Pixelflut v6

Sebastian Bernauer

oftware

'ixelflut vb

Netzarchitektur

Pixelflut v6 As fast as possible?

Sebastian Bernauer

August 29, 2019

Inhalt

Pixelflut v4
Software

Pixelflut v6

Netzarchitektur

Pixelflut v6

Sebastian Bernauer

elflut v4 tware

Pixelflut v4

Pixelflut v6

Sebastian Bernauer

Pixelflut v4

Disselfter .

► ASCII-Befehle über TCP, Zeile für Zeile

Verwendung

echo "PX x y rrggbb[aa]" | nc 127.0.0.1 1234

Software

- Server: shoreline von TobleMiner
 - ▶ 37G
 - https://github.com/TobleMiner/shoreline
- ► Client: sturmflut
 - ▶ 80G
 - https://github.com/TobleMiner/sturmflut

Pixelflut v6

Sebastian Bernauer

Software

Pixelflut v

Pixelflut v6

Das Format der zu sendenden IPv6-Adresse:

- ▶ 64 bit festes Prefix
- ▶ 16 bit X-Koordinate
- ▶ 16 bit Y-Koordinate
- ▶ 8 bit R
- ▶ 8 bit G
- ► 8 bit B
- ▶ 8 bit Padding

Gesamt ergibt sich: Prefix:XXXX:YYYY:RRGG:BBPP

Pixelflut v6

Sebastian Bernauer

elflut v4

Pixelflut v6

Beispiel

Beispiel

ping 4000:42:0:0:0505:ffaa:ccff

- ► Netz: 4000:42::/64
- ► X = 5
- ► Y = 5
- ► Farbe: 0xffaacc

Pixelflut v6

Sebastian Bernauer

ixelflut v4 ioftware

Pixelflut v6

Netzarchitektur

Pixelflut v6

Sebastian Bernauer

ixelflut v ioftware

-ixemut vo

Netzarchitektur

▶ Neighbor Discovery von > 2 Millionen IPv6 Adressen (Full HD)?

Netzarchitektur

Pixelflut v6

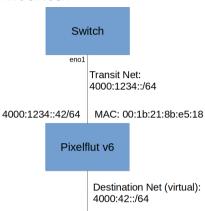
Sebastian Bernauer

oftware

Pixelflut v

- ▶ Neighbor Discovery von > 2 Millionen IPv6 Adressen (Full HD)?
 - \rightarrow Nein!

Netzarchitektur



Configuration for switch::

(optional) ip -6 addr add 4000:1234::1/64 dev eno1 ip -6 neigh add 4000:1234::42 lladdr 00:1b:21:8b:e5:18 dev eno1 ip -6 route add 4000:42::/64 dev eno1 nexthop via 4000:1234::42

The clients must send their packets to 4000:42::xxxx:yyyy:rrgg:bb00

Pixelflut v6

Sebastian Bernauer

oftware

Pixelflut v6