

# How to upload and download configuration and F/W with SNMP command on DES-3028

Base on F/W 2.00B27

## Example

1. Backup configuration file to TFTP server on 10.90.90.101 name "TEST"

```
snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.1.2.1.1.6.3 i 3 1.3.6.1.4.1.171.12.1.2.1.1.4.3 i 2  
1.3.6.1.4.1.171.12.1.2.1.1.5.3 s TEST 1.3.6.1.4.1.171.12.1.2.1.1.7.3 i 2 1.3.6.1.4.1.171.12.1.2.1.1.3.3 a  
10.90.90.101 1.3.6.1.4.1.171.12.1.2.1.1.8.3 i 3
```

2. Download configuration file, named TEST from TFTP server, 10.90.90.101 to device.

```
snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.1.2.1.1.6.3 i 3 1.3.6.1.4.1.171.12.1.2.1.1.4.3 i 2  
1.3.6.1.4.1.171.12.1.2.1.1.5.3 s TEST 1.3.6.1.4.1.171.12.1.2.1.1.7.3 i 3 1.3.6.1.4.1.171.12.1.2.1.1.3.3 a  
10.90.90.101 1.3.6.1.4.1.171.12.1.2.1.1.8.3 i 3
```

3. Download configuration file, named TEST from TFTP server, 10.90.90.101 to device with option increment

```
snmpset -v 2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.1.2.1.1.3.3 a 10.90.90.101  
1.3.6.1.4.1.171.12.1.2.1.1.5.3 s TOMTEST3 1.3.6.1.4.1.171.12.1.2.1.1.9.3 i 1  
1.3.6.1.4.1.171.12.1.2.1.1.7.3 i 3 1.3.6.1.4.1.171.12.1.2.1.1.8.3 i 3
```

4. Save configuration

```
snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.1.2.6.0 i 2
```

5. Download F/W ( file name "test.had") from TFTP server 10.9.90.101, write in Image ID 2

```
snmpset -v 2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.1.2.1.1.3.1 a 10.90.90.101  
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 x 746573742E686164  
1.3.6.1.4.1.171.12.1.2.1.1.6.1 i 1 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 2
```

	<table border="1"> <tr><td>Object name</td><td>agentBasicConfig</td></tr> <tr><td>Object ID</td><td>1.3.6.1.4.1.171.12.1.2</td></tr> <tr><td>Module</td><td>AGENT-GENERAL-MIB</td></tr> <tr><td>Base syntax</td><td>Object Identifier</td></tr> <tr><td>Access</td><td>Not_Accessible</td></tr> <tr><td>Status</td><td>Mandatory</td></tr> <tr><td>Parent node</td><td>agentGeneralMgmt</td></tr> <tr><td>First child</td><td>agentBscSwFileTable</td></tr> </table>	Object name	agentBasicConfig	Object ID	1.3.6.1.4.1.171.12.1.2	Module	AGENT-GENERAL-MIB	Base syntax	Object Identifier	Access	Not_Accessible	Status	Mandatory	Parent node	agentGeneralMgmt	First child	agentBscSwFileTable
Object name	agentBasicConfig																
Object ID	1.3.6.1.4.1.171.12.1.2																
Module	AGENT-GENERAL-MIB																
Base syntax	Object Identifier																
Access	Not_Accessible																
Status	Mandatory																
Parent node	agentGeneralMgmt																
First child	agentBscSwFileTable																

	<table border="1"> <tr><td>Object name</td><td>agentBscSwFileTable</td></tr> <tr><td>Object ID</td><td>1.3.6.1.4.1.171.12.1.2.1</td></tr> <tr><td>Module</td><td>AGENT-GENERAL-MIB</td></tr> <tr><td>Base syntax</td><td>Sequence Of AgentBscSwFileEntry</td></tr> <tr><td>Access</td><td>Not_Accessible</td></tr> <tr><td>Status</td><td>Current</td></tr> <tr><td>Sequence</td><td>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:agentBscSwFileBlIncrement - Integer 10:agentBscSwFileCtrlID - Integer</td></tr> <tr><td>Parent node</td><td>agentBasicConfig</td></tr> <tr><td>First child</td><td>agentBscSwFileEntry</td></tr> <tr><td>Description</td><td>A list of MIB Basic Config entry support files updated by this agent.</td></tr> </table>	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	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:agentBscSwFileBlIncrement - Integer 10:agentBscSwFileCtrlID - Integer	Parent node	agentBasicConfig	First child	agentBscSwFileEntry	Description	A list of MIB Basic Config entry support files updated by this agent.
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																				
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:agentBscSwFileBlIncrement - Integer 10:agentBscSwFileCtrlID - Integer																				
Parent node	agentBasicConfig																				
First child	agentBscSwFileEntry																				
Description	A list of MIB Basic Config entry support files updated by this agent.																				

	<table border="1"> <tr><td>Object name</td><td>agentBscSwFileIndex</td></tr> <tr><td>Object ID</td><td>1.3.6.1.4.1.171.12.1.2.1.1.1</td></tr> <tr><td>Module</td><td>AGENT-GENERAL-MIB</td></tr> <tr><td>Base syntax</td><td>Integer</td></tr> <tr><td>Composed syntax</td><td>Integer32</td></tr> <tr><td>Access</td><td>Read-Only</td></tr> <tr><td>Status</td><td>Current</td></tr> <tr><td>Parent node</td><td>agentBscSwFileEntry</td></tr> <tr><td>First child</td><td>None</td></tr> <tr><td>Description</td><td>The table index for the file entry</td></tr> </table>	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
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																				

	<table border="1"> <tr><td>Object name</td><td>agentBscSwFileDscr</td></tr> <tr><td>Object ID</td><td>1.3.6.1.4.1.171.12.1.2.1.1.2</td></tr> <tr><td>Module</td><td>AGENT-GENERAL-MIB</td></tr> <tr><td>Base syntax</td><td>Octet String</td></tr> <tr><td>Composed syntax</td><td>DisplayString</td></tr> <tr><td>Access</td><td>Read-Write</td></tr> <tr><td>Status</td><td>Current</td></tr> <tr><td>Value list</td><td>1 : 0..64</td></tr> <tr><td>Parent node</td><td>agentBscSwFileEntry</td></tr> <tr><td>First child</td><td>None</td></tr> <tr><td>Description</td><td>The description of the software file purpose in this entry. Note: For systems that do not support change of this object, setting a value for this object will cause the system to return bad-value error messages.</td></tr> </table>	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 software file purpose in this entry. Note: For systems that do not support change of this object, setting a value for this object will cause the system to return bad-value error messages.
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 software file purpose in this entry. Note: For systems that do not support change of this object, setting a value for this object will cause the system to return bad-value error messages.																						

	<table border="1"> <tr><td>Object name</td><td>agentBscSwFileAddr</td></tr> <tr><td>Object ID</td><td>1.3.6.1.4.1.171.12.1.2.1.1.3</td></tr> <tr><td>Module</td><td>AGENT-GENERAL-MIB</td></tr> <tr><td>Base syntax</td><td>IP Address</td></tr> <tr><td>Composed syntax</td><td>IpAddress</td></tr> <tr><td>Access</td><td>Read-Write</td></tr> <tr><td>Status</td><td>Current</td></tr> <tr><td>Parent node</td><td>agentBscSwFileEntry</td></tr> <tr><td>First child</td><td>None</td></tr> <tr><td>Description</td><td>The IP address where the file that needs to be downloaded is located, or the IP address where the file will be uploaded to.</td></tr> </table>	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 that needs to be downloaded is located, or the IP address where the file will be uploaded to.
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 that needs to be downloaded is located, or the IP address where the file will be uploaded to.																				

	<b>Object name</b> agentBscSwFileTransferType <b>Object ID</b> 1.3.6.1.4.1.171.12.1.2.1.1.4 <b>Module</b> AGENT-GENERAL-MIB
	<b>Base syntax</b> Integer <b>Composed syntax</b> INTEGER <b>Access</b> Read-Write <b>Status</b> Current <b>Value list</b> 1 : other(1) 2 : network-load(2) 3 : out-of-band-load(3)
<b>Parent node</b> agentBscSwFileEntry <b>First child</b> None <b>Description</b> 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.	

	<b>Object name</b> agentBscSwFile <b>Object ID</b> 1.3.6.1.4.1.171.12.1.2.1.1.5 <b>Module</b> AGENT-GENERAL-MIB
	<b>Base syntax</b> Octet String <b>Composed syntax</b> DisplayString <b>Access</b> Read-Write <b>Status</b> Current <b>Value list</b> 1 : 0..128
<b>Parent node</b> agentBscSwFileEntry <b>First child</b> None <b>Description</b> The name of the file to be downloaded from, or uploaded to, the TFTP server.	

	<b>Object name</b> agentBscSwFileLocateId <b>Object ID</b> 1.3.6.1.4.1.171.12.1.2.1.1.6 <b>Module</b> AGENT-GENERAL-MIB
	<b>Base syntax</b> Integer <b>Composed syntax</b> INTEGER <b>Access</b> Read-Write <b>Status</b> Current <b>Value list</b> 1 : 1..16
<b>Parent node</b> agentBscSwFileEntry <b>First child</b> None <b>Description</b> This object describes the type of file. runtime-code(1), log-file(2), cfg-file(3) Note: For systems which do not support change of this object, setting a value for this object will cause the system to return bad-value error messages.	

	<b>Object name</b> agentBscSwFileLoadType <b>Object ID</b> 1.3.6.1.4.1.171.12.1.2.1.1.7 <b>Module</b> AGENT-GENERAL-MIB
	<b>Base syntax</b> Integer <b>Composed syntax</b> INTEGER <b>Access</b> Read-Write <b>Status</b> Current <b>Value list</b> 1 : other(1) 2 : upload(2) 3 : download(3)
<b>Parent node</b> agentBscSwFileEntry <b>First child</b> None <b>Description</b> This object provides the user with a choice of uploading or downloading the selected file. Note: For systems which do not support a change of this object, setting a value to this object will cause the system to return bad-value error messages.	

	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	<p>This object gives the user the option of downloading runtime software. This setting will take effect when the system restarts. See Note (1) below</p> <p>Note: For systems which do not support change for this object, setting a value to this object will cause the system to return bad-value error messages.</p> <p>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.</p>	

	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	<p>This object indicates whether the previous configuration will remain valid or not after downloading the configuration file. True: keep valid False: erase</p>	

	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	<p>The section ID of the firmware image or configuration file. A value of 0 indicates the boot-up firmware image or configuration file.</p>	

	Object name	agentSystemReset
	Object ID	1.3.6.1.4.1.171.12.1.2.3
	Module	AGENT-GENERAL-MIB
	Base syntax	Integer
Composed syntax	INTEGER	
Access	Read-Write	
Status	Current	
Value list	1 : other(1) 2 : cold-start(2) 3 : warm-start(3) 4 : no-reset(4)	
Parent node	agentBasicConfig	
First child	None	
Description	<p>This object indicates the agent system reset state. Setting this object to no-reset(4) has no effect. Setting this object to cold-start(2) will reset the agent. The agent always returns no-reset(4) when this object is read.</p>	

<ul style="list-style-type: none"> <li>agentBasicConfig <ul style="list-style-type: none"> <li>agentBscSwFileTable <ul style="list-style-type: none"> <li>agentBscSwFileEntry <ul style="list-style-type: none"> <li>agentBscSwFileIndex</li> <li>agentBscSwFileDscr</li> <li>agentBscSwFileAddr</li> <li>agentBscSwFileTransferType</li> <li>agentBscSwFile</li> <li>agentBscSwFileLocateld</li> <li>agentBscSwFileLoadType</li> <li>agentBscSwFileCtrl</li> <li>agentBscSwFileBlIncrement</li> <li>agentBscSwFileCtrlID</li> </ul> </li> <li>agentSystemReset</li> <li><b>agentRs232PortConfig</b></li> <li>agentSaveCfg</li> </ul> </li> <li>swMultiImageInfoTable</li> </ul> </li> </ul>	<table border="1"> <tr><td>Object name</td><td>agentRs232PortConfig</td></tr> <tr><td>Object ID</td><td>1.3.6.1.4.1.171.12.1.2.4</td></tr> <tr><td>Module</td><td>AGENT-GENERAL-MIB</td></tr> <tr><td>Base syntax</td><td>Integer</td></tr> <tr><td>Composed syntax</td><td>INTEGER</td></tr> <tr><td>Access</td><td>Read-Write</td></tr> <tr><td>Status</td><td>Current</td></tr> <tr><td>Value list</td><td>1 : other(1) 2 : console(2) 3 : out-of-band(3) 4 : notAvail(4)</td></tr> <tr><td>Parent node</td><td>agentBasicConfig</td></tr> <tr><td>First child</td><td>None</td></tr> <tr><td>Description</td><td>This object indicates the RS-232C mode once the device has restarted.</td></tr> </table>	Object name	agentRs232PortConfig	Object ID	1.3.6.1.4.1.171.12.1.2.4	Module	AGENT-GENERAL-MIB	Base syntax	Integer	Composed syntax	INTEGER	Access	Read-Write	Status	Current	Value list	1 : other(1) 2 : console(2) 3 : out-of-band(3) 4 : notAvail(4)	Parent node	agentBasicConfig	First child	None	Description	This object indicates the RS-232C mode once the device has restarted.
Object name	agentRs232PortConfig																						
Object ID	1.3.6.1.4.1.171.12.1.2.4																						
Module	AGENT-GENERAL-MIB																						
Base syntax	Integer																						
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<ul style="list-style-type: none"> <li>agentBasicConfig <ul style="list-style-type: none"> <li>agentBscSwFileTable <ul style="list-style-type: none"> <li>agentBscSwFileEntry <ul style="list-style-type: none"> <li>agentBscSwFileIndex</li> <li>agentBscSwFileDscr</li> <li>agentBscSwFileAddr</li> <li>agentBscSwFileTransferType</li> <li>agentBscSwFile</li> <li>agentBscSwFileLocateld</li> <li>agentBscSwFileLoadType</li> <li>agentBscSwFileCtrl</li> <li>agentBscSwFileBlIncrement</li> <li>agentBscSwFileCtrlID</li> </ul> </li> <li>agentSystemReset</li> <li>agentRs232PortConfig</li> <li><b>agentSaveCfg</b></li> </ul> </li> <li>swMultiImageInfoTable <ul style="list-style-type: none"> <li>swMultiImageInfoEntry <ul style="list-style-type: none"> <li>swMultiImageInfoID</li> <li>swMultiImageVersion</li> <li>swMultiImageSize</li> <li>swMultiImageUpdateTime</li> </ul> </li> </ul> </li> </ul> </li> </ul>	<table border="1"> <tr><td>Object name</td><td>agentSaveCfg</td></tr> <tr><td>Object ID</td><td>1.3.6.1.4.1.171.12.1.2.6</td></tr> <tr><td>Module</td><td>AGENT-GENERAL-MIB</td></tr> <tr><td>Base syntax</td><td>Integer</td></tr> <tr><td>Composed syntax</td><td>INTEGER</td></tr> <tr><td>Access</td><td>Read-Write</td></tr> <tr><td>Status</td><td>Current</td></tr> <tr><td>Value list</td><td>1 : other(1) 2 : cfg-id1(2) 3 : cfg-id2(3) 4 : log(4) 5 : all(5)</td></tr> <tr><td>Parent node</td><td>agentBasicConfig</td></tr> <tr><td>First child</td><td>None</td></tr> <tr><td>Description</td><td>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)</td></tr> </table>	Object name	agentSaveCfg	Object ID	1.3.6.1.4.1.171.12.1.2.6	Module	AGENT-GENERAL-MIB	Base syntax	Integer	Composed syntax	INTEGER	Access	Read-Write	Status	Current	Value list	1 : other(1) 2 : cfg-id1(2) 3 : cfg-id2(3) 4 : log(4) 5 : all(5)	Parent node	agentBasicConfig	First child	None	Description	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)
Object name	agentSaveCfg																						
Object ID	1.3.6.1.4.1.171.12.1.2.6																						
Module	AGENT-GENERAL-MIB																						
Base syntax	Integer																						
Composed syntax	INTEGER																						
Access	Read-Write																						
Status	Current																						
Value list	1 : other(1) 2 : cfg-id1(2) 3 : cfg-id2(3) 4 : log(4) 5 : all(5)																						
Parent node	agentBasicConfig																						
First child	None																						
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