ipv_95 - 0.38

tion_96 - 0.38 ee_87 - 0.38

udp_68 - 0.38

ethernet_34 - 0.3

intradomain_279 - 0.41

burst_223 - 0.44 router_186 - 0.45

average -

bandwidth briefly -

packet switch

arp briefly -

latency ·

vlan ·

nat briefly -

firewall

socket

ssl tls briefly

tcp ip protocol suite -

dhcp briefly -

mac ·

switch -

hub -

rout table -

principles wireless network communication

on provide examples commonly network protocols respective purpose -

ac address logical address ip address function network communication -

egment network explain vlans work advantage network administration -

t network explain role gateway function perform network connectivity -

s servers discuss purpose proxy server network affect communication -

nultiple devices share single public ip address explain nat work benefit -

oday interconnect world explain role firewall network enhance security -

n internet communication discuss key protocols suite specific function -

ment ip address explain dhcp work advantage network administration -

ext network purpose domain dns dns resolve domain name ip address

agement explain subnetting help organize optimize network resources -

explain difference ipv ipv advantage ipv -

tcp establish terminate connections

explain difference hub switch router -

bgp border gateway protocol rout internet -

dmz demilitarize zone network security -

process packet transmit host network -

explain concept bandwidth throughput -

packet switch differ circuit switch -

network packet significance -

purpose arp network -

mac address network

dns domain work -

ssl secure sockets layer provide security network communications -

t modern network explain principles packet switch differ circuit switch -

data transmission explain network packet structure information carry -

col arp map ip address mac address discuss purpose arp work network -

cess different devices explain socket facilitate network communication -

nsport layer protocols compare contrast tcp udp term feature use case -

e determine optimal path data packets explain rout table network rout -

t network latency latency affect network responsiveness performance -

access private network explain vpn work significance network security -

derstand network protocols service interaction different network layer -

iguration parameters network devices simplify network administration -

nanisms establish secure communication tunnel remote users network -

n imap internet message access protocol retrieve email interact email -

al network segment enhance security simplify network administration -

ler protocols like ospf open shortest path bgp border gateway protocol -

challenge associate wireless network signal interference security risk -

provide connectivity bandwidth management local area network lans

manage network congestion guarantee bandwidth critical applications -

lities discuss common network security threats measure take mitigate -

ncept network virtualization benefit term resource utilization flexibility -

ology field network explain sdn discuss advantage potential challenge -

ance discuss benefit network segmentation methodologies implement

l ensure optimal network performance explain qos implement network -

rk design discuss factor consider design scalable network architecture -

context network troubleshoot common issue occur approach resolve -

rk performance discuss tool techniques network monitor management -

ss ddos attack orchestrate potential countermeasures mitigate impact -

t threat network explain do attack objectives potential impact network -

ommunication internet explain ssl tls ensure secure data transmission -

ences symmetric asymmetric encryption algorithms provide examples -

n wireless network operate discuss key considerations ensure security -

identify devices network discuss purpose ip address difference ipv ipv -

al role network communication explain mac address data transmission -

ork infrastructure plan decide use hub switch advantage disadvantage -

derstand network communication explain purpose seven layer interact -

de area network wan network support different business requirements -

explain role network facilitate communication devices organization -

ribute denial service ddos attack include orchestrate potential counter -

service do attack include objectives methods potential impact network -

ences symmetric asymmetric encryption algorithms provide examples -

overview rout table role determine optimal path data packets network -

andwidth network include measurement impact network performance -

te network vpn provide secure remote access private network internet -

purpose address resolution protocol arp map ip address mac address -

teristics transmission control protocol tcp user datagram protocol udp -

concept network protocol provide examples widely protocols network -

distinctions physical address mac address logical address ip address -

elaborate concept virtual local area network vlan segment network -

gateway facilitate communication different network function perform -

nslation nat role enable multiple devices share single public ip address -

otocol suite key protocols respective function network communication -

nic host configuration protocol simplify assignment ip address network -

role function domain dns translate domain name ip address -

subnetting work advantage offer term network management

highlight primary distinctions ipv ipv term address functionality

purpose ip address assist identify devices network -

concept mac address significance network communication -

outline disparities hub switch term operation effectiveness -

osi model specific function perform seven layer -

router function network role play direct data packets

purpose network facilitate communication devices -

vlan virtual local area network explain work -

nat network address translation work -

purpose firewall work -

explain osi model layer -

subnet mask work -

difference tcp udp protocols use -

make network effective efficient

criteria check network reliability -

advantage distribute process -

mean network topology

0.0

different factor affect performance network -

explain key differences local area network lan wide area network wan -

proxy server act intermediary clients servers network

purpose firewall network enhance network security -

socket enable communication process different devices network -

wireless network operate key considerations ensure security -

latency context network affect network responsiveness

principles function packet switch differ circuit switch -

network packet include structure information carry -

ssl tls protocols ensure secure communication internet -

network function router determine path data packets -

difference router switch -

nat use network configurations -

difference tcp udp protocols -

purpose dhcp network -

dns function

subnet work -

difference ipv ipv

role router network -

firewall important -

concept bandwidth network communication -

network protocol provide example -

difference mac ip address -

concept vlan benefit -

role proxy server -

explain difference public ip address private ip address -

purpose arp address resolution protocol work -

dhcp dynamic host configuration protocol work -

concept network latency impact -

number available address feature introduce ipv address limitations ipv -

ication external network translate private ip address public ip address -

itate map human readable domain name machine readable ip address -

ed security rule protect unauthorized access potential security threats -

ient vs connectionless communication suitability different applications -

ring bus term ability handle traffic fault tolerance ease administration -

e network smaller subnetworks enhance network efficiency scalability -

ata packets different network examine ip address make rout decisions -

Comaprison of Models

burst_223 - 0.58 subnet_185 - 0.58 bandwidth_145 - 0.6 switching_92 - 0.58 delay_54 - 0.6

arp_73 - 0.53

lan_166 - 0.47

nics_330 - 0.44

tion_96 - 0.44 ee_87 - 0.44

server_112 - 0.43

nat_128 - 0.44

physical_83 - 0.46 arp_73 - 0.45

subnet_185 - 0.47

ssl_146 - 0.47

flow_65 - 0.49

chip_139 - 0.49 communicate_177 - 0.5

copyright_105 - 0.5 delay_54 - 0.49

padded_189 - 0.49 osi_168 - 0.48

certificate_129 - 0.44

delay_54 - 0.38

youtube_227 - 0.4

ipv_95 - 0.39

port_29 - 0.39

procedure_130 - 0.38 firewall_118 - 0.38

rfc_51 - 0.39

ip_20 - 0.4

solution_75 - 0.4

udp_68 - 0.38

delay_54 - 0.36

model_122 - 0.36

server_112 - 0.34

segment_148 - 0.29

ieee_196 - 0.31

firewall_118 - 0.3

public_173 - 0.33

gigabit_239 - 0.32

lan_47 - 0.31

lan_47 - 0.37

delay_54 - 0.37

udp_68 - 0.38

ip_20 - 0.36

ospf_97 - 0.36

nat_128 - 0.36

intradomain_279 - 0.36

arp_73 - 0.38

iv_56 - 0.39

udp_68 - 0.39

bandwidth_145 - 0.37

interconnected_178 - 0.39

0.4

ipv_95 - 0.4

alice_5 - 0.37

dns_1 - 0.36

rfc_51 - 0.36

layer_25 - 0.35

dns_1 - 0.32

ipv_95 - 0.33

lan_47 - 0.32

flow_65 - 0.31

reliable_266 - 0.29

0.2

broadcast_325 - 0.41

protocol_15 - 0.42

dct_314 - 0.36

qos_320 - 0.33

ospf_97 - 0.33

email_217 - 0.34

gigabit_239 - 0.33

model_122 - 0.33

gigabit_239 - 0.34

udp_68 - 0.42

flow_65 - 0.43

advantage_176 - 0.42

certificate_129 - 0.43 server_112 - 0.44

ct_259 - 0.44 table_265 - 0.44

physical_83 - 0.45 arp_73 - 0.44 arp_73 - 0.43

vlan_76 - 0.46

checksum_144 - 0.45

wireless_147 - 0.46

qos_320 - 0.47

firewall_118 - 0.38

hub_210 - 0.43

mac_197 - 0.43

physical_83 - 0.36 arp_73 - 0.35

arp_73 - 0.32

copyright_105 - 0.48 delay_54 - 0.48

rfc_51 - 0.5

vlan_76 - 0.5

procedure_130 - 0.49 firewall_118 - 0.49 firewall_118 - 0.48

udp_68 - 0.5

router_120 - 0.53 nat_128 - 0.53

subnet_185 - 0.53

ospf_97 - 0.52

rfc_51 - 0.58 ttl_53 - 0.57

iv_56 - 0.59

nics_330 - 0.59

physical_83 - 0.63 arp_73 - 0.63

ee_87 - 0.65 bandwidth_145 - 0.64

introduction_183 - 0.63 vpn_170 - 0.64

introduction_183 - 0.69

area_64 - 0.76

udp_68 - 0.75

introduction_183 - 0.74

vpn_170 - 0.74

udp_68 - 0.61

vpn_170 - 0.61

protocol_15 - 0.61

fig_100 - 0.62

cache_14 - 0.58

cache_14 - 0.57

ethernet_34 - 0.54 broadcast_325 - 0.56

physical_83 - 0.56 arp_73 - 0.56

button_195 - 0.56 router_186 - 0.57

ap_218 - 0.56 measurement_234 - 0.56

cookie_149 - 0.57

encryption_167 - 0.61

delay_94 - 0.59

cryptography_81 - 0.57

ap_218 - 0.57

arp_73 - 0.55

cell_256 - 0.54 ospf_97 - 0.53

cache_14 - 0.52

subnet_185 - 0.5

terminology_231 - 0.49

nics_330 - 0.46

padded_189 - 0.45 osi_168 - 0.46

solution_75 - 0.45

advantage_176 - 0.45

fig_50 - 0.47

lan_166 - 0.48

vlan_76 - 0.53

ap_218 - 0.51

Prediction

measurement_234 - 0.51

ap_218 - 0.52

measurement_234 - 0.52

tion_96 - 0.56 ee_87 - 0.56

nat_128 - 0.55

procedure_130 - 0.55 firewall_118 - 0.55

iv_56 - 0.58 ip_20 - 0.57

router_120 - 0.64 nat_128 - 0.65

udp_68 - 0.62

burst_223 - 0.62

ap_218 - 0.62

advantage_176 - 0.6 advantage_176 - 0.61

measurement_234 - 0.62

subnet_185 - 0.59

0.6

procedure_130 - 0.71

area_64 - 0.73 udp_68 - 0.73

8.0

firewall_118 - 0.71

firewall_118 - 0.7

padded_189 - 0.7

firewall_118 - 0.55

measurement_234 - 0.57

physical_83 - 0.59 arp_73 - 0.59

udp_68 - 0.58

vpn_170 - 0.62

cache_14 - 0.62 protocol_15 - 0.62

delay_94 - 0.65 switching_92 - 0.65

> area_64 - 0.66 udp_68 - 0.66

switching_92 - 0.59

cache_14 - 0.54 protocol_15 - 0.55

qos_320 - 0.54

ssl_146 - 0.53

checksum_144 - 0.52

padded_189 - 0.52

checksum_144 - 0.51 wireless_147 - 0.52

sublayer_80 - 0.54

wireless_147 - 0.54

cryptography_81 - 0.54

tion_96 - 0.49 ee_87 - 0.48

lan_166 - 0.42

nics_330 - 0.44

model_122 - 0.43

smtp_110 - 0.45 hub_210 - 0.46

spam_158 - 0.46

tion_96 - 0.47 ee_87 - 0.47

copyright_105 - 0.47 delay_54 - 0.47

ip_20 - 0.49

vlan_76 - 0.48

certificate_129 - 0.45 intradomain_279 - 0.45

router_120 - 0.44 nat_128 - 0.45

udp_68 - 0.44

physical_83 - 0.42 arp_73 - 0.42

arp_73 - 0.42

route_88 - 0.45

fig_50 - 0.45

switching_92 - 0.46

dns_1 - 0.56

smtp_110 - 0.53

router_120 - 0.53 nat_128 - 0.53

arp_73 - 0.52

cookie_149 - 0.55

rfc_51 - 0.56 ttl_53 - 0.54

vlan_76 - 0.56

arp_73 - 0.58

copyright_105 - 0.67 delay_54 - 0.68 band_3 - 0.67 ssl_146 - 0.6 udp_68 - 0.55 physical_83 - 0.57 arp_73 - 0.56 checksum_201 - 0.59 mac_197 - 0.6

cookie_149 - 0.68 ssl_146 - 0.67 udp_68 - 0.69 udp_68 - 0.68 bridge_179 - 0.58 bridge_179 - 0.58 ct_259 - 0.66 table_265 - 0.66 table_265 - 0.57 cache_14 - 0.62 protocol_15 - 0.63

checksum_144 - 0.69 wireless_147 - 0.7 udp_68 - 0.6 physical_83 - 0.66 arp_73 - 0.66 arp_73 - 0.62 hub_210 - 0.64

ospf_97 - 0.7 terminology_231 - 0.62 dns_1 - 0.63 ee_87 - 0.72 bandwidth_145 - 0.7 rfc_51 - 0.66 ttl_53 - 0.65 delay_94 - 0.69 switching_92 - 0.69

delay_94 - 0.73 switching_92 - 0.73 physical_83 - 0.74 arp_73 - 0.74 arp_73 - 0.72 area_64 - 0.71 udp_68 - 0.7

cell_256 - 0.8 cache_14 - 0.76 protocol_15 - 0.77

introduction_183 - 0.82

vpn_170 - 0.85 procedure_130 - 0.78 firewall_118 - 0.78 firewall_118 - 0.77 burst_223 - 0.81 subnet_185 - 0.83 subnet_185 - 0.78

No Length Ngram Correlation

ee_87 - 0.83

introduction_183 - 0.82

delay_94 - 0.82 switching_92 - 0.82

router_120 - 0.82 nat_128 - 0.82

vpn_170 - 0.85

vpn_170 - 0.9

procedure_130 - 0.89 firewall_118 - 0.89 firewall_118 - 0.89

ip_20 - 0.87

switching_92 - 0.87

smtp_110 - 0.87

iv_56 - 0.93 ip_20 - 0.93

fig_50 - 0.98 lan_47 - 0.98

bandwidth_145 - 0.8

physical_83 - 0.76 arp_73 - 0.77 arp_73 - 0.76

nat_128 - 0.77

port_29 - 0.76

tcp_107 - 0.76

delay_94 - 0.78 switching_92 - 0.78

hub_210 - 0.79

hub_210 - 0.81

mac_197 - 0.72

1.0