RADIUS – demo

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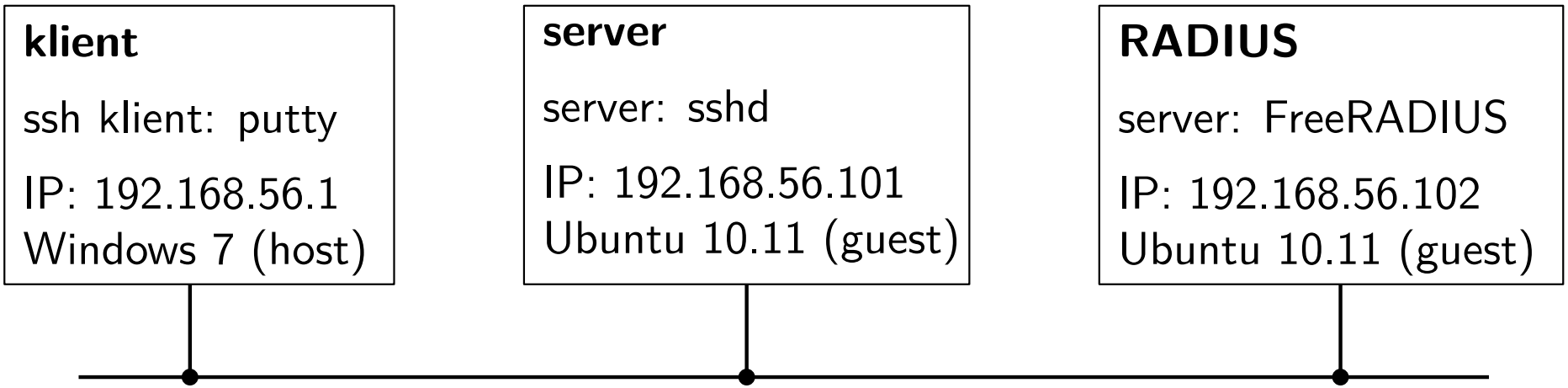
Setup



- server (časť súboru `shadows`):

```
root:!:15411:0:99999:7:::
daemon:*:15259:0:99999:7:::
martin:$6$jkLjyYa.................:15411:0:99999:7:::
sshd:*:15411:0:99999:7:::
euler:!:15412:0:99999:7:::
```

  ... používateľ *euler* so „zablokovaným“ heslom

RADIUS server

- definícia klienta (teda servera s sshd), `clients.conf`:

```
client test-sshd-server {
  ipaddr = 192.168.56.101
  secret = najtajnejsie
}
```

- definícia používateľa (len obyčajný súbor), `users`:

```
euler Cleartext-Password := "testing"
```

SSH server

- potrebný PAM modul pre RADIUS (`libpam_radius_auth`)
- pridanie RADIUS servera (`/etc/pam_radius_auth.conf`):

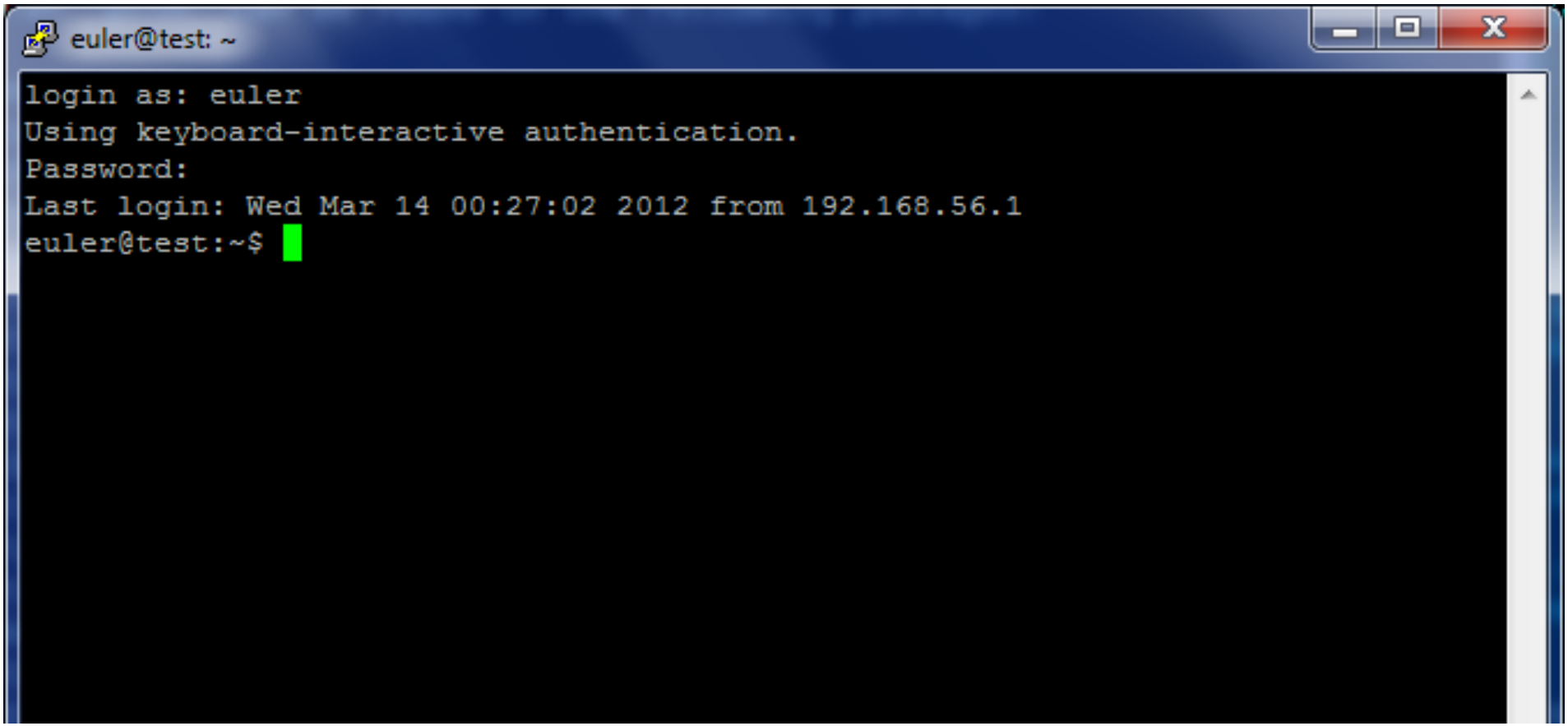
  ```
  192.168.56.102 najtajnejsie 1
  ```

- úprava PAM logiky pre sshd (`/etc/pam.d/sshd`):

  ```
  auth sufficient pam_radius_auth.so
  ```

- úpravy `/etc/ssh/sshd_config`

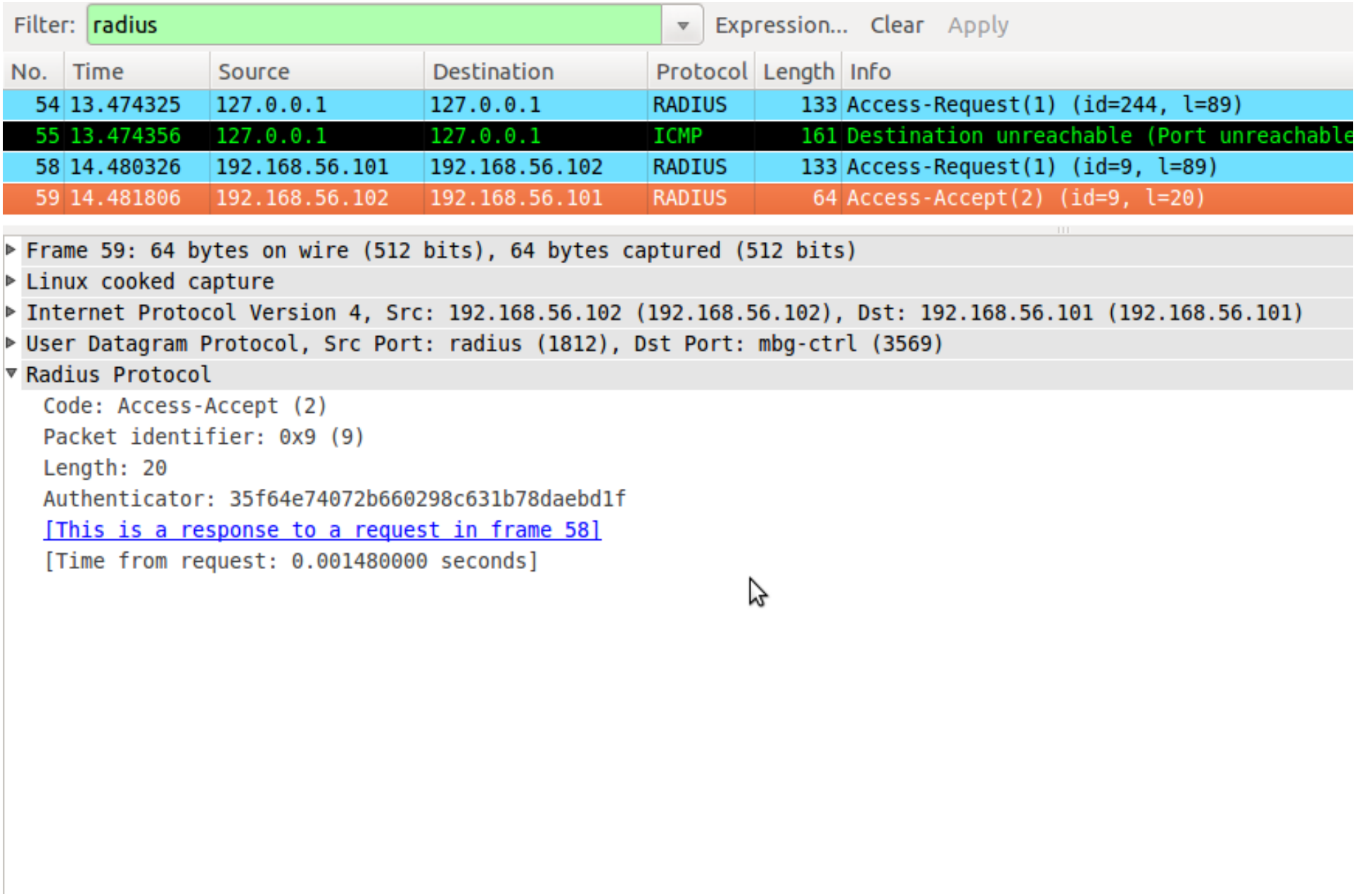
putty


euler@test: ~
login as: euler
Using keyboard-interactive authentication.
Password:
Last login: Wed Mar 14 00:27:02 2012 from 192.168.56.1
euler@test:~$

Filter: radius ▾ Expression... Clear Apply

No.	Time	Source	Destination	Protocol	Length	Info
54	13.474325	127.0.0.1	127.0.0.1	RADIUS	133	Access-Request(1) (id=244, l=89)
55	13.474356	127.0.0.1	127.0.0.1	ICMP	161	Destination unreachable (Port unreachable
58	14.480326	192.168.56.101	192.168.56.102	RADIUS	133	Access-Request(1) (id=9, l=89)
59	14.481806	192.168.56.102	192.168.56.101	RADIUS	64	Access-Accept(2) (id=9, l=20)

```
▸ Frame 58: 133 bytes on wire (1064 bits), 133 bytes captured (1064 bits)
▸ Linux cooked capture
▸ Internet Protocol Version 4, Src: 192.168.56.101 (192.168.56.101), Dst: 192.168.56.102 (192.168.56.102)
▸ User Datagram Protocol, Src Port: mbg-ctrl (3569), Dst Port: radius (1812)
▾ Radius Protocol
    Code: Access-Request (1)
    Packet identifier: 0x9 (9)
    Length: 89
    Authenticator: c08de524a5a05ea3ffe0680e9e76fe28
    [The response to this request is in frame 59]
  ▾ Attribute Value Pairs
    ▸ AVP: l=7  t=User-Name(1): euler
    ▾ AVP: l=18  t=User-Password(2): Encrypted
        User-Password: ▯(\202▯\033m\034▯▯hk\2309-D1
    ▸ AVP: l=6  t=NAS-IP-Address(4): 127.0.1.1
    ▸ AVP: l=6  t=NAS-Identifier(32): sshd
    ▸ AVP: l=6  t=NAS-Port(5): 2544
    ▸ AVP: l=6  t=NAS-Port-Type(61): Virtual(5)
    ▸ AVP: l=6  t=Service-Type(6): Authenticate-Only(8)
    ▸ AVP: l=14  t=Calling-Station-Id(31): 192.168.56.1
```


Filter: radius
Expression... Clear Apply
No. Time Source Destination Protocol Length Info
54 13.474325 127.0.0.1 127.0.0.1 RADIUS 133 Access-Request(1) (id=244, l=89)
55 13.474356 127.0.0.1 127.0.0.1 ICMP 161 Destination unreachable (Port unreachable
58 14.480326 192.168.56.101 192.168.56.102 RADIUS 133 Access-Request(1) (id=9, l=89)
59 14.481806 192.168.56.102 192.168.56.101 RADIUS 64 Access-Accept(2) (id=9, l=20)
Frame 59: 64 bytes on wire (512 bits), 64 bytes captured (512 bits)
Linux cooked capture
Internet Protocol Version 4, Src: 192.168.56.102 (192.168.56.102), Dst: 192.168.56.101 (192.168.56.101)
User Datagram Protocol, Src Port: radius (1812), Dst Port: mbg-ctrl (3569)
Radius Protocol
Code: Access-Accept (2)
Packet identifier: 0x9 (9)
Length: 20
Authenticator: 35f64e74072b660298c631b78daebd1f
[This is a response to a request in frame 58]
[Time from request: 0.001480000 seconds]