Activity
Report
2022

Figures, Data, Facts.

denic

The Future in Mind

Future-Oriented Thinking: Ready to Face Upcoming Challenges

In 2022, major changes have taken place at DENIC. We have put an increased focus on market requirements and have reorganised the technical departments to move in new directions. A particular challenge for us is the classification of our registration services as part of Germany's critical infrastructure. Thanks to the stringent standards and high-performing systems and processes we already have in place, we will tackle also this challenge successfully.

Co-Shaping Regulation in the Net

Cyber security and responsible behaviour on the Internet are crucial. Therefore, our dedicated Policy Team does its utmost to keep up to date with the latest legislation and carefully monitors numerous legislative proposals, including the EU's new NIS2 Directive and the Digital Services Act. We are closely collaborating with our partners to actively accompany the development of these and other intended regulations and to make sure that we are involved and render a contribution. Our mission is to ensure that DENIC and its members are always well prepared for the upcoming challenges and can do their business successfully.

Live at the Pulse of the Community

The return to face-to-face contact with the domain industry was one of the best things last year, and we very much enjoyed welcoming our members again at events like the Domain pulse, held in the historical plenary chamber of the German parliament in Bonn. The high-carat events will continue in 2023: In October, we will organise the 78th meeting of ICANN in collaboration with eco – Association of the Internet Industry and the Free and Han-

seatic City of Hamburg. We are looking forward eagerly to the exchange with leading experts and stakeholder groups.

Green Living – A Matter of Course for Us

In June 2023, after intensive preparatory planning, we will move our offices to more modern and resource-efficient premises. With this change, we are taking another step to live our commitment to sustainability and environmental protection and to reduce our ecological footprint.

Together Successful

We are proud that thanks to our members – contrary to the general trend – .de domains scored a solid absolute growth of 1.5 percent last year. We are confident that this positive development will continue. As a cooperative membership organisation we provide of an extensive portfolio of expertise and experience, which puts us in a position to suitably consider the needs of our members and to successfully master both current and future challenges. We look forward to staying actively involved in shaping the domain industry and in supporting our members in the best possible way.

With best regards

Executive Board of DENIC eG

Executive Board of DENIC eG

Thomas Keller

Martin Küchenthal

Andreas Musielak

Sebastian Röthler

2022 – an Eventful Year

17.4 Million Domains

.de grows continuously in a stagnant ccTLD market

Domain pulse

DENIC hosted a successful expert conference in the historical plenary chamber of the German parliament in Bonn

Dashboard

Members can now view the performance of their .de domain inventory and benchmark to their peer group at a glance

DENIC Cloud

Complete redevelopment of the data center infrastructure and the operating platform makes DENIC viable for the future

"Many for Many"

● DENIC and .de: Cooperatively Engaged for the German Namespace on the Internet

17.4 million .de domains are registered with DENIC. They represent a huge range of digital diversity. Our state-of-the art name servers answer about seven billion queries every day, within a fraction of a second, and ensure that all the contents and services provided by websites, e-mail, online shops, ticket systems, streaming services and social media platforms are reliably available 24/7 all over the world. We are very proud to manage and operate this important resource of the Internet in Germany as an impartial infrastructure service provider.

Our core tasks are:

– Operation of a worldwide name server network for the Top Level Domain .de
– Operation of the registration database for the central administration of all .de domains
– Provision of information services.

● An Organisation of National Importance

With the world turning ever more digital, the Internet has assumed a central role for both the society and Germany as a business location. The technical systems behind .de are of vital importance in this context and therefore classified as part of the national critical infrastructures (KRITIS). DENIC as the institution running this important resource, has a crucial role regarding public utility and safety in Germany and thus is an organisation of particular relevance.

International Commitment

DENIC helps to make sure that the internationally recognised standards for operating a domain registry meet the requirements of modern times. We are actively involved in the relevant bodies and standardisation organisations and thus consistently live our commitment to the evolution of an open and secure Internet.

Long-Term Success as a Cooperative

From the very beginning, DENIC has been guided by a strong sense of solidarity. It was this basic principle that led to the decision to found DENIC as a cooperative nearly 30 years ago. The organisational form of a not-for-profit community of cooperate members is globally unique among all the domain registries and has proven a great success in many respects.

With more than 17.4 million registered domains, .de consistently maintains its position as one of the leading domain endings of the world and as the largest country-targeted Top Level Domain in Europe. For domain registrants in Germany, the national ending .de very often is the first choice and it has an impressive share of almost 70 percent in the German market.

Fit for the Future trough Self-Regulation

One pillar of our success is the independent and reliable operation of our technical infrastructure. The other is our membership of roughly 300 companies from all sectors of the IT and telecommunications industry in Germany and abroad. Representing the Internet community and its needs in all their abundance and diversity, they live the idea of an impartial, not-for-profit organisation and of self-regulated domain management as cooperative partners on an equal footing.

Close Cooperation with a Broad Benefit

The central element of our Cooperative's self-regulation is the intensive exchange and close cooperation with our members. It is the very basis for advancing existing and developing new processes and systems together. In 2022, we therefore established the new Member Relations division and further expanded our topic- and demand-oriented dialogue formats, which are used for instance in our working groups.

The close cooperation with our members also is beneficial for the domain holders because their needs and the developments on the market are directly taken into consideration.

Collective Competence

Today and in the future, we can rely in our work on the collective competence of all our Cooperative members and our staff – true to the cooperative motto "Many for many".

Stable Basis

Financial Position

Financial Position	K€	2022	2021	2020
Gross Earnings		13,428	13,592	13,409
Payroll & Material Expenses		12,769	12,982	12,590
Annual Surplus		5	2	67

From the annual surplus of EUR 4,531.97, the amount of EUR 453.20 was allocated to the statutory reserve as stipulated by the bylaws.
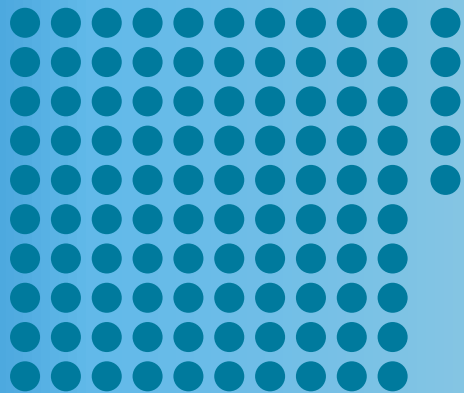
Income & Expenses

2022 Income	K€
Turnover Members	14,077
Other Operating Income	189
Other Non-Operating Income	554
Total Gross Income	14,820
Net Earnings Before Tax (EBT)	181
Annual Surplus	5

2022 Expenses	K€
Material Expenses	1,393
Payroll Expenses	8,408
Depreciations	375
Other Operating Costs	4,361
Total Operating Costs	14,537

⬤ Turnover

2022 — **50,814**
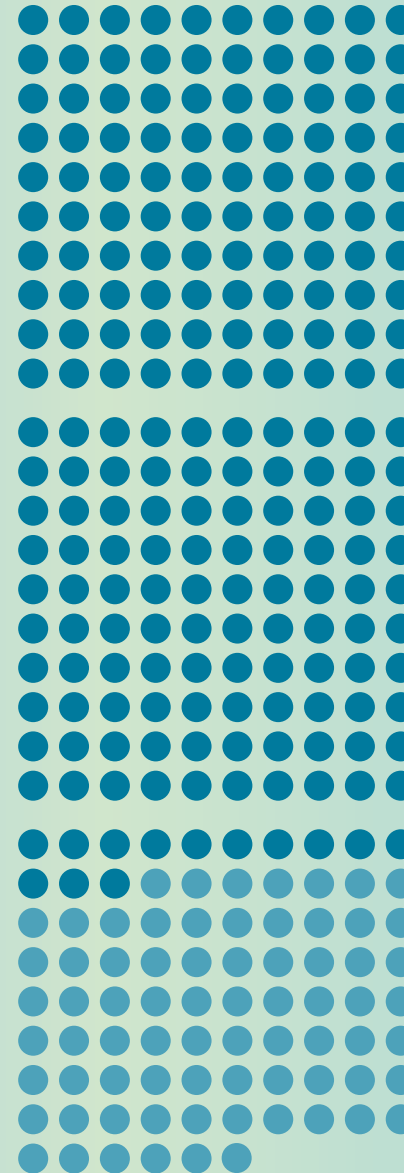
2021 — **49,444**

2020 — **48,666**

⬤ Workforce

105
Employees

⬤ Membership

286
Members

73
Members from Abroad

.de
in the Focus

⬤ Development of .de Domains

2022 was a successful year for .de: the number of domains under management increased by more than a quarter of a million. On 31 December 2022, 17,420,367 domains were registered under the German country code .de. This is a plus of 260,000 or 1.5 percent within one year.

The total number of .de registrations by German-based holders increased by roughly 110,000 over that time. Nearly a quarter of all the .de domains registered in Germany are located in North Rhine-Westphalia, Germany's federal state with the largest number of inhabitants and domains (2022: +46,000 or +1.4%). The 2022 average national growth rate of 0.8 percent was reached or exceeded by nine federal states and 239 of the 400 urban and rural districts.

Among holders residing outside Germany, the popularity of .de domains is rising consistently. In 2022, they grew by 150,000. Scoring almost 1.85 million, these domains exceeded a 10-percent share (10.6%) in the overall number of .de domains under management for the first time. The champion among foreign countries of origin remains the United States with a share of 31 percent. The US has held this position for years.

⬤ Development of .de Domains as of 31 Dec.

17,420,367

2022

17,160,504

2021

GERMANY
89.4%

+ 110.000 Domains

North Rhine-Westphalia
3,402,791 = **21.9%**

Bavaria
2,734,187 = **17.6%**

Baden-Württemberg
2,058,601 = **13.3%**

Lower Saxony
1,451,567 = **9.4%**

Hesse
1,301,878 = **8.4%**

Berlin
999,426 = **6.4%**

Rhineland-Palatinate
661,856 = **4.3%**

Hamburg
613,232 = **4.0%**

Schleswig-Holstein
554,158 = **3.6%**

Saxony
546,762 = **3.5%**

Brandenburg
308,131 = **2.0%**

Thuringia
229,478 = **1.5%**

Saxony-Anhalt
187,409 = **1.2%**

Mecklenburg Western Pomerania 177,651 = **1.1%**

Saarland 142,291 = **0.9%**

Bremen 133,938 = **0.9%**

WORLD
10.6%

+150,000 Domains

US
563,474 = **30.5%**

Netherlands
235,753 = **12.8%**

Austria
161,239 = **8.7%**

Portugal
124,096 = **6.7%**

Switzerland
97,046 = **5.3%**

Great Britain
73,198 = **4.0%**

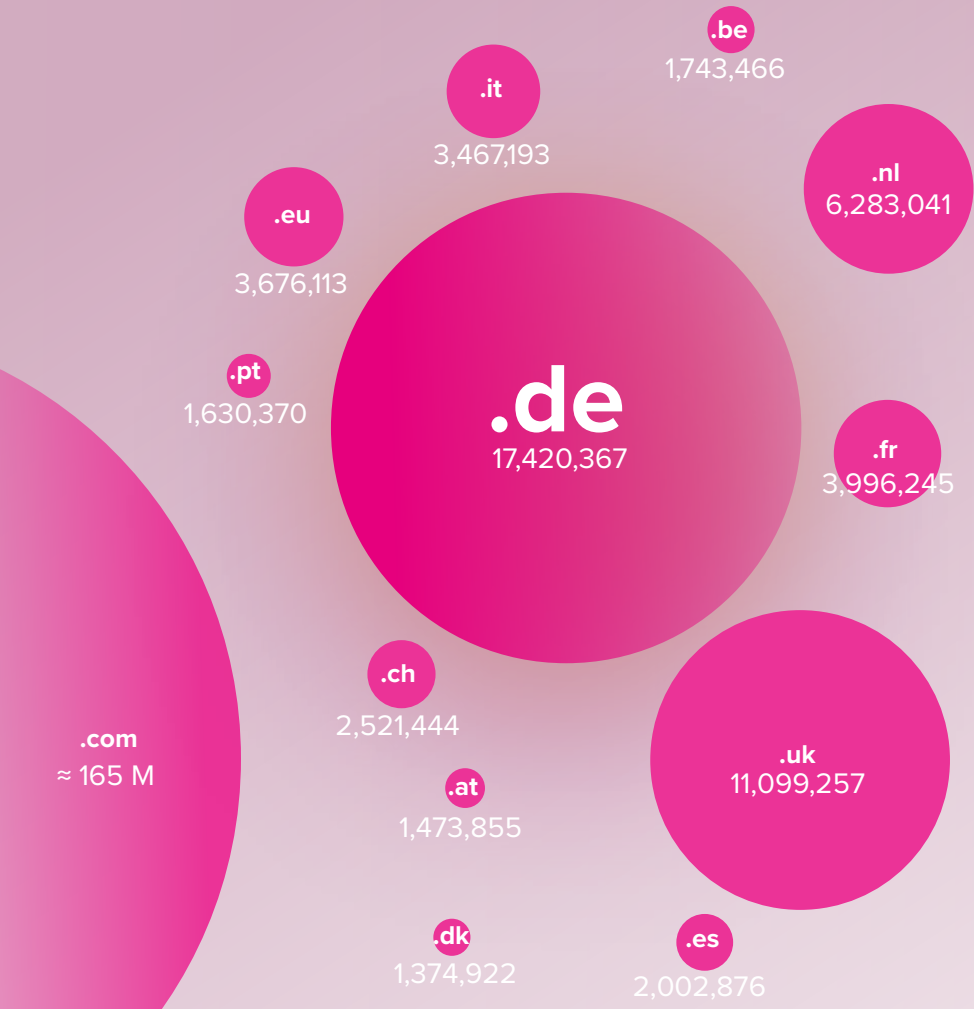**United Arab Emirates**
66,845 = **3.6%**

Vietnam
57,295 = **3.1%**

Belize
40,135 = **2.2%**

France
38,911 = **2.1%**

Others
388,344 = **21%**

.de Compared on an International Level

.be
1,743,466

.it
3,467,193

.nl
6,283,041

.eu
3,676,113

.pt
1,630,370

.de
17,420,367

.fr
3,996,245

.ch
2,521,444

.com
≈ 165 M

.at
1,473,855

.uk
11,099,257

.dk
1,374,922

.es
2,002,876

.de is

#1

of the European TLDs

Government & Regulatory Affairs

● Regulation

The trend of the recent years towards more state regulation of Internet services and infrastructures has continued in 2022. It is mainly initiatives of the European Commission as well as their transposition into or elaboration in national law that have to be dealt with. DENIC is committed to being involved in this process. We want to contribute to shaping the regulations, which often target large platforms and providers, in such a way that we can continue to provide the technical Internet infrastructure in a neutral and cost-effective manner in the interests of the community, giving priority to the technical requirements with their specific high standards of stability and reliability.

DENIC makes its contribution on a European level by developing political positions in intensive cooperation with other ccTLDs under the umbrella of CENTR, the association of European National Top Level Domain Registries, as well as on a national level by maintaining intensive contacts with government and authorities, both directly and through participation in industry associations and other exchange formats.

Cybersecurity

Against the backdrop of current geopolitical developments as well as new threats and changes in the regulatory environment, DENIC continuously adapts its risk assessments and protective measures as needed to meet the growing cybersecurity challenges its systems are facing. Through its participation in the national **CERT** Association and in the Internet Infrastructures Working Group in the **UP KRITIS**

(Information Technology and Telecommunications Sector under the German Critical Infrastructure Protection Implementation Plan), DENIC also is in direct exchange with other operators of critical infrastructures, and thus involved in the coordination process designed to increase cybersecurity and protect German IT networks.

Since 2022, the Top Level Domain Name Registry for .de, which is administered by DENIC, has been classified as critical infrastructure (KRITIS) in Germany in addition to the authoritative name servers for .de, which have already been assigned to this group since 2017. As a result, DENIC is obliged to provide evidence of compliance with the specified requirements, which must be delivered by an independent body as part of biennial security audits. DENIC had already performed the essential preliminary work over the past years by obtaining corresponding ISO certifications. In addition to the above, both system categories are subject to a reporting obligation in the event of disruptions to the availability, integrity, authenticity or confidentiality of IT systems, components or processes.

In November 2022, the Council of the EU adopted the revised legislation to ensure a high common level of cybersecurity (**NIS2 Directive**) across the European Union. This directive must now be transposed into national law by the EU member states by October 2024, in Germany presumably by amending the IT Security Act. For the domain industry, NIS2 entails numerous changes, which result primarily from its Article 28. According to this article, registries and registrars will in future be obliged to collect and maintain registration data completely and correctly and, under certain circumstances,

to make it available to the public, or at least to authorised inquirers. Together with representative member companies of the Cooperative, DENIC will evaluate and develop possible solutions in 2023 within the framework of a working group to ensure the accuracy of domain registration data under .de in compliance with the law.

In addition, the amended directive will impose numerous other obligations on CRITIS operators to improve cyber risk management and enhance the protection of their network and information systems. DENIC will check whether additional steps are needed to achieve NIS2 compliance that go beyond those already taken as part of its ISMS and BCMS certifications.

"Internet regulation is all around, challenging well established principles of Internet Governance, including the multistakeholder approach. We have increased our engagement to inform regulatory processes with technical expertise."

Already in force are the **Cybersecurity Regulation (2019)** and the **CER Directive** on Physical Protection and Resilience of Critical Facilities (2022), whose transposition into national law in Germany is expected to take place in 2023 with the KRITIS Umbrella Act. The EU Commission presented the first draft for a **Cyber Resilience Act**, which aims to achieve digital resilience across the entire IT value chain, in September 2022. This package of European digital legislation bundles a variety of overlapping regulatory approaches, leading to increasing complexity and at the same time more concentration in the network.

Peter Koch
Chief Policy Advisor

Platform Regulation & Intermediaries

In November 2022, the regulation on a single market for digital services (**Digital Services Act** (DSA)) came into force, amending the previously applicable regime of the Directive on Electronic Commerce of the year 2000. In particular, the DSA regulates the liability of Internet service providers for illegal content that users upload to the providers' platforms or otherwise distribute with the help of these services. In addition, there is a system of due diligence obligations graded according to the type and size of the services. All providers attributed to digital intermediary services must implement the obligations of the DSA by February 2024 at the latest. In the plenary vote on the regulation held by the European Parliament in January 2022, an amendment was rejected that sought to extend a general and indiscriminate KYBC ("Know Your Business Customer") requirement to such intermediaries, which according to the DSA include DNS operators and TLD registries. These are eligible for the conditional exemptions from liability set forth in the regulation because they do not store or transport content. The stipulation of the KYBC principle also for "mere conduit services" would thus not only have contradicted the EU data protection legal framework with regard to the principles of appropriation and data economy but – applied exclusively to ccTLDs and not to gTLDs – would also have represented a competitive disadvantage compared to other market participants. Already in 2020, CENTR had appealed to policy makers in a commentary on the DSA to strictly distinguish the technical operation of the core infrastructure of the Internet from Internet service providers such as social networks, online marketplaces or cloud storage in their deliberations concerning the redrafting of the rules for services on the Internet. The goal must be to protect the core infrastructure from unnecessary and disproportionate interventions in order not to jeopardize the stability of facilities that are central to the functioning of the Internet.

Consumer Protection

In 2016, the EU Commission for the first time announced a reform of the **CPC ("Consumer Protection Cooperation") Regulation** to strengthen the European single market. By expanding cooperation and the powers of the respective national authorities in case of cross-border infringements, consumer protection was to be enhanced. After a long period of inactivity, the Commission resumed the project in 2022 with an amended scope. It remained unclear, however, whether the DNS level was to be included in the legislation. In the course of further consultations of the EU, CENTR renewed its appeal to the Commission in a statement in December to hold on to using interventions at the level of TLD registries only as an absolute last resort. Since the registries had no technical access to illegal content, such interventions were the least proportionate and effective measure; instead they bore an increased potential for damage due to the criticality of the domain name system for the functioning of the Internet. In addition, CENTR reinforced the view of its members that, in the case of consumer law infringements, primary responsibility for enforcement on their territory should remain with the competent national authorities of the member states. It remains to be seen how the reform legislation, originally announced for the 2nd quarter of 2023, will ultimately be formulated.

Protection of Intangible Assets

In 2022, DENIC and CENTR have also critically monitored the current plans of the EU to reform the protection of geographical indications for agricultural and craft products (**Regulation on Geographical Indication Protection for Craft and Industrial Products and Agricultural Products**). For the first time, domains are to be included and, on the initiative of the European Union Intellectual Property Office (EUIPO), a so-called "Domain Name Information and Alert System (DIAS)" is to be set up. According to this proposal, the obligation of ex-ante registration monitoring shall be restricted to ccTLDs only.

In addition to massive data protection concerns, the CENTR members also take a critical stance to the expense resulting for individual market participants from such a measure. An independent study commissioned by CENTR in November examined the small number of disputes on geographical indications in the individual member states that have occurred to date. All of them being settled through existing arbitration procedures, CENTR could thus prove the over-regulatory effect of the project. In Germany, for example, only one case has been brought to court so far.

● Internet Bodies: ICANN

Within the framework of ICANN (Internet Corporation for Assigned Names and Numbers), which coordinates the management of critical Internet resources– domains, addresses, protocol parameters and the DNS root zone – DENIC has

been a member of the Country Code Names Supporting Organization (ccNSO) since 2009. As a stakeholder group within ICANN, the ccNSO is a platform for the exchange of experience among country code top level domains (ccTLDs) and develops global policies governing the relationship of ccTLDs with ICANN and IANA. To this end, policy development processes (PDPs) are applied, two of which are currently ongoing: As to ccPDP3, an initial report was submitted proposing a review mechanism for decisions pertaining to the delegation, transfer, revocation and retirement of delegated ccTLDs.

ccPDP4 dealt with to the selection, definition and retirement of IDN ccTLDs, i.e. those ccTLDs that contain non-Latin letters and therefore cannot be derived directly from ISO standard 3166-1. In addition to being involved in these processes, representatives of DENIC assume other important tasks – in 2022, primarily in the Standing Committee for Strategic and Operational Planning (SOPC) of the ccNSO and in the Root Server System Governance Working Group (RSSGWG). The latter deals with technology-related policy issues related to the coordination, selection, accountability and transparency of the system of DNS root server operators. In 2023, DENIC, together with eco - Association of the Internet Industry and the City of Hamburg as co-hosts, will organise the first ICANN meeting in Germany in 20 years.

● Internet Governance

Based on the multistakeholder model, which brings together a wide variety of stakeholders from politics, the industry, civil

society and the technical-academic community, DENIC has been contributing its expertise as one of the world's largest TLD operators to the Internet governance dialogue for many years. Through this commitment, DENIC wants to participate in the decision-making and implementation of solutions for the technical management and further development of critical Internet resources and be involved in the consideration and handling of the political problems arising from their use: be it in the national context by supporting the secretariat of the Internet Governance Forum Germany (**IGF-D**), be it by participating in the European format of EuroDIG, or on the international stage, in the context of the annual Internet Governance Forum (IGF) of the United Nations.

One of the main focuses of DENIC's Internet Governance activities is to keep the Internet Identifier System, as the core infrastructure of the network, free from influences that intend to impose controls and requirements without a legal basis.

As a multilateral specialised agency of the United Nations, the International Telecommunication Union (ITU) has long been trying to obtain an extended mandate also for the Internet, and thus gain authority over domains and IP address assignment. This conflicts with the responsibilities of ICANN and the regional Internet registries (RIRs) and the self-governing, multistakeholder management of global Internet resources.

While many of the member states have so far rejected this foray of ITU, Russia and the Arab states regularly call for strengthening the ITU in terms of Internet policy. In order to follow the controversial debates directly, a DENIC re-

presentative attended the ITU Plenipotentiary Conference, the highest body of the Telecommunication Union, which takes place every four years, for the first time in 2022 as a member of the German delegation.

Technical News

● DENIC Cloud

At DENIC, the cloud issue has been a focus already for some years. In the end, we decided to create our own cloud operating platform, which extends across several locations. We deliberately opted for running own servers because security and data protection have top priority at DENIC. Our core locations are situated at two independent computer centers in Frankfurt and Amsterdam, which enables us to guarantee perfect redundancy. The operation of the authoritative name servers has been part of Germany's critical infrastructure already since 2017.

DENIC approaches the future with great innovative spirit and has started to redevelop its complete data center infrastructure and its operating platform in 2022. By switching to a cloud-native concept featuring a hyper converged infrastructure (HCI) and by equipping all locations with new HCI hardware, DENIC is able to align and develop its infrastructure in a flexible way to appropriately meet any future requirements. Moreover, the new architecture offers more possibilities to extend the existing infrastructure and to add new hardware. New components for networking within and between the various locations and a new backup storage are other features that ensure that DENIC is perfectly prepared for future challenges.

We continue to rely on proven virtualisation technologies and provide corresponding clusters as virtualisation environments in all locations. These are controlled via central management software, which makes it possible to build and configure virtual machines fully automatically. In addition to the local

"The DENIC Cloud relies on commonly used cloud technologies operated in our own data centers, and thus offers the ideal combination of future viability, flexibility as well as data protection and security."

Matthias Amrhein
Head of IT

infrastructure, this software also allows to address various public cloud providers and thus to make machines available in the public cloud if required. DENIC is thus also prepared for a potential future with hybrid or public cloud operation. The new operating platform is focussed on a containerised environment in which the two data centers in Frankfurt and Amsterdam run in active-active mode. For migrating the applications, DENIC is consequently pursuing the strategy of a refurbishment from scratch and of tailoring them to the new operational environment. The change to so-called microservices, i.e. sub-applications that are as small as possible, has several advantages, such as better distribution, scalability and higher reliability. This also simplifies the autoscaling of applications and helps to automatically make available exactly the resources that are required. Additional efficiency is achieved by the possibility of automatically deploying not only individual containers but also entire machines as needed.

Moreover, the platform provides basic services such as logging and monitoring as well as the automatic management of secrets and backups. Comprehensive vulnerability management ensures extensive security management. We continue to use Continuous Integration and Continuous Deployment

(CI/CD) to keep software and services up to date with minimal effort, to make features available promptly and to test applications automatically. In the future, we will no longer rely on individual large CI/CD pipelines in this context but use so-called micro-pipelining, which means that only individual applications and their dependencies are rolled out. This reduces dependencies and thus accelerates the entire development process.

Registration System Goes DENIC Cloud

The core of the Registry is our automated registration system, which DENIC members can access 24/7 to register domains or make updates to domain data. Every day, an average of 22 million requests is processed. This requires a high-performance infrastructure tailored to these needs to ensure that everything runs smoothly.

"We have paid particular attention to reducing the need for adaptation by our members to a minimum and to ensure that the system is easy to maintain. Together with the members, we will go through an intensive test phase in 2023 before finally going live."

In 2022, all the preparations were made to move the registration system to a microservice architecture and to implement it in the new DENIC Cloud. The division into small, specialised services makes it possible to adapt the registration system precisely to the respective load situation. Moreover, new features, like additional front ends can be implemented more quickly.

Christian Simmen
Product Owner
Registry Service

First-Hand Individual Performance Indicators: Dashboards for Our Members

We have made available a beta version of the dashboards with individual key figures and metrics with which our members can interactively get an overview of the development of the .de domains under their management and of their performance level compared to their immediate market competitors, i.e. the peer group pursuing the same business model.

The members can use this statistical tool to strategically strengthen their business and to promote a positive development of their business. Next to the inventory of .de domains under their management, they can see the in- and outflow of domains at a glance. The data can be downloaded from the dashboard in CSV format for further processing in the members' own BI tools. In the next step, the dashboards will also provide information on the retention rate and the individual ranking.

"The comparison with the peer group is particularly useful because it allows to compare oneself with the trend of one's own market segment and to get answers to the questions: I have less registrations for new .de domains, is this due to my strategy or is it a general trend in my peer group or even the entire domain market?"

Manuel Probst
Head of Corporate Development
& Insights

Express Set-up: New Name Server Location in Africa

We provide the technical infrastructure for the anycast services of our subsidiary DENIC Services GmbH & Co. KG, which by now offers the service to **16** other Top Level Domains with a total of more than **14** million domains under management.

"With the Johannesburg name server location in South Africa, the last continent has been connected and the DENIC subsidiary can thus now offer its customers global DNS coverage."

With the new name server location in Johannesburg, DENIC is now represented on all continents with name server locations (NSL). After virtual hosts were added to the worldwide hardware setup of the name server infrastructure last year through a new architecture with automated installation, another virtual location in Johannesburg, South Africa, went live in September. Further automation enabled the location to be implemented within a few days via a provider who makes available virtual computing power.

This means we are excellently equipped to act openly, flexibly and quickly when it comes to the worldwide name server network.

Joachim Strohbach
Team Manager
Core Services

The Technical Infrastructure for the Internal DENIC Network on the Move

The relocation of DENIC's offices is casting its shadow ahead and preparations were already started at the beginning of 2022.

After a thorough status analysis of all existing technical systems and components of the internal office network, we started planning the new infrastructure for the future offices.

Focal issues were Internet connection, cabling, media technology and printers. The new premises were precisely measured with these aspects in mind, usage scenarios were simulated, the workplace concept planned and solutions for room booking software and groupware considered. The purchase of new hardware as well as the dismantling and decommissioning of the existing hardware had to be planned meticulously – because our primary goal is to ensure uninterrupted work and a smooth transition.ten.

"Our planning is always geared to the future, with the appropriate flexibility and scalability for changing requirements in mind."

Pascal Lehnert
Team Manager Internal Services

Nameserver Tester Refactoring

With the Name Server Tester (NAST), DENIC provides a tool for domain holders to carry out a so-called predelegation check for their own domain and thus check whether the name servers are configured correctly. Within the scope of a refactoring, we have revised the tool with regard to design, interface options and documentation. New are a number of comfort functions such as an auto-complete function for data entry and an interactive debug mode that provides additional background information on the checks performed. Using the share function, the results of the check can be shared with others and the tool provides helpful hints on how to correct warnings and error messages.

"Transparency is a real concern for us, which is why we have designed the Name Server Tester completely as open source and make the tool available to the general public for download."

In addition, an annotated version of the technical documentation provides explanatory descriptions of the implemented policies and the warnings/error messages.

Dr. Benjamin Schönbach
DevOps Engineer

New is the external availability of the NAST interface (API), which makes it accessible also from the World Wide Web. This means that predelegation checks – in addition to manual checks via the web interface – can also be carried out automatically.

Additional Communication Step in the TRANSIT Procedure

We protect domain holders from the unwanted loss of their domain by our **TRANSIT** procedure. When a provider gives up administering a domain, it is transferred to the **TRANSIT** procedure and the domain holder is informed by **DENIC** that they have to decide within a certain period of time what is to happen to their domain.

In order to make communication here even more transparent, we added a new component to the **TRANSIT** communication in September 2022: In addition to the postal **TRANSIT** letter, we now send a further reminder to the domain holder's e-mail address stored in our database about **14 days** before the **TRANSIT** deadline expires.

"There are signs that the additional e-mail communication has triggered a positive development: More domain holders are moving to a new provider and are thus keeping their domain."

Jill Doil
Head of Direct Services

Engagement

In 2022, DENIC has carried out major changes in the organisation to remain a reliable partner for the future. With the increasing digitisation of all areas of life, closer cooperation with both customers and partners is becoming ever more important to understand and meet their needs in the best possible way. With a dedicated team and future-oriented technologies, we are committed to ensuring that the Internet in Germany remains accessible to all and facilitates the participation of all.

Member Focus

Our members are the heart of our organisation and the most important factor for driving .de's consistent growth and ensuring the innovative force of the Cooperative. Therefore, we put a special focus in 2022 on intensifying the dialogue with our members and on introducing new event formats for enhanced exchange to better understand our members' needs. These platforms enable us to conduct solution-oriented discussions and develop practical processes and products together. We are already offering many events in a hybrid format. In 2023, the General Assembly of the DENIC Cooperative will be added to this group. With the hybrid format, all members, regardless of their location, are able to participate in all the Cooperative's events.

Transparency

DENIC is an important player in the domain industry and committed to the exchange of know-how and innovation, also beyond the limits of the Cooperative. We rely on a wide range of events and digital channels for this purpose. At the annual Domain pulse expert congress, which DENIC arranges in

cooperation with nic.at and SWITCH, current topics and trends of the industry are discussed and ideas for the future developed. We also participate with a booth in the renowned CloudFest, the world's largest conference for cloud, hosting and Internet services, and present ourselves as a competent partner in the field of domain registration. Our regular LinkedIn posts inform the general public about current developments and the latest news. Through all these activities, DENIC keeps its finger on the pulse of time and contributes actively to shaping the future of the Internet.

Sponsoring and Promoting Young Talents

DENIC is sustainably committed to the training and further education of young talents in the IT sector. As a training company, the Cooperative promotes the next generation of competent specialists for IT professions. It also is the main sponsor of the annual European Summer School on Internet Governance (EuroSSIG) in the East-German city of Meißen, which trains and educates future players in the Internet governance realm. In addition to that, DENIC has supported the local edition of the IT youth hackathon initiative "Jugend hackt" in Frankfurt, Germany, since 2018. Under the motto "Improve the world with code", young talents have the opportunity to develop open data projects together with qualified mentors at this event. Also since 2018, DENIC is a member of the CAST Forum (Center for Applied Security Technology) that is related to the Technical University of Darmstadt to promote IT security and the protection of personal data.

Sustainability Management & Corporate Social Responsibility

DENIC is not only committed to a reliable Internet but also to a sustainable future. We build on environmentally friendly measures such as the use of green energy, regional products and a climate-neutral post service. In addition to that, DENIC has supported several social and sustainability projects for many years. In terms of technology, too, we are increasingly relying on virtual, resource-saving solutions to render a contribution to climate protection. For DENIC, sustainability is not just a trend but a responsibility towards the environment and future generations.

The DENIC forest in the vicinity of Frankfurt has grown to include about 1300 trees by now, and we also continue to collect used mobile phones to support the insect protection fund of NABU, a German nature and biodiversity conversation union. Moreover, we have supported the Ukrainian refugee association "Gemeinsam für die Ukraine e.V." and the volunteer association "Arche Frankfurt e.V." to support people in difficult life situations. DENIC further gave a donation to the Frankfurt association for children suffering from cancer "Hilfe für krebskranke Kinder Frankfurt e.V." (HfkK).

We are also planning an ecologically sustainable move to energy-efficient premises in 2023. DENIC thus remains a company that is committed to a world worth living in.

DENIC Subsidiary

At the end of 2018, the DENIC subsidiary DENIC Services GmbH & Co. KG was founded. The KG operates the business fields Data Escrow, Anycast DNS and DENICdirect, all of which it has taken over from DENIC eG. They are progressively complemented by independent new business fields such as Digital Escrow. The KG's turnover has increased consistently since its foundation, and it is successfully expanding its business activities in collaboration with DENIC eG.

You find information about the KG and its business fields at:

www.denic-services.de/en.de

● Data Escrow

In 2022, a decisive innovation opened up an enormous and sustainable business potential for the KG. The launch of a new interface technology for Back End Registry Operators (BEROs) has facilitated and accelerated the integration of Data Escrow into the systems of the customers. This has made Data Escrow by DENIC even more attractive. In the past business year, only a small share of this new market could be exploited. Our subsidiary is expecting to generate comprehensive additional business volume in this field in the coming years.

● Digital Escrow

With the Digital Escrow Software-as-a-Service solution DENIC Services GmbH & Co. KG has launched a pioneering product on the German market in 2022. The new digital escrow agent offer is fully digital and provides customers of the domain industry and beyond with a solution for storing digital content with an independent third party in a secure and reliable way.

The new escrow service makes it easy for the customers to consistently apply best practices as recommended by the Federal Office for Information Security.

Anycast DNS

The network of globally distributed Anycast DNS servers was expanded again in 2022. With the Johannesburg location in South Africa, the last continent has been connected and the KG thus now offers its customers global DNS coverage. Next to the standard service, the portfolio includes an Extended Anycast Cloud option with additional locations and name servers on all continents. A new technology developed in-house allows the KG to make available a very special service to its customers: The Hybrid Anycast Cloud enables it to offer a tailored solution to each individual customer, perfectly adjusted to their traffic and regional requirements.

DENICdirect

DENICdirect is the partner of the KG who looks after domains that are registered directly with DENIC eG. Consistent process optimisation measures performed by DENIC eG have reduced the volume of this business field. The KG could successfully compensate for the related decrease with strong growth in other business fields. Data Escrow alone achieved an 8-percent increase in turnover in 2022. Its proven expertise and broad portfolio of innovative services makes DENIC Services GmbH & Co. KG the ideal partner for technical and administrative services in the domain industry.

New Initiatives and Outlook

In 2023, the KG plans to apply the experience it has gained with the online marketing of Digital Escrow in Germany to other countries and develop the respective markets with local partners. Data Escrow, both for registrars and registries is planned to grow at a much quicker pace. Already today, the DENIC subsidiary is a leading player in the Escrow market with regard to technical and quality aspects. Its goal for 2023 is to become the fastest growing Data Escrow Agent in the world on top of that. A special focus will be on the US-American market, where the greatest opportunities are expected to emerge. In January, the KG onboarded its first new Anycast customer in 2023 with the ccTLD of Italy. A good start for the ambitions it has for the new business year: The KG intends to outperform the success of the previous year also in the Anycast field. Together with DENIC eG it wants to become the leading Anycast provider for ccTLDs and for selected niches.

Stefan Pattberg
Managing Director of
DENIC GmbH & Co. KG

"Two years under pandemic conditions have shown that we are a sound business with amazing employees who can quickly react and adapt to any situational change. Even though the pandemic had no negative effect on our turnover, not being able to meet potential customers at international events eventually drained our sales pipeline after two years. However, attending many international meetings in Europe, the USA and Asia-Pacific, we have recreated a solid basis for the coming years. This was possible also because the satisfaction and the recommendations of our long-term customers have earned us an excellent reputation on the market. We are very grateful for that."

4.9

★★★★★

of 5 points

Customer satisfaction at the highest level
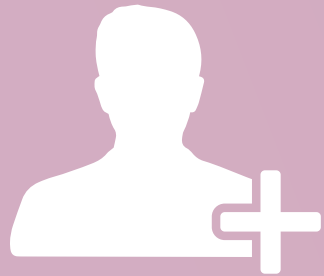
RDE

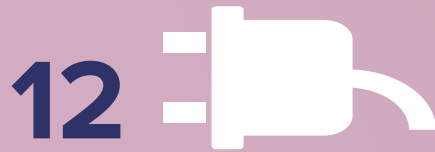**Registrar Data Escrow**

Customer Growth

24% ↗

RyDE

Registry Data Escrow

New technology for Back End Registry Operators (BEROs)
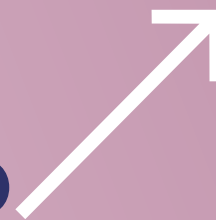
12

out of 39 BEROs connected

Digital Escrow

New escrow service helps to meet the requirements of the Trade Secrets Protection Act

Data Escrow

8%

Increase in turnover

from 2021 to 2022

denic