwFileTable agentBscSwFileEntry agentBscSwFileIndex agentBscSwFileDescr agentBscSwFileAddr agentBscSwFileTrans agentBscSwFile agentBscSwFileLocal agentBscSwFileLocal agentBscSwFileCtrl agentBscSwFileBlnc agentBscSwFileCtrlC agentBscSwFileCtrlU agentBscSwFileIPv6 agentBscSwFileBootUpImage agentBscSwFileForce agentBscSwFileInter agentFileTransfer agentSystemReset agentRs232PortConfig agentOutOfBandBaudRateC agentSaveCig swMultiImageInfoTable swMultiImageInfoEntry swMultiImageInfoID swMultiImageVersion swMultiImageSize swMultiImageUpdate ... </pre>	<pre> agentBscSwFileBootUpImage 1.3.6.1.4.1.171.12.1.2.1.1.13 AGENT-GENERAL-MIB < Integer yntax TruthValue Read-Write Current Value list 1 : true(1) 2 : false(2) agentBscSwFileEntry None The result of the download will depend on whether the boot_up option is specified. Case 1: In the case where the master unit provides the file system and the slave unit does not provide the file system, when boot_up is specified, the file will be downloaded to the boot_up image on the slave. If boot_up is not specified, then the file will not be downloaded to this slave unit. Case 2: In the case where the master unit does not provide the file system and the slave unit provides the file system, when boot_up is specified, then the file will be downloaded to the boot_up image on the slave unit. If boot_up is not specified, then the file will not be downloaded to this slave unit. Case 3: In the case where the master unit and the slave unit both support or do not support the file system, the file will be downloaded to the specified file on the slave unit. If boot_up is specified, the downloaded file will be assigned as the boot_up image. True : boot_up option is specified. False : boot_up option is not specified.. </pre>
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<pre> nBasicConfig agentBscSwFileTable agentBscSwFileEntry agentBscSwFileIndex agentBscSwFileDescr agentBscSwFileAddr agentBscSwFileTrans agentBscSwFile agentBscSwFileLocal agentBscSwFileLocal agentBscSwFileCtrl agentBscSwFileBlnc agentBscSwFileCtrlC agentBscSwFileCtrlU agentBscSwFileIPv6 agentBscSwFileBootUpImage agentBscSwFileForce agentBscSwFileInter agentFileTransfer agentSystemReset </pre>	<pre> Object name agentBscSwFileForceAgree Object ID 1.3.6.1.4.1.171.12.1.2.1.1.14 Module AGENT-GENERAL-MIB Base syntax Integer Composed syntax TruthValue Access Read-Write Status Current Value list 1 : true(1) 2 : false(2) Parent node agentBscSwFileEntry First child None Description When the force_agree option is specified, the reboot command will be executed immediately without further confirmation by the user. True : force_agree option is specified. False : force_agree option is not specified.. </pre>
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<pre> nBasicConfig agentBscSwFileTable agentBscSwFileEntry agentBscSwFileIndex agentBscSwFileDescr agentBscSwFileAddr agentBscSwFileTrans agentBscSwFile agentBscSwFileLocal agentBscSwFileLocal agentBscSwFileCtrl agentBscSwFileBlnc agentBscSwFileCtrlC agentBscSwFileCtrlU agentBscSwFileIPv6 agentBscSwFileBoot agentBscSwFileForceAgree agentBscSwFileInter agentFileTransfer </pre>	<pre> Object name agentBscSwFileInterfaceName Object ID 1.3.6.1.4.1.171.12.1.2.1.1.15 Module AGENT-GENERAL-MIB Base syntax Octet String Composed syntax DisplayString Access Read-Write Status Current Value list 1 : 0..12 Parent node agentBscSwFileEntry First child None Description This node is used to specify interface name when the agentBscSwFileIPv6Addr is link local address. </pre>
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agentBasicConfig	name	agentSaveCfg
agentBscSwFileTable	ID	1.3.6.1.4.1.171.12.1.2.6
agentBscSwFileEntry		AGENT-GENERAL-MIB
agentBscSwFileInc	syntax	Integer
agentBscSwFileDs	id syntax	INTEGER
agentBscSwFileAd		Read-Write
agentBscSwFileTr		Current
agentBscSwFile	list	1 : other(1) 2 : cfg-id1(2) 3 : cfg-id2(3) 4 : log(4) 5 : all(5)
agentBscSwFileLo		
agentBscSwFileLo		
agentBscSwFileCtr	node	agentBasicConfig
agentBscSwFileBlr	child	None
agentBscSwFileCtr	option	This object indicates the type of save command to be executed, when saving to the NV-RAM. other(1) - none of the following. cfg-id1(2) - save configuration ID1. cfg-id2(3)- save configuration ID2 log(4) - save log. all(5) - save both (active configuration and log).
agentBscSwFilePA		
agentBscSwFileBo		
agentBscSwFileFo		
agentBscSwFileInt		
agentFileTransfer		
agentSystemReset		
agentRs232PortConfig		
agentOutDBandBaudRate		
agentSaveCfg		
swMultiImageInfoTable		
swMultiImageInfoEntry		