



N through T Commands

`pvr ceegu/itqwr. rcig 5`

`pvr cmqy oqfg rtkxcvg. rcig 8`

`pvr cwjgpvkecvg. rcig 9`

`pvr cwjgpvkecvkqp/mg{. rcig 32`

`pvr dtqfecuv. rcig 35`

`pvr dtqfecuv enkpv. rcig 37`

`pvr dtqfecuvfgncU`

`fgnR`

`vfg`

pvr wrfcvg/ecngpfct. rcig 82

ujqy dwhhgtu ngcm. rcig 84

ujqy dwhhgtu wpg. rcig 87

ujqy dwhhgtu wucig. rcig 89

ujqy ecngpfct. rcig 8;

ujqy enqem. rcig

ntp access-group

Command History

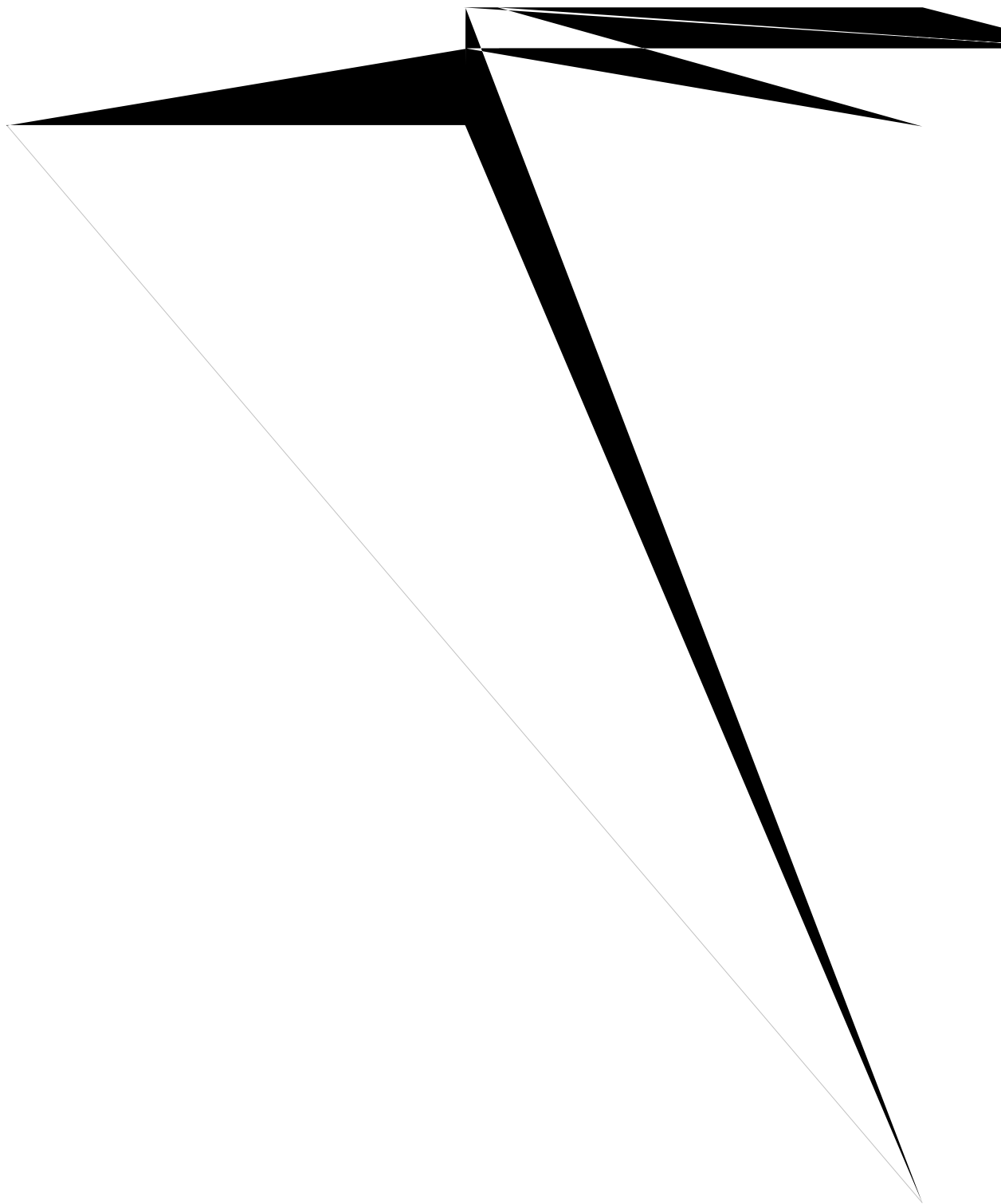
kh {qw fq pqv urgek{ vjg **krx6** qt **krx8** mg{ yqtf. vjg kRx6 ceeguu nkuv ku eqphkiwtgf d{ fghcwnv0 Kp Ekueq KQU
ZG Tngcug 507U cpf ncvgt tngcugu. vjg **ujqy twppki/eqphki** eqo o cpf

ntp allow mode private



ntp authenticate

Vq gpedng Pgv y qtm Vko g Rtqvqeql *PVR+ cwvjgpvkecvkqp. wug vjg **pvr cwvjgpvkecvg** eq o o cpf kp vjg inqdcn eqphki wtecvkqp o qfg0 Vq fkucdng PVR cwvjgpvkecvkqp.



ntp authentication-key

Vq fghkpg cp cwvjgpvkecvkqp mg{ hqt Pgv y qtm Vk o g Rtqvqeql *PVR+. wug v jg **pvr cwvjgpvkecvkqp/mg**{ eq o o c p f
kp inqdcn eqphki wtcvkqp o qfg0 Vq tg o qxg v jg cwvjgpvkecvkqp mg{ hqt PVR. wug v jg **pq** hqt

Related Commands

ntp broadcast client

v

ntp broadcastdelay

Vq ugv vjg guvk o cvgf tqwpf/vtkr fgnc{ dgvy ggp vjg Ekueq KQU uqhvy ctg cpf c

Vjg PVR ugtxkeg ecp dg cevkxcvgf d{ gpvgtkpi cp{ **pvr** eqo ocpf0 Yjgp {qw wug vjg **pvr**
dt

ntp clear drift

Vq tguy vjg ftkh xcnwg uvqtgf

ntp clock-period



Usage Guidelines

Fq pqv

ntp logging

vq

ntp master

Vq eqphki wtg vjg Ekueq KQU uqhv yctg cu c Pgv yqtm Vko g Rtqvqeqn *PVR+ o cuvgt enqem vq y jkej rggtu
u{pej tqpk|g vjg o ugnxgu y jgp cp gzvgtpcn PVR

Related Commands

Eq o c p f	Fguetkrvkqp
	Eqphkiwtgu vj

ntp max-associations

Vq

Usage Guidelines

Vjg

ntp maxdistance

Vq eqphkiwtg c oczkowo fkuvcpeg vjtgujqnf xcnwg vq iqxgtp vjg pwo dgt qh rcemgvu tgsuktgf hqt u{pejtqpk|cvkqp qh rggtu kp Pgv yqtm Vko g Rtqvqeqn xgtukqp 6 *PVRx6+. wug vjg **pvr oczfkuvcpeg** eq o ocpf kp inqden eqphkiwtcvkqp oqfgl Vq ugv vjg oczkowo fkuvcpeg vjtgujqnf vq vjg fghcwmv xcnwg. wug vjg **pq** hqt o qh vjku eq o ocpf0

pvr oczfkuvcpeg vjtgujqnf)

g

kh {qw jcf kuwgf vjg pvr o czflucpeg

ntp multicast

Vq eqphkiwtg

ntp multicast client

Vq eqphki wtg vjg u{uvgo vq tgegkxg Pgyyqtm Vkog Rtqvdeqn *PVR+ o wnvkecuu rcemgyu qp c urgekhhgf kpvgtbceg.
wug vjg **pvr** o **wnvkecuu** **enkgpv** eq o o c p f

Eq o o cpf	Fguetkrvkqp
	Eqphkiwtgu vjg urgekkgf kpvghceg vq tgegkxg PVR dtqcfecuv rcemgyu()

ntp orphan

Vq gpcdng

Related Commands

Command	Description
	Eqphk i wtgu v jg uqhv y ctg enqem vq

ntp passive

Vq

Examples

Vjg hqmqkpi gzcOrng uQyu jgy vq eqphkiwtg rcuukxg PVR cuuqekcvkqpu<

Kh {qw jcf kuuwgf vjg **pvr rggt** eqo o cpf cpf {qw pqy ycpv vq tgoqxg pqv qpn{ vjku tguvtkevqap. dwv cnuq cnn
PVR hwpevkqpu htqo vjg fgxkeg. wug vjg **pq pvr** eqo o cpf ykvjqwv cp{ mg{ yqtfu qt ctiwo gpvu0



Note

Kh {qw wug vjg **pq pvr** eqo o cpf ykvjqwv mg{ yqtfu qt ctiwo gpvu kp inqdcn eqphkiwtcvkqp oqfg. cnn PVR
eqphkiwtcvkqpu ctg tgoqxgf cpf vjg PVR ugtxkeg qp vjg fgxkeg ku fkucdngf0

Examples00

ntp refclock

v

Command History

Vq vgtokpcvg vjg

ntp server

Vq eqphki wtg c tqwgt vq cmqy kvu uqhv yctg enqem

Y jgp {qw gpygt vjg **pq pvr ugtxgt** eq o o cpf.

ntp source

Vq

wugf cu vjg fgukpcvkqp hqt tgrn{ rcemgvu0 kh vjg

ntp trusted-key

Vq cwwjgpkvkecvg vjg kfgpkv{ qh c u{uwg o vq y jkej Pgv y qtm Vko g Rtqvqeqn *PVR+ y kmn

Release	Modification
3704*5+V	Vjku eqo o c p f y c u o q f k h k g f 0 V j g / g p f / m g l / p w o d g t c t i w o g p v y c u c f f g f 0

Usage Guidelines

ntp update-calendar

Vq rgtkqfkecm{ wrfcvg vjg jctf yctg enqem

urgekkgf d{ vjg PVR uqwtg0 Vjg jctf yctg enqem

show buffers leak

Vq fkurnc{ vjg fgvcnu qh cm vjg dwh

show buffers tune

Vq flurnc{ vjg

Related Commands

show buffers usage

Vq fkrnc{ vjg

S|↑âæã ~à Ñ|ààæãb |bæã â] *á'←æ\b &æ^æãá\æã â]

show calendar

Vq fkurnc{ vjg ewttgpy vk o g cpf fcvg ugwkpi hqt vjg jctfyctg enqem. wug vjg **ujqy ecngpfct** eq o o cpf kp GZGE oqfg<

ujqy ecngpfct

Syntax Description

Vjku eq o o cpf jcu pq ctiwo gpvu qt mg{ yqt fu0

Command Modes

GZGE

Command History

Release	Modification
3202	Vjku eq o o cpf ycu kpvtqfwegf0

E`FIGÈFNÎÈFĜÈÍÍ FÌGÈFNÎÈFÈFFF Ć ĆG FGÎ ĆÍÍ ÍÈÌ FFÈFÎ ĆÈN
E ↑áb\æã Çb|^'æädÊ Æ ↑áb\æã Ç|^b|^'æädÊ É bæ→æ'\æäÊ Ê 'á^á↔ää\æÊ ~'^~^à↔&|ãæã
Vjg hqmkykpi vcdng fguetkdgu vjg uki pkhkecpv hknfu uj qyp kp vjg fkurc{0

Table 3: show ntp associations Field Descriptions

à↔\æää~ä K €ÈI€ FÈHÎ GÈHJ

show ntp info

Vq fkurnc{ uvcvke kphqt o cvkqp cdqww Pgv y qtm Vko g Rtqv qeqn *PVR+ gpvkkgu.

Vjg hqmqykpi ku uc o ring qwrww htq o vjg **ujqy pvr rcemgvu o qfg enkgpv** eq o o cpf<

Ææ{↔'æÀ **ujqy pvr rcemgvu oqfg enkgpv**

S* Ø^ *á'←æ\b '→æ^\\i H€

S* Š|\ *á'←æ\b '→æ^\\i I€

Vjg hqmqykpi ku uc o ring qwrww htq o vjg **ujqy pvr rcemgvu o qfg rcuukxg** eq o o cpf<

Ææ{↔'æÀ **ujqy pvr rcemgvu oqfg rcuukxg**

S* Ø^ *á'←æ\b b|↑↑æ\ã↔'Ë*ább↔{æi H€

S* Š|\ *á'←æ\b b|↑↑æ\ã↔'Ë*ább↔{æi I€

Vjg hqmqykpi ku uc o ring qwrww htq o vjg **ujqy pvr rcemgvu o qfg ugtxgt** eq o o cpf<

Ææ{↔'æÀ **ujqy pvr rcemgvu oqfg ugtxgt**

S* Ø^ *á'←æ\b bæã{æãi €

S* Š|\ *á'←æ\b bæã{æãi €

Vjg hqmqykpi O pi

Table 7: show ntp status Field Descriptions

show snmp

Vq ujqy kphqt o cvkqp cdqww vjg Uko ring Pgv y qtm Vk o g Rtqv qeqn *UPVR+. wug vjg **ujqy upvreq** o o cpf kp GZGE o qfg qp c Ekueq 3225. Ekueq 3226. Ekueq 3227. Ekueq 3822. Ekueq 3942. qt Ekueq 3972 tqwvgtl)

ujqy upvr

<u>Syntax Description</u>	Vjku eqo o cpf
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Field	Description
Decuv	Κρfkecvgu c dtqcfeuv ugtxgtl

Related Commands

show time-range

Vq flurnc{ kphqt o cvkqp cdqww eqphkiwtgf vk o g tcpigu. wug vjg **ujqy vk o g/tcpig** eq o o cpf

sntp broadcast client

FÍĚGFĚĜĬĚĜĤ H Ĝ eeiĚiĜW UJ^'æä Ñ'áb\
Ñă~áä'áb\ '→æ^ \ ↑~äæ ↔ æ^áâ→æäĚ

sntp logging

Vq gpcdng Uko ring Pgyvqtm Vko g Rtqvdeqn *UPVR+ o guucig nqi ikpi. wug

Р~|æää
еиієиіџи

sntp server

v

sntp source-interface

time-period

Vq ugv vjg vk o g kpetg o gpv hqt cwvq o cvkecm{ ucxkpi ep ctejkxg hkng qh vjg ewttgpn twppkpi eqphki wtcvkqp kp vjg Ekueq eqphki wtcvkqp ctejkxg. wug vjg **vk o g/rgtkqf** eq o o cpf kp ctejkxg eqphki wtcvkqp o qfg⁰ Vq flucdnq vjku hwpevkqp. wug vjg **pq** hqt o qh vjku eq o o cpf⁰

vk o g/rgtkqf *okpwwgu*

pq vk o g/rgtkqf

Kh vj ku eq o o cpf ku eqphki wtgf. cp ctejkxg hkng qh vjg ewttgpn twppkpi eqphki wtevkqp ku cwvq o cvkecm{ ucxgf chvgt
vjg ikxgp vk o g urgekhhkf d{ vjg *okpwygu* ctiwo gpn⁰ Ctejkxg hkngu eqpvkpwg vq dg cwvq o cvkecm{ ucxgf cv vjku
ikxgp vk o g kpetg o gpn wvkn vjku hwpevkqp ku fkucdnf⁰ Wug vjg **o c z k o w o** eq o o cpf vq ugv vjg o c z k o w o p w o d g t
qh

time-range

Vq gpedng vk o g/tcp i g eqphki wtevkqp o qfg cpf fghkpg vk o g tcp i gu hqt hwpevkqpu *uwej cu gzvqpf gf ceeguu nkuvu+.
wug vjg vk o g/tcp i g eq o o cpf kp

Chvgt vjg vk **og/tcpig** eq o ocpf. wug vjg **rgtkqfle** vk og/tcpig eqphki wtcvkqp eq o ocpf. vjg **cduqvwg** vk og/tcpig eqphki wtcvkqp eq o ocpf. qt uq og eq o dkpcvkqp qh vjgo vq fghkpg y jgp vjg hgcvwtg ku kp ghggev0 O wnvkrng **rgtkqfle** eq o ocpfu