

→ **Welcome to the DE-CIX May Newsletter!**

Among other topics, this issue covers the first German IPv6 conference, the implementation of a new edge switch at DE-CIX, the upcoming DE-CIX Meeting, and the F-root server deployment and connection to DE-CIX.

*Remember to mark August 25th in your calendar. This is the date of the upcoming DE-CIX Peering Workshop for new customers and prospects and the date for the DE-CIX summer break event!*



→ **Report from the First German IPv6 Congress**

The first German IPv6 congress took place on May 28<sup>th</sup> & 29<sup>th</sup> in Frankfurt and was hosted by heise Netze, iX, and DE-CIX. Over 200 attendees, great presentations and tutorials made this congress a great success. The program included firsthand reports relevant to practical issues instead of marketing blurbs or general declarations of intent.

The welcome notes were given by Johannes Endres (Chief Editor at Heise Netze) and DE-CIX's Frank Orłowski who pointed out that IPv6 is finally getting the attention it is supposed to get. A fact clearly indicated by the numbers of attendees and the fact that representatives of the most important German corporations and ISPs attended the event.



Over 200 attendees came to the first German IPv6 congress

The keynote was given by Daniel Karrenberg who is the Chief Scientist at RIPE and ISOC Chairman. He explained that the most important reason to implement IPv6 now is not to increase security and to add features but it is all about solving the problem of the lack of remaining IPv4 address space.

Johannes Spanier from Vodafone explained how his company built its IPv6 test lab and network and pointed out that the biggest problem for mobile providers is the fact that only very few mobile devices actually support IPv6. The latest Nokia devices and Windows Mobile 6.1 work fine with the new protocol but 3G USB sticks and Cardbus modems don't support v6 at this point.

Another interesting presentation was given by Google's Thorsten Dahm. For Google it was key to be one of the early adopters of this new technology because this will make it easier to deliver quality service once the market will really demand applications being delivered by IPv6. Since introducing IPv6 is not rocket science but takes time to implement, he recommended starting now. The company launched its v6 service back in March 2008 and since then has further developed its v6 infrastructure. Select Google partners can not only use the IPv6 search but Gmail and other applications, too.

The problems that were discovered were mainly related to routing issues (such as the lack of v6 peering and long AS paths) which results in slower connections and less resilience if compared to today's IPv4 environment.



Daniel Karrenberg, chief scientist for RIPE and ISOC chairman



Thorsten Dahm, Google!



Constanze Bürger, Federal Ministry of the Interior

„Peering, peering, peering - in order to get a real v6 Internet, everyone needs to peer;” Google’s Thorsten Dahm motivated the audience.

In a presentation given by Gert Döring from the Munich based ISP Spacenet, he made it very clear that “IPv6 is not a product.” No one should expect his customers to ask for v6. Even for engineers it is important to understand that v6 is just an underlying technology but nothing normal users care about. His recommendation is not to build any new v4 only products but to make

sure that v6 is supported wherever new services are designed and wherever networks are built.

Other presentations were given by various companies including Deutsche Telekom, AVM, 1&1, and the Federal Ministry of the Interior.

DE-CIX appreciates the support of the event sponsors: AVM, Brocade, Interxion, Men & Mice, n3k, and rh-tec.

To see the event pictures, please go to:

<http://pix-public-1.beachmail.de/2009/ipv6kongress/>

### → Register Now for the Upcoming DE-CIX Meeting

The next DE-CIX meeting will take place on June 25<sup>th</sup>, 2009, at the DE-CIX Competence Center in the Frankfurt docklands. Registration will open at 10:00 and the meeting starts at 10:30.

The DE-CIX engineering team will present a technical update, and DE-CIX’s CEO Harald Summa will provide information on the 2008 financial results as well as the planning for 2009. Last but not least he will announce the new DE-CIX pricing scheme.

The meeting will end at 17:00 and DE-CIX invites all customers to a get-together with cold drinks and great food.

Make sure to register soon since space is limited:

<https://www.de-cix.net/members/content/meetings.php>

(You need to login first in order to get access to the registration)

## → New Force10 Edge Switch at Interxion

On June 26<sup>th</sup> DE-CIX will put another Force10 TeraScale E1200 Edge Switch into production. The machine will provide additional 10GE capacity to DE-CIX customers at the Interxion FRA1-FRA5 data centers in the Eastern part of Frankfurt. From the beginning the machine will be fully equipped with 56 line rate 10GE ports. Like all other DE-CIX edge switches the machine will be connected to both the production and to the hot standby core switch with up to 160Gbit/s capacity.

“Recent customer upgrades and our internal forecasting clearly show the need for additional edge switching capacity. Because the Force10 E1200 switches proved to be rock solid, we continue to use them as edge switches for the time being,” says DE-CIX CTO/COO Arnold Nipper.



DE-CIX edge switch #8 provides additional 56 line rate 10GE ports for customer connections

For more information about the edge switching gear used at DE-CIX, please visit the Force10 website:  
<http://www.force10networks.com/products/eseries.asp>

## → New Employee: Andreas Sturm

Let's welcome Andreas Sturm who has joined DE-CIX on June 1<sup>st</sup>, 2009, as an ISP & Carrier Relations Manager. Andreas has 10 years experience working in sales positions at various Internet and VPN providers including access: Seven, Cogent, and Pfalzkom.

In his spare time Andreas likes to spend time with his family. And if time is left he likes to join his soccer team or run with friends through the beautiful landscape of Mühlthal.

Andreas can be reached by email at [andreas.sturm@de-cix.net](mailto:andreas.sturm@de-cix.net) or by phone +49 69 1730902-36.

## → DE-CIX Media Coverage on Chinese News TV, ZDF/3sat TV and Capacity Magazine

- A TV team from the Chinese news TV “Phoenix” visited DE-CIX as part of their project to film a documentary about important businesses in Frankfurt. Interviews were taken at the DE-CIX office and some video was recorded at one of the DE-CIX sites.
- The high-tech magazine “neues” that is produced by 3sat and shown on German TV channels 3sat and ZDF put together a report with the title “Will the Internet collapse?” Experts from c't magazine and DE-CIX explained how the Internet is designed and how it will be able to handle future traffic growth.
- Capacity Magazine is well known and an essential news source for ISPs and carriers. Published monthly, Capacity has over 6,310 subscribers in 116 countries world-wide and covers the critical business issues that need to be understood in today's markets. In a one page article in the “spotlight” section of the magazine DE-CIX's Frank Orłowski talks about how DE-CIX emerged from a national Internet Exchange to one of the leading players in the IX environment.

## → DE-CIX Supports Deployment of F-root Servers in Frankfurt

ISC has operated the „F“ root domain server, one of the 13 Internet root name servers known as A-root through M-root since 1994.

46 of the world's root domain servers are F-roots, operated by ISC. If you are perplexed that 46 (the number of F-root servers) is greater than 13 (the number of root name servers), it is important to know that the „anycast“ scheme is used to make the 46 servers collectively behave as 1 server.

F-root answers queries on IPv4 on 192.5.5.241, and on IPv6 on 2001:500:2f::f using a hierarchical anycast technique and BIND 9 software.

DE-CIX provides both connectivity and collocation and sponsors server hardware for the redundant F-root server deployment in Frankfurt.

„ISC is extremely happy to deploy an F-root anycast node at DE-CIX, one of the world's main exchange points,“ stated Paul Vixie, President of ISC. „This installation furthers our goal of bringing F-root name service closer to ISPs and end users and increase the network's resilience with multiple failover points.“


“We are excited to finally see F-root being extended to Frankfurt. ISPs can improve their access to the F-root name server, and the reliability of the DNS in general, by peering with ISC at DE-CIX,” says Arnold Nipper, CTO/COO at DE-CIX.

Additionally DE-CIX provides direct access to the I/J/K-root servers, too.

## ASK DR.PEERING



Brought to you by [www.drpeering.net](http://www.drpeering.net) and DE-CIX. Any question: send an email to [askdrpeering@de-cix.net](mailto:askdrpeering@de-cix.net)

 Dear Dr. Peering,

What is “paid peering” and when does it make sense?  
Why won't anyone talk about it?

Regards,  
Gavdi Enron

 Mr. Enron - Good questions.

DrPeering has been searching far and wide for evidence of paid peering, from the well connected peering ecosystems in the U.S. and Europe, all the way into the deepest darkest parts of remote peering ecosystems in South East Asia. There have always been rumblings, but no one was willing to talk about it and be cited...

→ Read the full article online:

[http://www.drpeering.net/a/Ask\\_DrPeering/Entries/2009/4/18\\_Oh%2C\\_Elusive\\_Paid\\_Peering.html](http://www.drpeering.net/a/Ask_DrPeering/Entries/2009/4/18_Oh%2C_Elusive_Paid_Peering.html)

The monthly Ask Dr. Peering column is brought to you by [drpeering.net](http://drpeering.net) and DE-CIX, the exclusive IX sponsor of the Dr. Peering Internet peering knowledge center.

If you have a peering related question, send an email to [askdrpeering@de-cix.net](mailto:askdrpeering@de-cix.net) and your question might be answered in next month's release.

## → UPCOMING EVENTS:

If you would like to attend any of these events, please register:

**NANOG46, June 14-17, Philadelphia,**  
www.nanog.org

**Telx CBX, June 25, New York,**  
www.telx.com

**DE-CIX Meeting, June 25, Frankfurt,**  
www.de-cix.net

**Capacity CEE, June 29-30, Prague,**  
www.telcap.co.uk

**SANOG14, July 15-23, Chennai,**  
www.sanog.org

**IETF 75, July 26-31, Stockholm,**  
www.ietf.org

**APNIC 28, August 24-28, Beijing,**  
www.apnic.net

→ **DE-CIX Peering Workshop,**  
**August 25, Frankfurt**

→ **DE-CIX Summer Break Party,**  
**August 25, Frankfurt**

**EPF4, September 14-15, Copenhagen,**  
www.peering-forum.eu

**Capacity Russia, October 5-6,**  
**Moscow,**  
www.telcap.co.uk

**MENOG5, October 25-29, Beirut,**  
www.menog.net

**cnX3, October 26-27, Frankfurt,**  
www.cnx-frankfurt.com

**RIPE59, October 5-9, Lisbon,**  
www.ripe.net

**NANOG47, October 18-20,**  
**Dearborn, MI, USA,**  
www.nanog.org

Check the listed websites for more information.  
Listings in red are hosted or sponsored by DE-CIX.

## → NEW DE-CIX PARTICIPANTS

**DE-CIX welcomes its most recent customers:**

- ISC Internet Systems Consortium, USA
- VRNetze, Germany
- InterFiber, Czech Republic

**Soon to be connected:**

- Invitel, Hungary
- GCN, Bulgaria
- Starnet, Moldova
- INFOnline, Germany

**Upgraded customers:**

(since April 1<sup>st</sup>, 2009)

- OVH, (AS16276)
- Akamai Technologies, (AS20940)
- Kabel BW, (AS29562)

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