

How to use NET-SNMP – 802.1x

1. Enable 802.1x

```
# snmpset -v2c -c private 10.90.90.90 1.0.8802.1.1.1.1.1.0 i 1
```

1 → Enable

2. Set 802.1x Settings

```
# snmpset -v2c -c private 10.90.90.90 1.0.8802.1.1.1.1.2.1.1.3.10 i 0  
1.0.8802.1.1.1.1.2.1.1.6.10 i 2 1.0.8802.1.1.1.1.2.1.1.7.10 u 60  
1.0.8802.1.1.1.1.2.1.1.8.10 u 30 1.0.8802.1.1.1.1.2.1.1.9.10 u 30  
1.0.8802.1.1.1.1.2.1.1.10.10 u 30 1.0.8802.1.1.1.1.2.1.1.11.10 u 2  
1.0.8802.1.1.1.1.2.1.1.12.10 u 3600 1.0.8802.1.1.1.1.2.1.1.13.10 i 1  
1.0.8802.1.1.1.1.2.1.1.14.10 i 1
```

10 → Port Number

0 → both

2 → auto

1 → true

OID for 802.1x

Module:	IEEE8021-PAE-MIB
Name:	dot1xPaeSystemAuthControl
Type:	OBJECT-TYPE
OID:	1.0.8802.1.1.1.1.1.1
Full path:	iso(1).std(0).iso8802(8802).ieee802dot1(1).ieee802dot1x
Module:	IEEE8021-PAE-MIB
Parent:	dot1xPaeSystem
Next sibling:	dot1xPaePortTable
Numerical syntax:	Integer (32 bit)
Base syntax:	INTEGER
Composed syntax:	INTEGER
Status:	current
Max access:	read-write
Value list:	1: enabled(1) 2: disabled(2)
Reference:	9.6.1, SystemAuthControl
Description:	The administrative enable/disable state for Port Access Control in a System.

Module:	IEEE8021-PAE-MIB
Name:	dot1xAuthPaeState
Type:	OBJECT-TYPE
OID:	1.0.8802.1.1.1.2.1.1.1
Full path:	iso(1).std(0).iso8802(8802).ieee802dot1(1).ieee802dot1mibs(1).ieee802dot1x(1).dot1xAuthPaeState
Module:	IEEE8021-PAE-MIB
Parent:	dot1xAuthConfigEntry
Next sibling:	dot1xAuthBackendAuthState
Numerical syntax:	Integer (32 bit)
Base syntax:	INTEGER
Composed syntax:	INTEGER
Status:	current
Max access:	read-only
Value list:	1: initialize(1) 2: disconnected(2) 3: connecting(3) 4: authenticating(4) 5: authenticated(5) 6: aborting(6) 7: held(7) 8: forceAuth(8) 9: forceUnauth(9)
Reference:	9.4.1, Authenticator PAE state
Description:	The current value of the Authenticator PAE state machine.

Module: IEEE8021-PAE-MIB	
Name:	dot1xAuthBackendAuthState
Type:	OBJECT-TYPE
OID:	1.0.8802.1.1.1.2.1.1.2
Full path:	iso(1).std(0).iso8802(8802).ieee802dot1(1).ieee802dot1mibs(1).IEEE8021-PAE-MIB
Module:	IEEE8021-PAE-MIB
Parent:	dot1xAuthConfigEntry
Prev sibling:	dot1xAuthPaeState
Next sibling:	dot1xAuthAdminControlledDirections
Numerical syntax:	Integer (32 bit)
Base syntax:	INTEGER
Composed syntax:	INTEGER
Status:	current
Max access:	read-only
Value list:	1: request(1) 2: response(2) 3: success(3) 4: fail(4) 5: timeout(5) 6: idle(6) 7: initialize(7)
Reference:	9.4.1, Backend Authentication state
Description:	The current state of the Backend Authentication state machine.

Module: IEEE8021-PAE-MIB	
Name:	dot1xAuthAdminControlledDirections
Type:	OBJECT-TYPE
OID:	1.0.8802.1.1.1.2.1.1.3
Full path:	iso(1).std(0).iso8802(8802).ieee802dot1(1).ieee802dot1mibs(1).IEEE8021-PAE-MIB
Module:	IEEE8021-PAE-MIB
Parent:	dot1xAuthConfigEntry
Prev sibling:	dot1xAuthBackendAuthState
Next sibling:	dot1xAuthOperControlledDirections
Numerical syntax:	Integer (32 bit)
Base syntax:	INTEGER
Composed syntax:	PaeControlledDirections
Status:	current
Max access:	read-write
Reference:	9.4.1, Admin Control Mode
Description:	The current value of the administrative controlled directions parameter for the Port.

Module: IEEE8021-PAE-MIB	
Name:	dot1xAuthOperControlledDirections
Type:	OBJECT-TYPE
OID:	1.0.8802.1.1.1.2.1.1.4
Full path:	iso(1).std(0).iso8802(8802).ieee802dot1(1).ieee802dot1mibs(
Module:	IEEE8021-PAE-MIB
Parent:	dot1xAuthConfigEntry
Prev sibling:	dot1xAuthAdminControlledDirections
Next sibling:	dot1xAuthAuthControlledPortStatus
Numerical syntax:	Integer (32 bit)
Base syntax:	INTEGER
Composed syntax:	PaeControlledDirections
Status:	current
Max access:	read-only
Reference:	9.4.1, Oper Control Mode
Description:	The current value of the operational controlled directions parameter for the Port.

Module: IEEE8021-PAE-MIB	
Name:	dot1xAuthAuthControlledPortStatus
Type:	OBJECT-TYPE
OID:	1.0.8802.1.1.1.2.1.1.5
Full path:	iso(1).std(0).iso8802(8802).ieee802dot1(1).ieee802d
Module:	IEEE8021-PAE-MIB
Parent:	dot1xAuthConfigEntry
Prev sibling:	dot1xAuthOperControlledDirections
Next sibling:	dot1xAuthAuthControlledPortControl
Numerical syntax:	Integer (32 bit)
Base syntax:	INTEGER
Composed syntax:	PaeControlledPortStatus
Status:	current
Max access:	read-only
Reference:	9.4.1, AuthControlledPortStatus
Description:	The current value of the controlled Port status parameter for the Port.

Module: IEEE8021-PAE-MIB	
Name:	dot1xAuthAuthControlledPortControl
Type:	OBJECT-TYPE
OID:	1.0.8802.1.1.1.1.2.1.1.6
Full path:	iso(1).std(0).iso8802(8802).ieee802dot1(1).ieee802dot1x(1).ieee802dot1xAuth(1).ieee802dot1xAuthAuthControlledPortControl
Module:	IEEE8021-PAE-MIB
Parent:	dot1xAuthConfigEntry
Prev sibling:	dot1xAuthAuthControlledPortStatus
Next sibling:	dot1xAuthQuietPeriod
Numerical syntax:	Integer (32 bit)
Base syntax:	INTEGER
Composed syntax:	PaEControlledPortControl
Status:	current
Max access:	read-write
Reference:	9.4.1, AuthControlledPortControl
Description:	The current value of the controlled Port control parameter for the Port.

Module: IEEE8021-PAE-MIB	
Name:	dot1xAuthQuietPeriod
Type:	OBJECT-TYPE
OID:	1.0.8802.1.1.1.1.2.1.1.7
Full path:	iso(1).std(0).iso8802(8802).ieee802dot1(1).ieee802dot1x(1).ieee802dot1xAuth(1).ieee802dot1xAuthQuietPeriod
Module:	IEEE8021-PAE-MIB
Parent:	dot1xAuthConfigEntry
Prev sibling:	dot1xAuthAuthControlledPortControl
Next sibling:	dot1xAuthTxPeriod
Numerical syntax:	Gauge (32 bit)
Base syntax:	Unsigned32
Composed syntax:	Unsigned32
Status:	current
Max access:	read-write
Default values:	1: 60 (int)
Reference:	9.4.1, quietPeriod
Description:	The value, in seconds, of the quietPeriod constant currently in use by the Authenticator PAE state machine.

Module: IEEE8021-PAE-MIB	
Name:	dot1xAuthTxPeriod
Type:	OBJECT-TYPE
OID:	1.0.8802.1.1.1.2.1.1.8
Full path:	iso(1).std(0).iso8802(8802).ieee802dot1(1).ieee802dot1mibs(1)
Module:	IEEE8021-PAE-MIB
Parent:	dot1xAuthConfigEntry
Prev sibling:	dot1xAuthQuietPeriod
Next sibling:	dot1xAuthSuppTimeout
Numerical syntax:	Gauge (32 bit)
Base syntax:	Unsigned32
Composed syntax:	Unsigned32
Status:	current
Max access:	read-write
Default values:	1: 30 (int)
Reference:	9.4.1, txPeriod
Description:	The value, in seconds, of the txPeriod constant currently in use by the Authenticator PAE state machine.

Module: IEEE8021-PAE-MIB	
Name:	dot1xAuthSuppTimeout
Type:	OBJECT-TYPE
OID:	1.0.8802.1.1.1.2.1.1.9
Full path:	iso(1).std(0).iso8802(8802).ieee802dot1(1).ieee802dot1mibs(1).ieee
Module:	IEEE8021-PAE-MIB
Parent:	dot1xAuthConfigEntry
Prev sibling:	dot1xAuthTxPeriod
Next sibling:	dot1xAuthServerTimeout
Numerical syntax:	Gauge (32 bit)
Base syntax:	Unsigned32
Composed syntax:	Unsigned32
Status:	current
Max access:	read-write
Default values:	1: 30 (int)
Reference:	9.4.1, suppTimeout
Description:	The value, in seconds, of the suppTimeout constant currently in use by the Backend Authentication state machine.

Module: IEEE8021-PAE-MIB	
Name:	dot1xAuthServerTimeout
Type:	OBJECT-TYPE
OID:	1.0.8802.1.1.1.1.2.1.1.10
Full path:	iso(1).std(0).iso8802(8802).ieee802dot1(1).ieee802dot1mibs(1).ieee
Module:	IEEE8021-PAE-MIB
Parent:	dot1xAuthConfigEntry
Prev sibling:	dot1xAuthSuppTimeout
Next sibling:	dot1xAuthMaxReq
Numerical syntax:	Gauge (32 bit)
Base syntax:	Unsigned32
Composed syntax:	Unsigned32
Status:	current
Max access:	read-write
Default values:	1:30 (int)
Reference:	9.4.1, serverTimeout
Description:	The value, in seconds, of the serverTimeout constant currently in use by the Backend Authentication state machine.

Module: IEEE8021-PAE-MIB	
Name:	dot1xAuthMaxReq
Type:	OBJECT-TYPE
OID:	1.0.8802.1.1.1.1.2.1.1.11
Full path:	iso(1).std(0).iso8802(8802).ieee802dot1(1).ieee802dot1mibs(1).ieee
Module:	IEEE8021-PAE-MIB
Parent:	dot1xAuthConfigEntry
Prev sibling:	dot1xAuthServerTimeout
Next sibling:	dot1xAuthReAuthPeriod
Numerical syntax:	Gauge (32 bit)
Base syntax:	Unsigned32
Composed syntax:	Unsigned32
Status:	current
Max access:	read-write
Default values:	1:2 (int)
Reference:	9.4.1, maxReq
Description:	The value of the maxReq constant currently in use by the Backend Authentication state machine.

Module: IEEE8021-PAE-MIB	
Name:	dot1xAuthReAuthPeriod
Type:	OBJECT-TYPE
OID:	1.0.8802.1.1.1.2.1.1.12
Full path:	iso(1).std(0).iso8802(8802).ieee802dot1(1).ieee802dot1mibs(1).ieee802dot1mib(1).IEEE8021-PAE-MIB
Module:	IEEE8021-PAE-MIB
Parent:	dot1xAuthConfigEntry
Prev sibling:	dot1xAuthMaxReq
Next sibling:	dot1xAuthReAuthEnabled
Numerical syntax:	Gauge (32 bit)
Base syntax:	Unsigned32
Composed syntax:	Unsigned32
Status:	current
Max access:	read-write
Default values:	1: 3600 (int)
Reference:	9.4.1, reAuthPeriod
Description:	The value, in seconds, of the reAuthPeriod constant currently in use by the Reauthentication Timer state machine.

Module: IEEE8021-PAE-MIB	
Name:	dot1xAuthReAuthEnabled
Type:	OBJECT-TYPE
OID:	1.0.8802.1.1.1.2.1.1.13
Full path:	iso(1).std(0).iso8802(8802).ieee802dot1(1).ieee802dot1mibs(1).ieee802dot1mib(1).IEEE8021-PAE-MIB
Module:	IEEE8021-PAE-MIB
Parent:	dot1xAuthConfigEntry
Prev sibling:	dot1xAuthReAuthPeriod
Next sibling:	dot1xAuthKeyTxEnabled
Numerical syntax:	Integer (32 bit)
Base syntax:	INTEGER
Composed syntax:	TruthValue
Status:	current
Max access:	read-write
Default values:	1: false (name)
Reference:	9.4.1, reAuthEnabled
Description:	The enable/disable control used by the Reauthentication Timer state machine (8.5.5.1).

Module:	IEEE8021-PAE-MIB
Name:	dot1xAuthKeyTxEnabled
Type:	OBJECT-TYPE
OID:	1.0.8802.1.1.1.1.2.1.1.14
Full path:	iso(1).std(0).iso8802(8802).ieee802dot1(1).ieee802dot1mibs(1)
Module:	IEEE8021-PAE-MIB
Parent:	dot1xAuthConfigEntry
Prev sibling:	dot1xAuthReAuthEnabled
Numerical syntax:	Integer (32 bit)
Base syntax:	INTEGER
Composed syntax:	TruthValue
Status:	current
Max access:	read-write
Reference:	9.4.1, keyTransmissionEnabled
Description:	The value of the keyTransmissionEnabled constant currently in use by the Authenticator PAE state machine.