

Press release

DE-CIX: Global Data Traffic Volume Hits New Record-Breaking High at Internet Exchanges

Global Data Traffic throughput has doubled since 2020, and increased 15 percent in 2024 to hit a record high of 68 exabytes

Frankfurt am Main (Germany), 22 January 2025. DE-CIX, the world's leading Internet Exchange (IX) operator, has revealed another record-breaking milestone in the amount of global data traffic being exchanged at its locations in 2024. More than 3,400 connected networks exchanged over 68 exabytes of data traffic at DE-CIX's locations around the world, corresponding to an increase of around 15 percent compared to the previous year: In 2023, this figure stood at 59 exabytes. Global data traffic has more than doubled in the five years since 2020, when the number was 32 exabytes. 68 exabytes equates to the amount of data that it would take to stream – in high definition – a football game that lasts for 2 million years. On November 20, 2024, global data throughput reached a one-off peak of 24.92 terabits per second (Tbit/s), the highest throughput for the year, in parallel to several gaming releases and updates from a range of providers. At exactly 8pm CET on November 20, in a single second, the data equivalent of a stack of printed paper 20 times higher than Mount Everest was exchanged by networks connected to DE-CIX IXs. In the space of one minute, 186.9 terabytes of data flowed over the DE-CIX IXs worldwide.

Internet-based applications drive development

The growing use of Internet-based and cloud applications has been driving the development of data traffic at DE-CIX for years. While 32 exabytes of data was exchanged in 2020 and 38 exabytes in 2021, this grew to 48 exabytes in 2022, and then 59 in 2023. Together with the growth in 2024, this makes 113 percent growth in traffic over DE-CIX exchanges worldwide in the last five years. The November peak coincided with the latest record at DE-CIX Frankfurt: The traffic exchanged by the close to 1,100 local, regional, and global connected networks reached a peak of 18.11 Tbit/s on that day. DE-CIX Frankfurt is Europe's largest Internet Exchange, with more than 45 exabytes of data throughput in 2024, an increase of 13 percent compared to 2023.

In 2025, DE-CIX celebrates 30 years since the establishment of the company and DE-CIX Frankfurt, its first IX.

DE-CIX Internet Exchanges keep the world connected

From video conferencing and streaming services to gaming – there were significant differences in terms of usage over the course of the second half of 2024: Video conferencing saw strong seasonal changes, with growth of up to 30 percent in the third quarter of 2024, after the summer slow-down. The level reduced slightly during the festive season over the turn of the year. Usage of Video-on-Demand streaming services stayed consistently high throughout the second half of the year, showing the extent to which these services have become the standard for many viewers. Online gaming, which contributed the largest amount of traffic of the three traffic classes examined, also remained consistently high over Q3 and Q4 2024, with a slight uptake during the festive season.

"In this, our 30th anniversary year at DE-CIX, we again see the enormous importance of interconnection for powering daily life for millions of people. Whether it's for communication, entertainment, learning, health, data-based products and apps, artificial intelligence, or the transmission of global sports highlights – the fast and secure connections at DE-CIX Internet Exchanges are essential for our modern way of life," says Ivo Ivanov, CEO at DE-CIX. "Our Internet Exchanges not only connect people and communities worldwide, but also bring individual companies and entire economies together to do business."

These highs are reflected at individual DE-CIX locations around the globe. For example, DE-CIX New York experienced over 4348 petabytes (PB) of data flowing over the exchange during the year. At DE-CIX Dallas there were 2630 PB, DE-CIX Madrid 2575 PB, and at UAE-IX in Dubai 1879 PB. On a regional level, DE-CIX North America saw in excess of 7000 PB, and Southern Europe more than 3500 PB.

DE-CIX offers its interconnection services in close to 60 locations in Europe, Africa, North and South America, the Middle East, and Asia. Accessible from data centers in over 600 cities worldwide, DE-CIX interconnects thousands of network operators (carriers), Internet service providers (ISPs), content providers and enterprise networks from more than 100 countries, and offers peering, cloud, and other interconnection services. DE-CIX Frankfurt is the largest IX in Europe and one of the largest Internet Exchanges in the world.

Background information: How much is 68 exabytes?

- The transmission speed of data is specified in terabits per second (Tbit/s).
- 1 terabit per second is 10³ Gbit/s, 10⁶ Mbit/s, 10⁹ kbit/s, or 10¹² bit/s, or 1,000,000,000,000 bit/s.
- 8 Terabits = 1 Terabyte (TB), 1,000 TB = 1 Petabyte (PB), and 1,000 PB = 1 Exabyte (EB)
- 68 exabytes (EB) is the amount of data that streaming a 2-million-year-long football match in high definition would require.

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About DE-CIX

DE-CIX is the world's leading operator of Internet Exchanges (IXs). Founded in 1995, the company is celebrating its 30th anniversary in 2025. DE-CIX offers its interconnection services in close to 60 locations in Europe, Africa, North and South America, the Middle East, and Asia. In 2025, DE-CIX is celebrating its 30th anniversary. Today, accessible from data centers in over 600 cities world-wide, DE-CIX interconnects thousands of network operators (carriers), Internet service providers (ISPs), content providers and enterprise networks from more than 100 countries, and offers peering, cloud, and other interconnection services. DE-CIX Frankfurt is one of the largest Internet Exchanges in the world, with a data volume of over 45 Exabytes per year (as of 2024) and close to 1100 connected networks. Close to 250 colleagues from over 35 different nations form the foundation of the DE-CIX success story in Germany and around the world. Since the beginning of the commercial Internet, DE-CIX has had a decisive influence – in a range of leading global bodies, such as the Internet Engineering Task Force (IETF) – on co-defining guiding principles for the Internet of the present and the future. As the operator of critical IT infrastructure, DE-CIX bears a great responsibility for the seamless, fast, and secure data exchange between people, enterprises, and organizations at its locations around the globe.

Further information at $\underline{www.de\text{-}cix.net}$

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