Latency

In the future generation wireless systems, the latency will become a key performance metric. Why it is becoming important?

- (●) Many applications will require high responsiveness in the interaction with the network
- ( ) Many applications will require high throughputs at the end users
- ( ) 1)
- ( ) The end users may have high mobility during their connection
- ( ) Many applications will use high data processing and computation

Multi-path

What is important to be modeled in the multipath happening in a wireless communication, to use it constructively?

- (●) The attenuations and the delays of the different paths

The attenuation of the line of sight path

The delay of the line of sight path

Only the attenuation and delay of the line of sight path

Outbound IPSec

With reference to the outbound processing performed by an IPSec peer:

the first database that is checked is the SPD in order to determine if the current packet requires security service

the first database that is checked is the SAD in order to determine the set of security algorithms to use to handle the current packet

the SPI is used to select the proper SA to use to process the incoming packet

the SPD and SAD are inspected only if the incoming packet requires IPSec processing

packet auth

In order to authenticate the entire IP packet, IPSec peers must use:

AH in tunnel mode

AH in transport mode

ESP with authentication in transport mode

it is not possible to authenticate all the header fields since some of them change value while transiting in the network

PON

Which are the benefits of the Passive Optical Networks compared to the Active ones?

The cost of the infrastructure is lower

It is possible to reach longer distances only with fibers

The traffic management is easier

We can avoid to use Optical Network Units at the user side

SA negotiation

Let us consider a TCP connection steered over an IPSec tunnel, then:

- (●) SAs might be re-negotiated while the flow is alive
- ( ) before negotiating new SAs, the security gateways need to wait for the TCP connection tear down
- ( ) SAs are re-negotiated only in case the IPSec sequence numbers overcome the maximum value
- ( ) SAs do not need to be negotiated if these have been statically configured

ssh port forwarding

What is the command to create a local port forwarding of local port 8080:

- ( ) ssh - NL local_p:host_ip_addr:remote_p user@tunnel_ip -p 8080
- ( ) ssh - NL remote_p:host_ip_addr:8080 user@tunnel_ip
- (●) ssh - NL 8080:host_ip_addr:remote_p user@tunnel_ip
- ( ) ssh - NL 8080:host_ip_addr:8080 user@tunnel_ip

VDSL

Which are the two improvements enabling the VDSL?

- (●) The vectoring of the signals in the copper cables and the placement of the DSLAM close to the end user
- ( ) The vectoring of the signals in the fibers cables that arrive till the end users
- ( ) The use of high frequencies in the copper cable band and the full cancellation of the cross-talk noise
- ( ) The use of high frequencies in the fiber optic cables and the vectoring of these signals

Invia richiesta