



# EIGRP MD5 Authentication



## CONFIGURATION

```
key chain EIGRP-KEYS
key 1
  accept-lifetime 00:00:00 january 01 2020 infinite
  key-string password 051B075A745B411B1D
  send-lifetime 00:00:00 january 01 2020 infinite
  cryptographic-algorithm MD5
!
!
router eigrp 10
  address-family ipv4
  router-id 1.1.1.1
  interface Loopback0
    passive-interface
  !
  interface GigabitEthernet0/0/0/0
    authentication keychain EIGRP-KEYS
  !
  !
  interface GigabitEthernet0/0/0/0
    ipv4 address 10.0.0.1 255.255.255.252
  !
!
```

```
key chain EIGRP-KEYS
key 1
  key-string 7 03145A5E53182E5E4A
  accept-lifetime 00:00:00 Jan 1 2020 infinite
  send-lifetime 00:00:00 Jan 1 2020 infinite
  cryptographic-algorithm md5
!
!
router eigrp 10
  network 2.2.2.2 0.0.0.0
  network 10.0.0.0 0.0.0.3
  eigrp router-id 2.2.2.2
!
!
interface GigabitEthernet1
  ip address 10.0.0.2 255.255.255.252
  ip authentication mode eigrp 10 md5
  ip authentication key-chain eigrp 10 EIGRP-KEYS
end
```

## VERIFICATION - XR

```
RP/0/RP0/CPU0:EIGRP-R1#show eigrp interfaces gigabitEthernet 0/0/0/0 detail
Tue Nov 29 20:13:17.082 UTC
```

```
IPv4-EIGRP Interfaces for AS(10)
```

Interface	Peers	Xmit Queue Un/Reliable	Mean SRTT	Pacing Time Un/Reliable	Multicast Flow Timer	Pending Routes
Gi0/0/0/0	1	0/0	39	0/10	152	0

Hello interval is 5 sec, hold time is 15 sec  
 BFD disabled, BFD interval 150 msec, BFD multiplier is 3  
 Next xmit serial <none>  
 Un/reliable mcasts: 0/2 Un/reliable ucasts: 4/6  
 Mcast exceptions: 0 CR packets: 0 ACKs suppressed: 2  
 Retransmissions sent: 2 Out-of-sequence rcvd: 1  
 Bandwidth percent is 50  
 Total packets received: 207  
**Authentication mode: MD5 Key chain: EIGRP-KEYS**  
 Current active key id: 1  
 Valid authenticated packets received: 57  
 Packets dropped due to wrong keychain config: 0  
 Packets dropped due to missing authentication: 87  
 Packets dropped due to invalid authentication: 0  
 Classic peers : 0, Wide peers: 1  
 Effective Metric:  
 Bandwidth: 1000000 Kbit, Delay: 10000000 picosecond,  
 Reliability: 255, Load: 1, MTU: 1500

```
RP/0/RP0/CPU0:EIGRP-R1#
```

## VERIFICATION - XE

```
EIGRP-R2#show ip eigrp 10 interfaces detail gigabitEthernet 1
EIGRP-IPv4 Interfaces for AS(10)
```

Interface	Peers	Xmit Queue Un/Reliable	PeerQ Un/Reliable	Mean SRTT	Pacing Time Un/Reliable	Multicast Flow Timer	Pending Routes
Gi1	1	0/0	0/0	41	0/0	164	0

Hello-interval is 5, Hold-time is 15  
 Split-horizon is enabled  
 Next xmit serial <none>  
 Packetized sent/expedited: 4/1  
 Hello's sent/expedited: 236/3  
 Un/reliable mcasts: 0/4 Un/reliable ucasts: 5/4  
 Mcast exceptions: 0 CR packets: 0 ACKs suppressed: 0  
 Retransmissions sent: 2 Out-of-sequence rcvd: 2  
 Topology-ids on interface - 0  
**Authentication mode is md5, key-chain is "EIGRP-KEYS"**  
 Topologies advertised on this interface: base  
 Topologies not advertised on this interface:

```
EIGRP-R2#
```