

HAMNET DL

„Was bisher geschah“ und „Wie geht es weiter?“

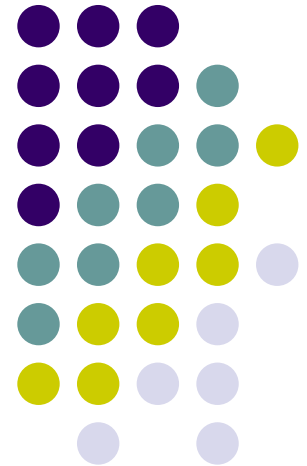


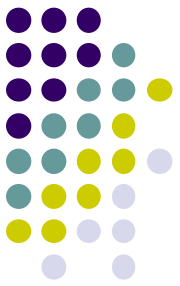
Egbert Zimmermann

DD9QP

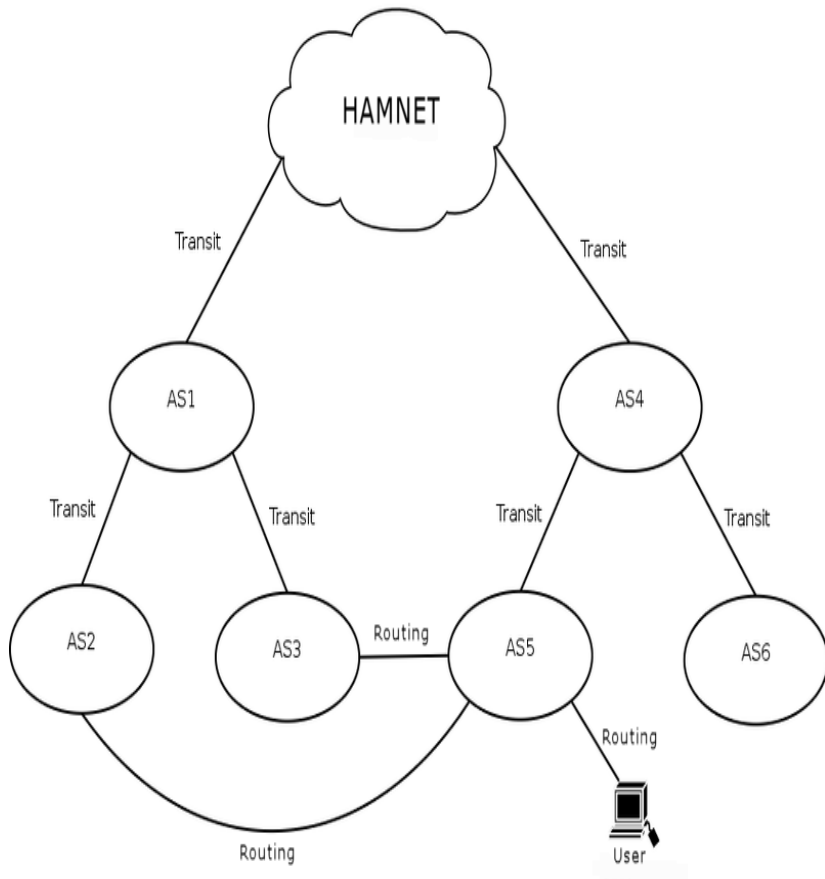
Thomas Osterried

DL9SAU



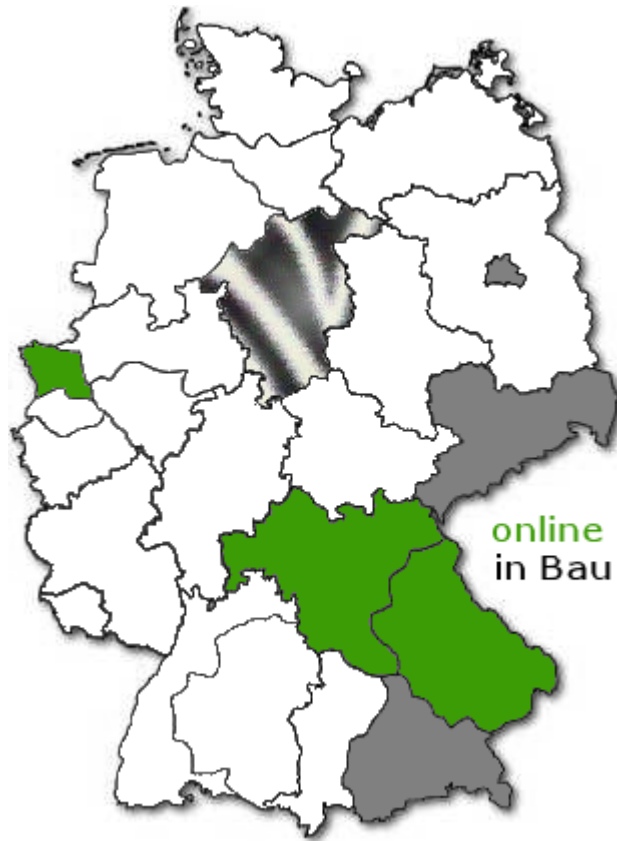
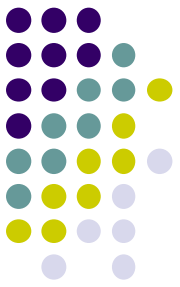


HAMNET DL: Peeringnetz

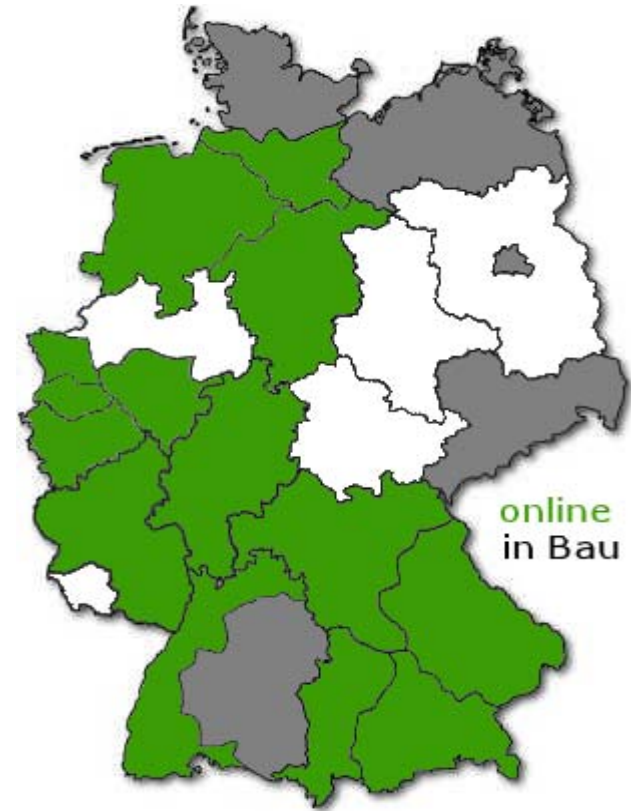


- Direkter Zusammenschluss von IP-Netzen um Datenaustausch zwischen 2 Partnern (AS) kostenneutral zu routen.
- Autonome Systeme (AS) sind ein Zusammenschluss von Netzen, die über eine gemeinsame Administration verfügen.
- Gemeinsame Sprache: TCP/IP + BGP4-Routing

HAMNET DL: Netzausbau

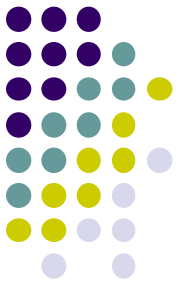


Stand: 28.09.2009



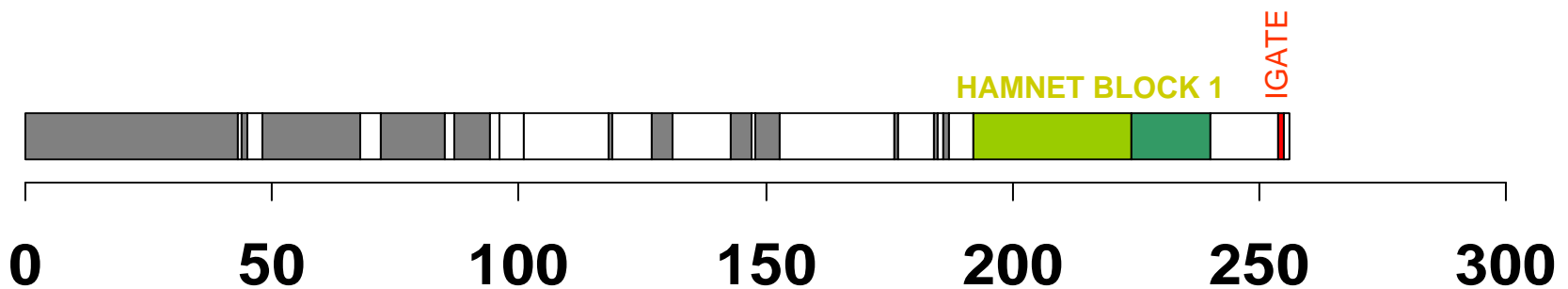
Stand: 02.04.2011

HAMNET DL: IPv4-Netze (alt)

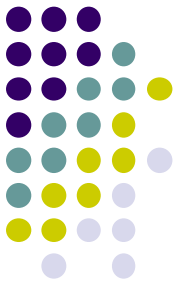


IPv4-Vergabe in Deutschland
44.130.0.0/16
(bis April 2010)

HAMNET hier langfristig zu klein!



HAMNET DL: IPv4-Netze

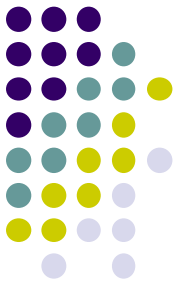


HAMNET DL bekommt neuen Netzblock (Brian Kantor WB6CYT)

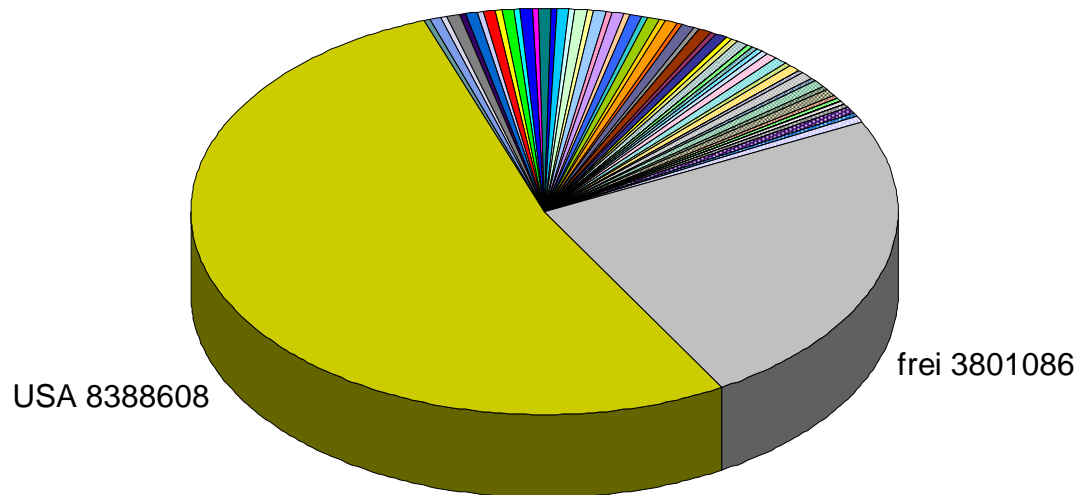
```
AMPRNet IP address coordinators as of 1 May 2010
# ...
# International subnet coordinators by country
# ...
44.130/16   Germany
            DD9QP      Egbert Zimmermann
            DL3SBB     Thomas Maisl
            DL9SAU     Thomas Osterried
#
# ...
#
44.224/15  GERMANY HAMNET (Higspeed AMateur-radio NETwork)
            DD9QP      Egbert Zimmermann
            DL3SBB     Thomas Maisl
            DL9SAU     Thomas Osterried
```

Quelle: <http://www.ampr.org/amprnets.txt>

HAMNET DL: IPv4-Netze (alt)

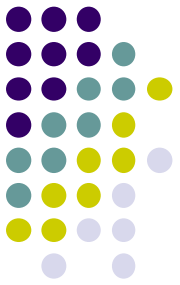


Vergaben im AMPR.ORG Netz 44/8 (April 2010)

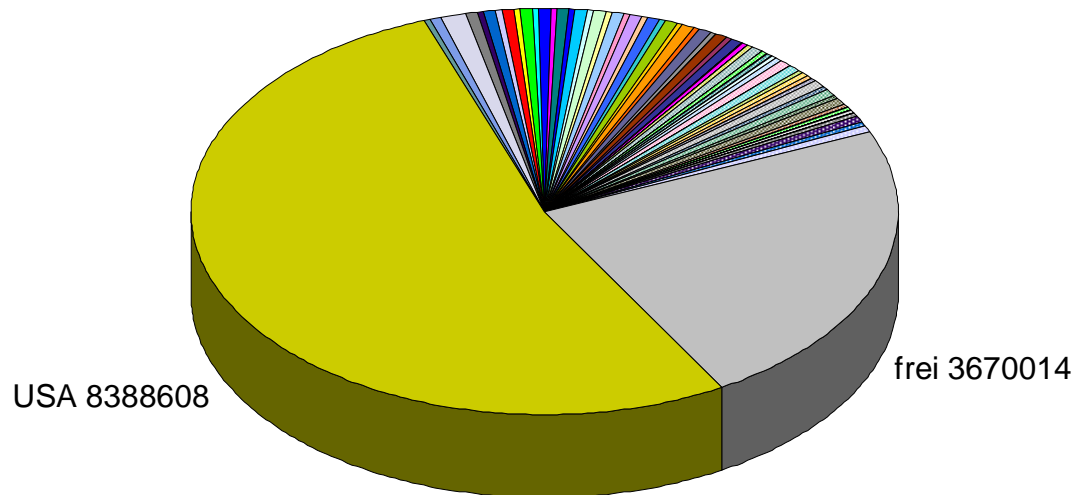


Deutschland hatte bis April 2010 65536 IP-Adressen

HAMNET DL: IPv4-Netze

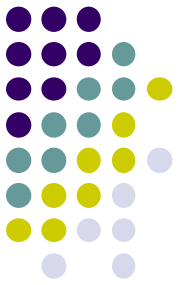


Vergaben im AMPR.ORG Netz 44/8 (April 2011)



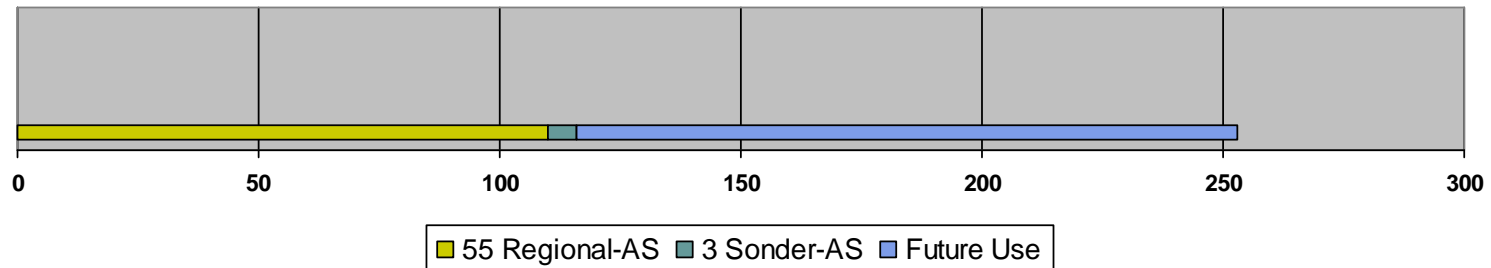
Deutschland hat ab Mai 2010 196608 IP-Adressen

HAMNET DL: IPv4-Netze

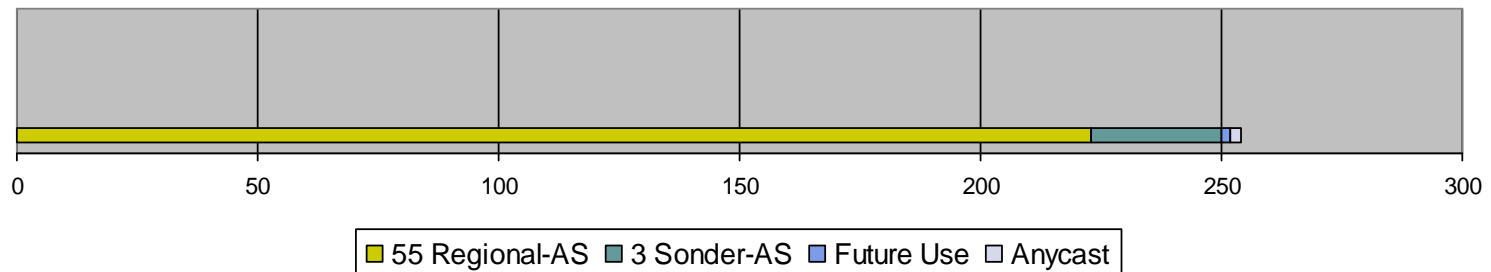


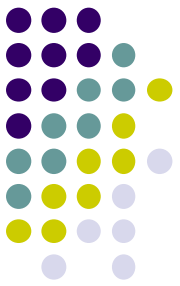
exklusiver IPv4-Block 44.224.0.0/15

44.224.0.0/17 (Backbone) und 44.224.128.0/17 (Future Use)



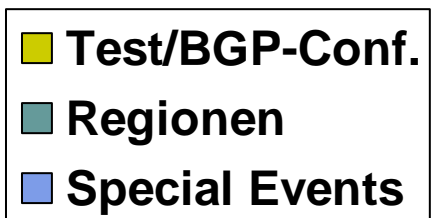
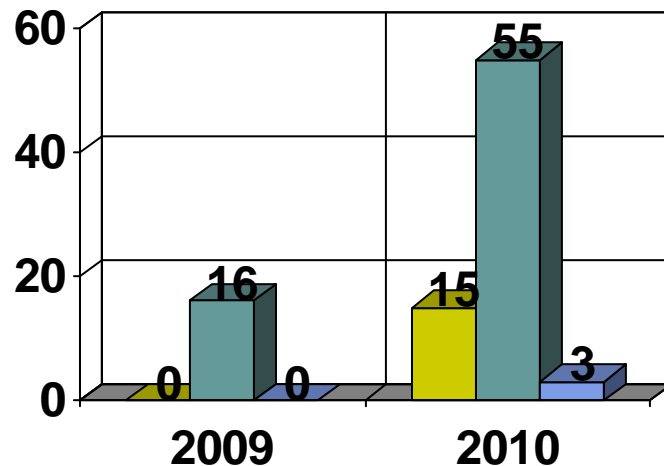
44.225.0.0/16 (User/Services)





HAMNET DL: AS-Nummern

Anzahl verfügbarer AS-Nummern

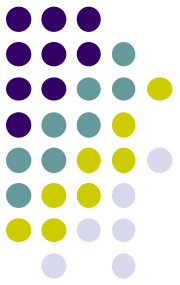


	Country	ASN Block	local documentation
OE	Austria	64512-64599	Wiki
I	Italy	64600-64619	Wiki
DL	Germany	64620-64683	List or WHOIS-Search
LX	Luxemburg	64684-64685	Wiki
CR	Croatia	64686-64690	Wiki
PA	Netherlands	64691-64694	Wiki
HB	Switzerland	64695-64704	Wiki
*	Test and BGP-Confederations	65520-65535	Wiki

Quellen (02.04.2011):

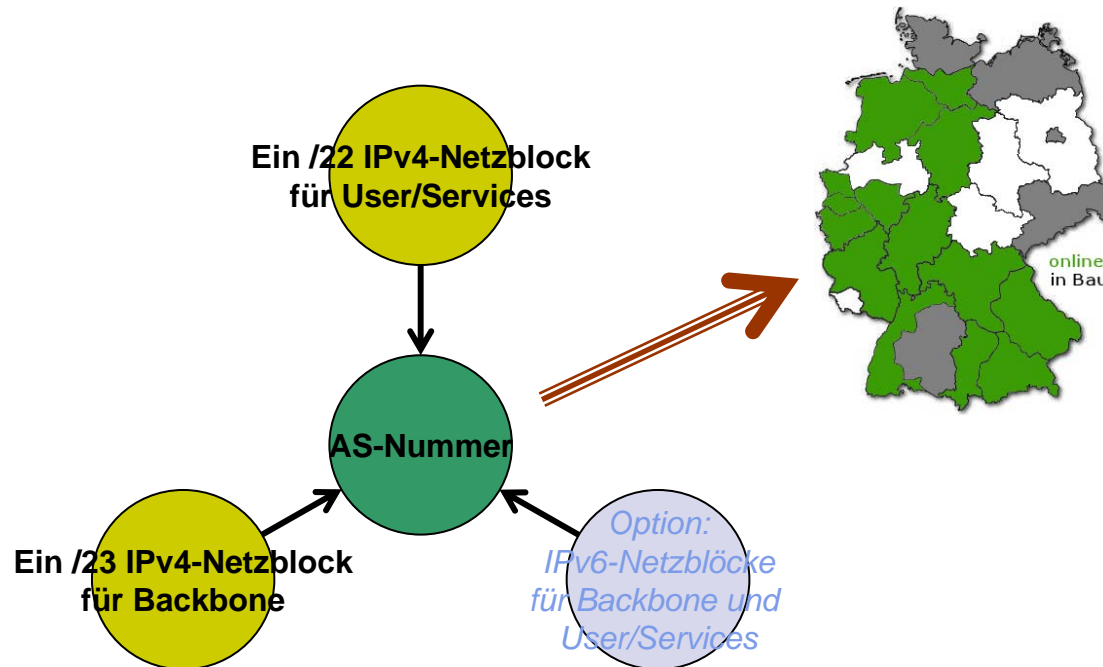
<http://www.de.ampr.org/doku.php/dokumentation/as-nummern>

http://wiki.oevsv.at/index.php/Routing_-_AS-Nummern

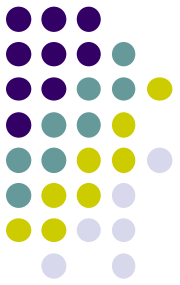


HAMNET DL: ASN + IP-Netze

- Gleichmäßige Verteilung von IP-Netzen auf AS-Nummern
- Zuweisung von AS-Nummern an die regionalen AS
- IPv6 jederzeit zu ergänzen (Dualstack auf jedem Router!)



HAMNET DL: ASN + IP-Netze

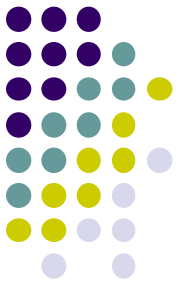


Special Event AS

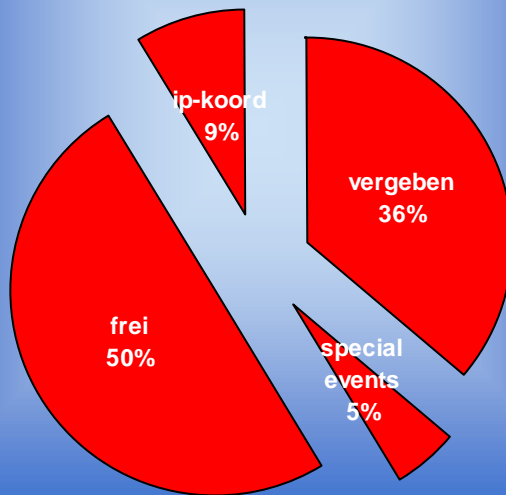
ASN	AS-NAME	BACKBONE	ANZAHL IPs	USER/SERVICE	ANZAHL IPs
64676	EVENT1-AS	44.224.112.0/23	510	44.225.224.0/20	4094
64677	EVENT2-AS	44.224.114.0/23	510	44.225.240.0/21	2046
64678	EVENT3-AS	44.224.116.0/23	510	44.225.248.0/22	1022

Info: ToDo

HAMNET DL: ASN + IP-Netze



Ressourcenverbrauch AS-Nummern und IPv4-Netze HAMNET DL (Stand April 2011)

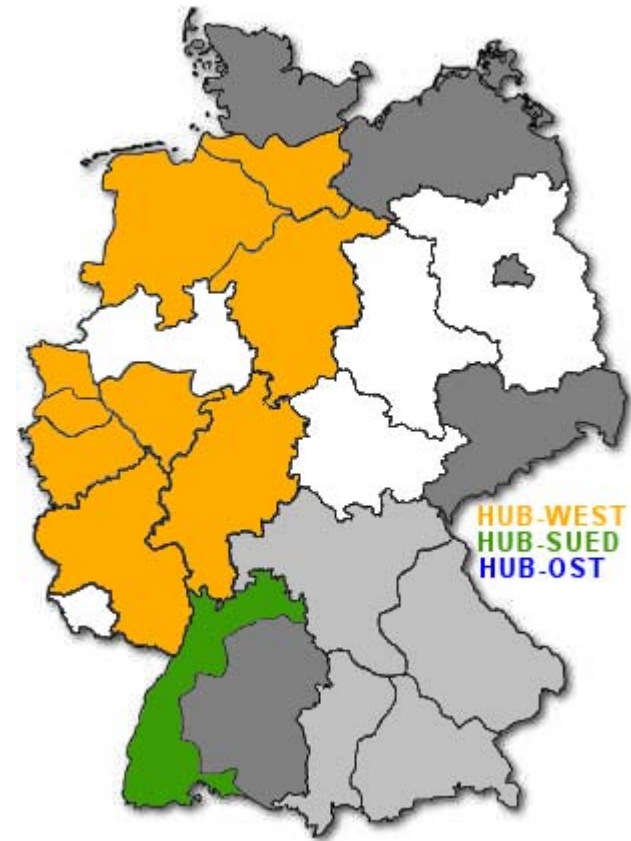


# ASN	AS-NAME	NETWORKS BACKBONE	NETWORKS USER/SERVICES
*			44.225.254.0/23 # Anycast
64620	IPKOORD-HUB-SUED-AS	44.224.0.0/24	44.225.0.0/22
64621	IPKOORD-HUB-WEST-AS	44.224.2.0/24	44.225.4.0/22
64622	IPKOORD-HUB-OST-AS	44.224.4.0/24	44.225.8.0/22
64623	IPKOORD-HUB-NORD-AS	44.224.6.0/24	44.225.12.0/22
64624	IPKOORD-HUB-MITTE-AS	44.224.8.0/24	44.225.16.0/22
64625	DISTRIKT-C-625-AS	44.224.10.0/24	44.225.20.0/22
64626	DISTRIKT-B-626-AS	44.224.12.0/24	44.225.24.0/22
64627	DISTRIKT-L-627-AS	44.224.14.0/24	44.225.28.0/22
64628	DISTRIKT-S-628-AS	44.224.16.0/24	44.225.32.0/22
64629	DISTRIKT-D-629-AS	44.224.18.0/24	44.225.36.0/22
64630	DISTRIKT-U-630-AS	44.224.20.0/24	44.225.40.0/22
64631	DISTRIKT-T-631-AS	44.224.22.0/24	44.225.44.0/22
64632	DISTRIKT-R-632-AS	44.224.24.0/24	44.225.48.0/22
64633	DISTRIKT-O-633-AS	44.224.26.0/24	44.225.52.0/22
64634	DISTRIKT-G-634-AS	44.224.28.0/24	44.225.56.0/22
64635	MS-OSN-OL-635-AS	44.224.30.0/24	44.225.60.0/22
64636	DISTRIKT-H-636-AS	44.224.32.0/24	44.225.64.0/22
64637	DISTRIKT-A-637-AS	44.224.34.0/24	44.225.68.0/22
64638	DISTRIKT-K-638-AS	44.224.36.0/24	44.225.72.0/22
64639	DISTRIKT-I-639-AS	44.224.38.0/24	44.225.76.0/22
64640	DISTRIKT-F-640-AS	44.224.40.0/24	44.225.80.0/22
64641	DISTRIKT-E-641-AS	44.224.42.0/24	44.225.84.0/22
64642	DISTRIKT-V-642-AS	44.224.44.0/24	44.225.88.0/22
64643	DISTRIKT-H-OST-643-AS	44.224.46.0/24	44.225.92.0/22
64644	DISTRIKT-P-644-AS	44.224.48.0/24	44.225.96.0/22
64645	DISTRIKT-M-645-AS	44.224.50.0/24	44.225.100.0/22
64646	not yet allocated		
...	...		
64675	not yet allocated		
64676	HAMNET-EVENT1-AS	44.224.112.0/23	44.225.224.0/20 # special events
64677	HAMNET-EVENT2-AS	44.224.114.0/23	44.225.240.0/21 # special events
64678	HAMNET-EVENT3-AS	44.224.116.0/23	44.225.248.0/22 # special events
#	Assignments end here -->	44.224.117.255	44.225.251.255

HAMNET DL: DNS-System

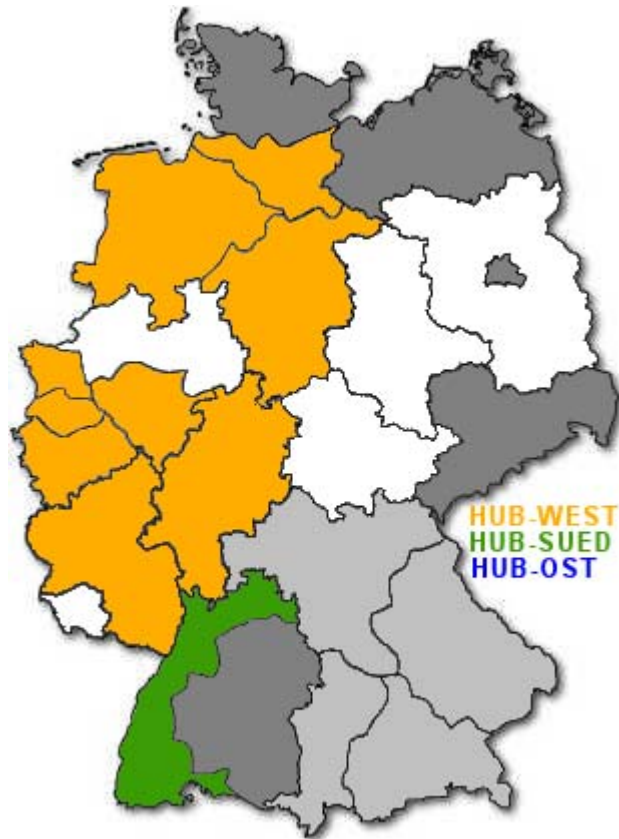
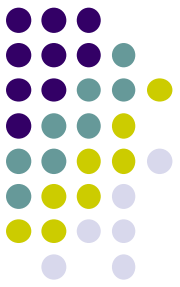


Netzstatus 02.04.2011

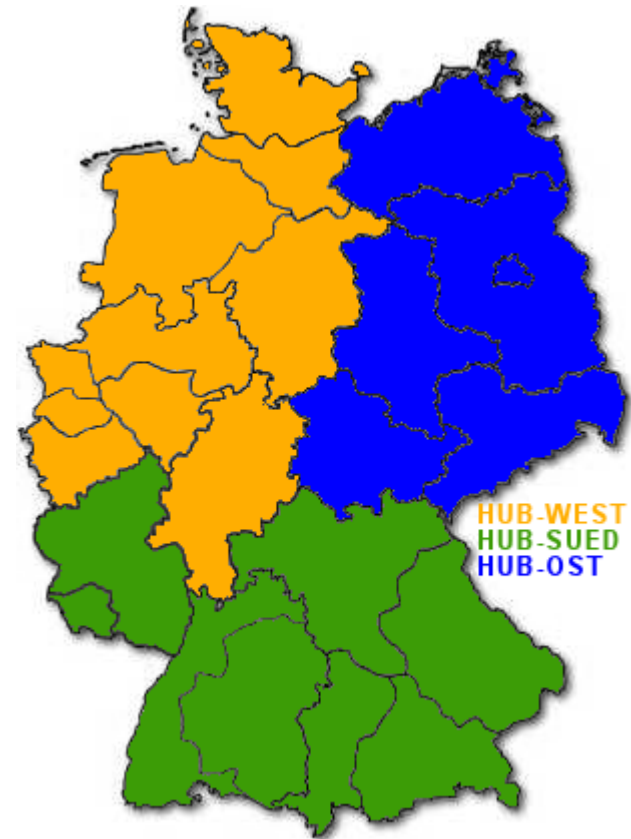


DNS-Status 02.04.2011

HAMNET DL: DNS-System

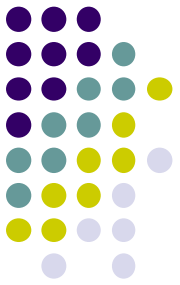


DNS-Status 02.04.2011



möglicher Endausbau

HAMNET DL: Ansprechpartner



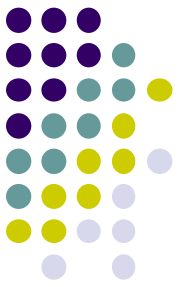
- DD9QP Egbert Zimmermann
- DG8NGN Jann Traschewski
- DL9SAU Thomas Osterried

Email: ipkoord@de.ampr.org

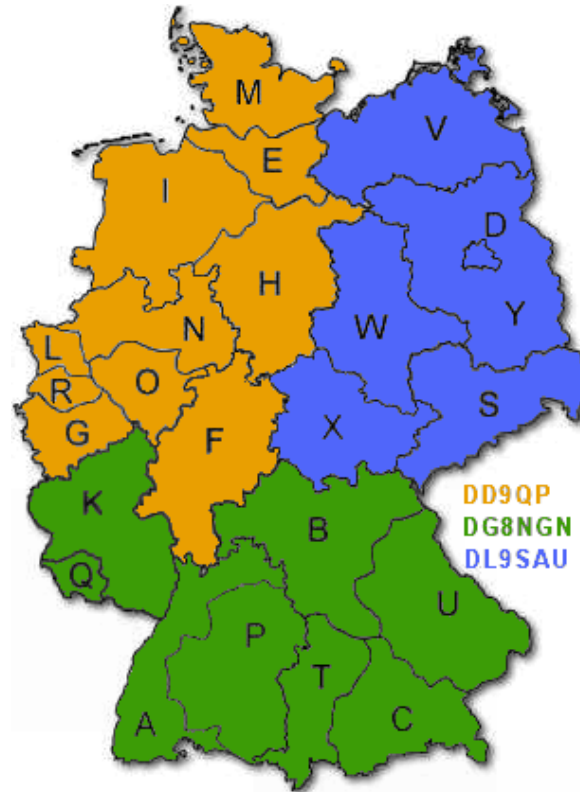
<http://www.de.ampr.org>

<http://de.ampr.org/mailman/listinfo>

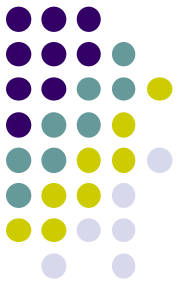
HAMNET DL: Ansprechpartner



Ansprechpartner für die Regionen



HAMNET DL: Weitere Fragen



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