

HOW TO?

Capturing walks with SNMPWalker





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Capture Walks with SNMPWalker

Principle

SNMP Walk is a command that allows to collect, thanks to the **SNMP**¹ protocol, data about a device installed on a specific network:

i walk_20190528_092913.txt - Bloc-notes	>
Fichier Edition Format Affichage Aide	
system.sysDescr.0 [str] "3070N"	
system.sysObjectID.0 [objectOid] .3.1.112.1.1	
system.sysUpTime.0 [timeticks] 01/01/0001 00:00:09	
system.sysContact.0 [str] (empty)	
system.sysName.0 [str] "3070N"	
system.sysLocation.0 [str] "Lille/AILE 2"	
system.sysServices.0 [integer] 72	
# skipping interface stats	
host.hrStorage.hrMemorySize.0 [integer] 4194304	
host.hrStorage.hrStorageTable.1.1.1 [integer] 1	
host.hrStorage.hrStorageTable.1.hrStorageType.1 [objectOid] host.hrStorage.hrStor	ageTypes.hrStorageRam
host.hrStorage.hrStoragelable.1.hrStorageDescr.1 [str] "Allocated memory for Prin	ter" [
host.hrStorage.hrStorageTable.1.hrStorageAllocationUnits.1 [integer] 1024	
host.hrStorage.hrStoragelable.l.hrStorageSize.l [integer] 4096	
host.hrstorage.hrstoragelable.l.hrstorageUsed.l [integer] 4090	
host heDavise heDaviseTable 1 heDaviseTeday 1 [istages] 1	
host heDovice heDoviceTable 1 heDoviceIndex.1 [Integer] 1	
host hnDevice hnDeviceTable 1 hnDeviceIndex.5 [integer] 5	
host hrDevice hrDeviceTable 1 hrDeviceIndex.4 [integer] 4	
host hrDevice hrDeviceTable 1 hrDeviceIndex 6 [integer] 6	
host.hrDevice.hrDeviceTable.1.hrDeviceIndex.7 [integer] 7	
host.hrDevice.hrDeviceTable.1.hrDeviceIndex.8 [integer] 8	
host.hrDevice.hrDeviceTable.1.hrDeviceIndex.9 [integer] 9	
host.hrDevice.hrDeviceTable.1.hrDeviceIndex.21 [integer] 21	
host.hrDevice.hrDeviceTable.1.hrDeviceIndex.23 [integer] 23	
host.hrDevice.hrDeviceTable.1.hrDeviceIndex.81 [integer] 81	
host.hrDevice.hrDeviceTable.1.hrDeviceIndex.86 [integer] 86	
host.hrDevice.hrDeviceTable.1.hrDeviceIndex.87 [integer] 87	
host.hrDevice.hrDeviceTable.1.hrDeviceType.1 [objectOid] host.hrDevice.hrDeviceTy	pes.hrDevicePrinter
host.hrDevice.hrDeviceTable.1.hrDeviceType.3 [objectOid] host.hrDevice.hrDeviceTy	pes.hrDeviceNetwork
host.hrDevice.hrDeviceTable.1.hrDeviceType.4 [objectOid]	
host.hrDevice.hrDeviceTable.1.hrDeviceType.5 [objectOid]	es.hrDeviceOther
host.hrDevice.hrDeviceTable.1.hrDeviceType.6 [objectOid]	
host.hrDevice.hrDeviceTable.1.hrDeviceType.7 [objectOid]	
host.hrDevice.hrDeviceTable.1.hrDeviceType.8 [objectOid]	es.hrDeviceDiskStorage
host.hrDevice.hrDeviceTable.1.hrDeviceType.9 [objectOid]	
host.hrDevice.hrDevicelable.1.hrDevicelype.21 [objectUid]	
host.nrDevice.nrDeviceTable.1.nrDeviceType.23 [objectU1d]	
nost.nruevice.nruevice/able.1.nruevice/ype.81 [objectuld]	pes.nrueviceutner
nost.nruevice.nrueviceiadie.i.nrueviceiype.86 [00]ectUid]	pes.nrueviceotner
host heDevice heDeviceTable 1 heDeviceType.8/ [OD]eCtUId]	pes.mbeviceotnen
host helevice heleviceTable 1 heleviceDesce 3 [ste] "Ethernet ===="	
noscim peviceim peviceimpieitimpevicepescr.5 [str] cumernet port	

The analysis of the collected data allows:

- to report the status of a device;
- to study new devices models;
- to report the internal counters of the device;
- to check the condition of the consumables (paper trays, cartridges, etc.);

Walks are valuable for monitoring Watchdoc malfunctions of the device. They are sometimes requested for troubleshooting by the Doxense Support team.

To perform an SNMP walk capture, you have the SNMPWalker tool provided by default in the Watchdoc installation folder.

This tool, which creates a point capture of the device's SNMP tree, can be used at regular intervals, before or after a printout, to allow a comparative study of the different data in the device.

¹Simple Network Management Protocol (SNMP) is an Internet-standard protocol for collecting and organising information about managed devices on IP networks and for modifying that information to change device behaviour. Devices that typically support SNMP include routers, switches, servers, workstations, printers, modem racks and more. SNMP is widely used in network management for network monitoring. SNMP exposes management data in the form of variables on the managed systems organised in a management information base which describes the system status and configuration.



Procedure

Access SNMP Walker

To access the **SNMPWalker** tool:

- 1. access the Watchdoc server and log on yas an administrator;
- 2. thanks to a explorer, access the folder SNMPWalker, saved by default in C:/Programmes/Doxense/Watchdoc/Tools/;
- 3. in the folder **SNM PWalker** is the executable SNMPWalker.exe:

→ ~ ↑ 🍊 > CePC > Disquellocal ((C:) > Programmes >	Doxense > Watchdoc > Tools > SNMPW	alker	V O Reche	rcher dans : S
, Disque local (C:)	^	Nom	Modifié le	Туре	Taille
inetpub		README.TXT	02/04/2019 23:21	Document texte	1 K
PerfLogs		💿 SNMPWalker User Manual.pdf	02/04/2019 23:21	Chrome HTML Do	205 8
Program Files (x86)		😘 SNMPWalker exe	03/04/2019 09:10	Application	1 204 k
Programmes		SNMPWalker.exe.config.merge	02/04/2019 23:21	Fichier MERGE	1 K
📙 Common Files					
Doxense					
Supervision					
📙 Watchdoc					
Archives					
📜 cache					
🦲 Data					
📜 Images					
logs					
📕 Redist					
SQL					
Tools					
ConfigTool					
SNMPWalker					

Use SNMPWalker

To obtain an SNMP walk:

- 1. click on the SNMPWalker.exe executable;
- 2. in the Doxense SNMP Walker tool, click on the Search Devices button;

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- 3. in the **Network SNMP Scanner** tool, select the network I.P. to browse, then click on the **Scan** button:
- 4. then, in the list of detected devices, double-click on the I.P. of the device you want to study the data;

IP	Brand	Device	Description	ObjectID
10.10.0.116	kyocera	TASKalfa 4052ci	KYOCERA Document Solution	kyocera.41
10.10.0.15	unix	NAS	Linux NAS-LILLE 3.10.105 #2	net-snmp.3.2.10
10.10.0.176	sharp	SHARP MX-3070N	SHARP MX-3070N	sharp.3.1.112.1.1
C 10.10.0.	canon	Canon iR-ADV 4225 16.04	Canon iR-ADV 4225 /P	canon.4.7
10.10.0.9	unix	NAS	Linux NAS 3.10.105 #24922	net-snmp.3.2.10
10.10.20.153	brother	Brother MFC-L6900DW series	Brother NC-8900h, Firmware	brother.nm.system.net-per
10.10.20.237	hp	HP Color LaserJet MFP E87640	HP ETHERNET MULTI-ENVIRO	hp.nm.hpsystem.net-perip
10.10.22.92	lexmark	Lexmark MX511de 701520HH	Lexmark MX511de version N	lexmark.printer.71107121

5. from the **Doxense SNMPWalker** interface, where the device to analyse is selected, click on the **Scan** button to launch the analysis:

Doxense SNMP Walker	_		×		
Watchdoc					
•					
This tool will create a snapshot of the SNMF a networked printer or device.	o tree e	exposed	by		
IP: 10.10.0.73	Loa	d Walk Fi	ile		
Read: public	Sea	rch Devic	es		
Save To: 10.10.0.73_\$SYSNAME\walk_\$NEW.	bin				
Save also a human-readable v	version	(.txt)			
Re-walk automatically every (minute	s): 2	•		
Start walking from the Host M	IB		_		
Automaticaly skip infinite branches					
Idle					
Fuit Court			_ 1		
Exit Scan >		ompar	e		

6. A cursor indicates the analysis progress. At the end of the operation, a message indicates the file where the analysis is saved. By default, this file is saved in **\Dox-ense\Watchdoc\Tools\SNMPWalker** and has the analysed device's name:



7. In the **SNMPWalker** folder, open the files **walk[...].txt** and **walk[...].bin** to read the analysis and/or sent it to the Doxense Support team:

← → × ↑ 📕 > Ce PC	> Disque local (C:) > Programmes > Doxense > Watchdo	oc > Tools > SNMPWalker > 10.10.0.	176_Sharp_Mx_3070N	~ Ū
	Nom	Modifié le	Туре	Taille
🖈 Accés rapide	walk_20191227_153038.bin	27/12/2019 15:30	Fichier BIN	54 Ko
🍠 Ce PC	walk_20191227_153038.txt	27/12/2019 15:30	Document texte	127 Ko
🔜 Bureau				
Documents				

