Sample List  
Possible Network Management Elements for Printers

|  |  |  |  |
| --- | --- | --- | --- |
| **Element** | **Values-Type** | **MIB** | **Comment** |
| **Ethernet Setup** |  |  |  |
| Ethernet Configuration | auto, 10 half duplex, 10 full duplex, 100 half duplex, 100 full duplex, 1000 |  |  |
| Enable TCP/IP | Yes/no |  |  |
| Enable Auto IPv4 Config | Yes/no |  |  |
| Enable DHCP/BOOTP | Yes/no |  |  |
| Enable PING/ARP | Yes/no |  |  |
| Enable AUTO IP | Yes/no |  |  |
| IPv4 Address | IPv4 Address |  |  |
| IPv4 Subnet Mask | IPv4 Address mask |  |  |
| IPv4 Default Router | IPv4 Address |  |  |
| DNS Host Name | IPv4 Address |  |  |
| Enable Domain Name Automatic Acquisition | Yes/no |  |  |
| Domain Name | name |  |  |
| Enable DNS Server Automatic Acquisition | Yes/no |  |  |
| DNS Server IP address | multiple IPv4 addresses |  |  |
| Enable Dynamic DNS | Yes/no |  |  |
| Enable IPv6 | Yes/no |  |  |
| IPv6 Link Local Address | IPv6 Address |  |  |
| Enable Automatic Global Address | Yes/no |  |  |
| Enable DHCP V6 | Yes/no |  |  |
| IPv6 Global Address | IPv6 Address |  |  |
| IPv6 Gateway Address | IPv6 Address |  |  |
| Enable LPD | Yes/no |  |  |
| LPD Queue Name | string |  |  |
| Enable FTP | Yes/no |  |  |
| FTP Port Number | decimal number |  |  |
| Enable RAW Port | Yes/no |  |  |
| RAW Port Number | decimal number |  |  |
| Enable RAW Port Bidirectional | Yes/no |  |  |
| Enable SLP | Yes/no |  |  |
| Enable Bonjour | Yes/no |  |  |
| Bonjour Printer Name | name |  |  |
| Bonjour Priority Printing Protocol (Multiple protocols, with priorities) |  |  |  |
| Bonjour location |  |  |  |
|  |  |  |  |
| **802.11 settings** |  |  |  |
| SSID | string |  |  |
| Password | string |  |  |
| channel(s) | Decimal number(s) |  |  |
| frequency | Decimal number(s) |  |  |
|  |  |  |  |
| **IPSEC** |  |  |  |
| Enable IP Sec (Lots of IP Sec elements, but perhaps not appropriate for CWMP) | Yes/no |  |  |
| IKE Key Lifetime |  |  |  |
| IKE Diffie-Hellman | Groups |  |  |
| IKE Diffie-Hellman (Options/ Encryption Algorithm, Hash Algorithm) |  |  |  |
| Security Association (Key Lifetime) |  |  |  |
| Security Association (Options/ Security Protocol, Encryption Algorithm for ESP, Authentication Algorithm for ESP, Authentication Algorithm for AH) |  |  |  |
| Peer’s Address (entry/Address, Enable Perfect Forward Security, PreShared Key, Encapsulation Mode) |  |  |  |
|  |  |  |  |
| **Printing Protocols** |  |  |  |
| Enable WSD Print Mode | Yes/no |  |  |
| WSD Printer Name | name |  |  |
| WSD Printer Location | string |  |  |
| WSD Printer Information | string |  |  |
| Enable IPP | Yes/no |  |  |
| IPP Printer Name | name |  |  |
| IPP Printer Location | string |  |  |
| Accept IPP Jobs | Yes/no |  |  |
| IPP Printer Make & Model | string |  |  |
| IPP Printer URLs Supported | URIs |  |  |
| IPP Authentication Scheme |  |  |  |
| IPP Password | string |  |  |
| IPP Realm |  |  |  |
|  |  |  |  |
| **SNMP Related** |  |  |  |
| Enable SNMPv1/v2C | Yes/no |  |  |
| Enable SNMPv3 | Yes/no |  |  |
| SNMP UDP Port | Decimal number |  |  |
| SNMPv1/SNMPv2C GET Community Name | string |  |  |
| SNMPv1/SNMPv2C GET & SET Community Name | string |  |  |
| SNMPv3 Context Name | string |  |  |
| SNMPv3 Enable Discovery | Yes/no |  |  |
| SNMPv3 Discovery User Name | string |  |  |
| SNMPv3 Security Level | No Auth/No Priv |  |  |
| SNMPv3 Access Right | Read Only - restricted objects |  |  |
| SNMPv3 Read Only Account | string |  |  |
| SNMPv3 Read Only Account User Name | name |  |  |
| SNMPv3 Read Only Account Authentication Password | string |  |  |
| SNMPv3 Read Only Account Privacy Password | string |  |  |
| SNMPv3 Read Only Account Security Level | No Auth/No Priv |  |  |
| SNMPv3Read/Write Account | string |  |  |
| SNMPv3 Read/Write Account User Name | name |  |  |
| SNMPv3 Read/Write Account Authentication Password | string |  |  |
| SNMPv3 Read/Write Account Privacy Password | string |  |  |
| SNMPv3 Read/Write Account Security Level | No Auth/No Priv |  |  |
| Enable SNMP Traps | Yes/no |  |  |
| Enable SNMP Authentication Failure Traps | Yes/no |  |  |
| SNMP Trap Community Name 1 | string |  |  |
| SNMP Trap IP Address 1 | IP V4 Address |  |  |
| SNMP Trap UDP Port Number 1 | number |  |  |
| SNMP Trap Community Name 2 | string |  |  |
| SNMP Trap IP Address 2 | IP V4 Address |  |  |
| SNMP Trap UDP Port Number 2 | number |  |  |
|  |  |  |  |
| **Email Related** |  |  |  |
| Enable Email Notification on Error | Yes/no |  |  |
| SMTP Notification From Address: | Email address |  |  |
| SMTP Notification To Address: | Email address |  |  |
| SMTP Notification Subject: | string |  |  |
| Delay Enable Email Notification on Error (n minutes) | Decimal number |  |  |
| Test Enable Email Notification on Error | Yes/no |  |  |
| SMTP MAIL SERVER Address | IP Address |  |  |
| SMTP MAIL SERVER Port Number | number |  |  |
| SMTP MAIL SERVER Connection Timeout | Number (sec) |  |  |
| SMTP Authentication Account | string |  |  |
| SMTP Authentication Password | string |  |  |
| SMTP Authentication Realm |  |  |  |
| Incoming Mail Server Type | POP3. IMAP4, etc |  |  |
| Incoming Mail Server ID |  |  |  |
| Port Number | number |  |  |
| Server Timeouts | Number (sec) |  |  |
| Disposition of retrieved message | remove/remove after / leave |  |  |
| connection encryption type |  |  |  |
|  |  |  |  |
| User Name | name |  |  |
| Password | string |  |  |
| Authentication type | login to SNMP before sending/separate log on |  |  |
|  |  |  |  |
| **Date-Time related** |  |  |  |
| Set Date & Time | Date-time |  |  |
| Enable SNTP | Yes/no |  |  |
| SNTP Server Address | IP Address |  |  |
| SNTP Port | number |  |  |
| Clock Synchronize Frequency | number |  |  |
| Time Zone UTC | number |  |  |
| Last SNTP Time | Date-time |  |  |
| Implement Daylight Savings Time | Yes/no |  |  |
|  |  |  |  |
| **SSL/TLS settings** |  |  |  |
| Create a self-signed Certificate | action |  |  |
| Request a Certificate | action |  |  |
| Install a Certificate | action |  |  |
| Set encryption strength | action |  |  |
| Remove Certificate | action |  |  |
| SSL/TLS Mode |  |  |  |
|  |  |  |  |
| **IEEE 802.1X** |  |  |  |
| IEEE 802.1X enable | Yes/no |  |  |
| EAP Method | EAP-MD5, EAP-TLS, EAP-TTLS, PEAP, Server Specified |  |  |
| User ID | string |  |  |
| Password () | string |  |  |
| TTLS Anonymous Name | string |  |  |
| TTLS Authentication Type | PAP, MS-CHAP, MS-CHAPv2 |  |  |
| Server ID | string |  |  |
| Server CA Certificate |  |  |  |
| Server Certificate Check | Validity, CA Confidence, Server ID |  |  |
| Client Certificate |  |  |  |
| Send Client Certificate | Yes/no |  |  |
| Encryption Strength | Low. Medium, High |  |  |
| Authentication Process Time Limit | seconds, 0 = disable |  |  |
| Port Authentication |  |  |  |
|  |  |  |  |
| **Resident applications,** |  |  |  |
| List |  |  |  |
|  |  |  |  |
| **Fonts** |  |  |  |
| List |  |  |  |
|  |  |  |  |
| **Other Resources** |  |  |  |
| List |  |  |  |
|  |  |  |  |
| **IDS health attributes** |  |  |  |
| CertificationState | OctetArray) |  |  |
| ConfigurationState | OctetArray) |  |  |
| DefaultPasswordEnabled | Boolean |  |  |
| credentials are set to the factory defaults. (0 = no default passwords) |  |  |  |
| FirewallSetting | OctetArray) |  |  |
| FirmwareName | String |  |  |
| HCD Health Assessment Attribute Name | DataType |  |  |
| FirmwarePatches | String |  |  |
| FirmwareStringVersion | String |  |  |
| FirmwareVersion | OctetArray) |  |  |
| ForwardingEnabled | Boolean |  |  |
| MachineTypeMode | String |  |  |
| PSTNFaxEnabled | Boolean |  |  |
| ResidentApplicationName | String |  |  |
| ResidentApplicationPatches | String |  |  |
| ResidentApplicationStringVersion | String |  |  |
| ResidentApplicationVersion | OctetArray) |  |  |
| HCD Health Assessment Attribute Name | DataType |  |  |
| TimeSource | String |  |  |
| UserApplicationEnabled | Boolean |  |  |
| UserApplicationPersistenceEnabled | Boolean |  |  |
| UserApplicationName | String |  |  |
| UserApplicationPatches | String |  |  |
| UserApplicationStringVersion | String |  |  |
| UserApplicationVersion | OctetArray) |  |  |
| VendorName | String |  |  |
| VendorSMICode | Integer |  |  |
| AttributesNaturalLanguage | String |  |  |

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