



Next-Gen Private/Hybrid Cloud - Data Center Services & Solutions

Colocation Services

Switzerland 2021
Quadrant
Report



A research report
comparing provider
strengths, challenges
and competitive
differentiators

Customized report courtesy of:



July 2021

About this Report

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The research and analysis presented in this report includes research from the ISG Provider Lens™ program, ongoing ISG Research programs, interviews with ISG advisors, briefings with services providers and analysis of publicly available market information from multiple sources. The data collected for this report represents information that ISG believes to be current as of April 2021 for providers who actively participated as well as for providers who did not. ISG recognizes that many mergers and acquisitions have taken place since that time, but those changes are not reflected in this report.

All revenue references are in U.S. dollars (\$US) unless noted.

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ISG Provider Lens™

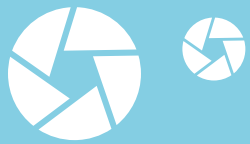
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EXECUTIVE SUMMARY

In 2020 and spring 2021, the demand for IT and cloud services in Switzerland was very high. Those that are part of the Swiss economy, including those that do not necessarily work on site inside Swiss companies, have further taken to digitalization of their lives and their work environment and thus, no longer need to depend on local elements and IT resources. At the same time, however, the hazards of cybercrime and the challenges arising due to the complexity of public cloud landscapes have grown more than ever.

Hybrid cloud, with a large proportion of private cloud, is the preferred choice for Swiss companies. It offers the best of private and public cloud characteristics. A hybrid cloud provides the necessary standardization for operating workloads according to their requirements. Above all, this cloud form offers more flexibility or, if necessary, more security compared to a pure private cloud. ISG Research found that enterprises use an average of 2.5 cloud providers – and the amount is trending up. The hybrid cloud approach enables the integration of different cloud types and, if implemented, offers a “single pane of glass” view for visibility and management. The disadvantage: The complexity for management and integration increases many times over.

The European market for IT and business services is still in excellent, robust shape: While the strong presence of the managed service segment continued in the first quarter of 2021, the demand for cloud-based services reached a new all-time high according to the EMEA ISG Index. In the first quarter, the magnitude of the overall outsourcing market in the region, which includes both as-a-service and managed services, amounted to

€5.0 billion. Compared to the same time period in the previous year, this represents an increase of 20 percent. In the managed services sector, the annual contract value (ACV) in the first quarter totaled €2.9 billion. This implies growth of 23 percent compared to the previous year and, also, the second strong quarter in a row. ISG attributes the increase to high growth in both the IT outsourcing (ITO) and business process outsourcing (BPO) segments. In addition, the results in Great Britain, France and the DACH region (Germany, Austria, Switzerland) were excellent. In the ITO environment, ADM services (application development and maintenance) and infrastructure services, in particular, have contributed to 17 percent ACV growth year-on-year, amounting to €2.5 billion. In the BPO sector, the growth was 66 percent, thanks to the strong demand for industry-specific services and the finance and accounting, engineering and research and development (R&D) sectors. In total, business process outsourcing has contributed €437 million to the entire managed service segment.

The COVID-19 pandemic and the rise of the home office entity, which has now established itself across regions, have contributed to the fact that managed services, hosting and colocation providers play an even greater role in maintaining economic power in Switzerland. Midsize companies, in particular, have sought consulting and support for implementation and ongoing operations to ensure their presence. Large corporations are also working on expanding their cloud resources and getting a higher level of utilization, with a dimension of complexity which is unparalleled.

Managed service providers were required to organize a wide variety of IT environments and set up or operate new workspaces sufficient for remote work or homeschooling; managed cloud hosting providers were responsible for the provision of sufficient server capacities, and colocation providers ensured the provision of professional and standardized data centers for operation, including providing the necessary carrier and hyperscaler connectivity and bandwidth.

Owing to the fact that companies are increasingly concentrating on software-centric and data-centric business models, they accordingly need a standardized operating and delivery model that still offers the flexibility necessary to be able to adapt quickly to changing market conditions. This, coupled with the rapid rise in on-demand and elastic cloud services, implies that IT executives are now faced with the need for platforms that can handle legacy and new services. It is precisely this combination that requires broad and in-depth specialist knowledge of legacy and cloud-native topics. As a consequence, many companies are overwhelmed and need external support.

The call for service support has become more prominent, as the handling of these architectures and technologies involves complexities that in most cases cannot be handled by in-house employees. User companies want to invest less and less in their own, in-house hardware as they are relying on the flexibility and scaling on the part of the cloud provider as a way to reduce their capital expenses. Most service providers offer both managed services and managed hosting, which is why the offers are fluid and tend to

overlap. It is, therefore, important for the customer to rely on the right provider that can provide comprehensive support in planning, implementation and operation.

Managed hosting providers that previously owned and operated their own data centers are increasingly relying on the use of colocation services. As a result, the need for additional colocation data centers is increasing. The clientele is also made up of integrators, companies that are downsizing or closing their data centers, and public cloud providers, some of which no longer build their own data centers, but use the space and services of colocation providers. The colocation customers can provide everything from a single source – space, security, a modern technical infrastructure and support. The boundaries between private and public cloud will soon be entirely blurred; distributed clouds are now being aimed for.

With a view to the DACH region, there are over 1,000 service providers or hosting services in Germany, Austria or Switzerland seeking access to almost 100 million inhabitants and more than 5 million mid-sized companies and groups. The number of user companies that want to be supplied with a maximum latency of 35 milliseconds, or even less, has risen sharply and will continue to grow, owing to the ongoing digitalization projects. New IT/OT solutions, the emerging edge computing market segment, plus development like autonomous driving and mixed reality will lead to increased demands for response times and to familiarize users with data processing and storage. The fifth generation (5G) of mobile communication plays an important role in the successful transition and smooth functioning of such use cases with a latency of 5 m/sec up to real time.

Colocation Services

Swiss colocation and connectivity services are in great demand, similar to that for the entire DACH market. New data centers are constantly being announced or opened in the region, which is adorned by mountains and valleys. In the past 12 months, the large colocation providers in Zurich alone have built four new data centers or expanded existing ones and offer an additional 20,000 m² of area.

In Switzerland there are currently 93 colocation data centers in operation with total area of 154,000 m². More data centers are being planned or are already under construction. The largest sites are Zurich with 63,000 m², Aargau with 14,000 m², Lausanne with 19,000 m², Geneva with 17,000 m² and Bern with 18,000 m².

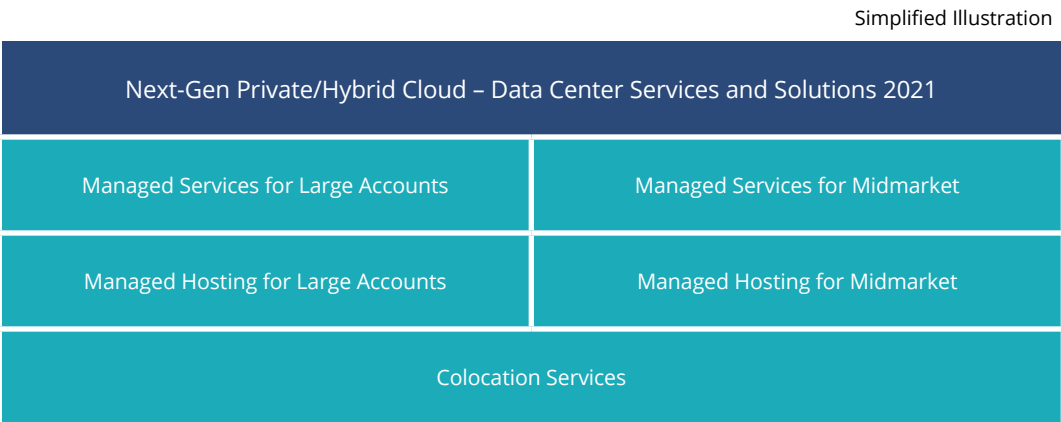
Convincing arguments such as security, connectivity services that can be set up on short notice, high availability and adherence to compliance guidelines are testimonies that are greatly valued by national and international companies, despite the high energy costs involved. Energy efficiency is playing an increasingly important role. Energy costs in Switzerland are among the highest in Europe. Data center operators are, therefore, stepping up efforts to deploy high-efficiency cooling and UPS systems to minimize electricity costs and CO2 emissions and achieve a PuE of 1.3 or lower. Colocation service providers take the PuE value into account in their pricing, which has a positive impact on costs.

At the largest colocation site, around the SwissIX internet exchange hub in Zurich, the data throughput has increased significantly within 12 months. The COVID-19 pandemic has hugely contributed to this; people are relying more on digital applications than ever before

because of using home offices instead of company offices, movie streaming instead of movie theaters, increased videoconferencing and other factors. Data traffic is growing, and the bandwidth must increase with it. And it has, too. The floor space is increasing dramatically in the new data centers. In the past, data centers with about 2,000 m² and less net area were built, nowadays it is often 5,000 m² and more. The colocation offering is also increasingly being used by managed service and cloud providers. Major hyperscalers are setting up their own PoPs at the sites of colocation providers to provide added value and be accessible in real time. Alternatively, they're moving their infrastructure straight into the colocation providers' premises and letting go of in-house data centers.

Leading providers for Switzerland include: Equinix, EveryWare, Green, Interxion, NTS Workplace, NTT Global Datacenters Switzerland (previously e-shelter), Safe Host and Swisscom. BrainServe was rated Rising Star.

Introduction



Source: ISG 2021

Definition

A private cloud is an IT or cloud system landscape made available in isolation, consisting of a virtual infrastructure and applications. It is essential that the cloud infrastructure consists of either physically or logically separate systems on which no other customers are served. Companies with strict security and governance requirements, and those that process large amounts of data and must ensure tight integration with other company applications and workflows, may prefer an in-house or private cloud. Service providers or managed service providers can use multiple cloud technologies to create private clouds with virtual machines or containers, network and storage resources that run in their data centers or via a shared infrastructure, but in a suitably configured, isolated environment.

A hybrid cloud combines the best of cloud infrastructure on site with customers/users, a hosted cloud in the data center of a service provider and a public cloud from a so-called hyperscaler. The aim is to combine services and data from different cloud models to set up a uniform, automated and

Definition (cont.)

well-managed cloud infrastructure. Hybrid clouds enable companies to use the capabilities of public cloud platforms without having to outsource all of their data to a third-party data center or to shared infrastructure environments. Clients benefit from greater flexibility in sourcing workloads, but at the same time they can continue to operate the important components within their own firewall or private cloud.

When data centers are outsourced, responsibility for the provision, monitoring and management of computing and storage resources is transferred to a third party. The data center can be owned by the client company, the service provider or a colocation provider. Monitoring usually takes place at the provider's location; such services are referred to as remote infrastructure management (RIM).

The colocation services providers provide sufficient space in their data centers to operate the IT infrastructure of companies that want to give up their own data center in whole or in part. The colocation data centers offer a comprehensive technical infrastructure such as electricity, USV, air conditioning and fire protection, which is designed redundantly

and guarantees a high level of reliability, which is often at 99.99 percent. The IT equipment will continue to be administered by the corporate IT department, but numerous services such as monitoring, patch services, hardware replacement, hardware storage and others can be transferred to the colocation service provider. The portfolio includes a range of connectivity options that enable customers to quickly connect to partners, other data centers and hyperscalers on short notice.

Security products for the data center provide protection against cyberattacks for the IT infrastructure in the customer-specific data center, in the private, hybrid and multi-cloud environment. The products recognize the threats early and stop the attacks before they do any damage. Vulnerability analysis is conducted and automatic patching is done. The events are recorded with a reporting tool and serve as the basis for further measures to improve protection. With the security product tools, which are implemented on a physical or virtual appliance platform, the infrastructure is either monitored and managed by the customer on its own or by a managed security service provider.

Definition (cont.)

Scope of Report

The ISG Provider Lens™ study offers IT decision makers the following advantages:

- Transparent presentation of the strengths and weaknesses of relevant service providers
- Differentiated positioning of the provider according to the segments
- Focus on markets including U.S., Germany, Switzerland, U.K., Scandinavia and Brazil

These studies thus provide an essential basis for decisions on positioning, relationships and go-to-market considerations. ISG advisors and corporate customers also use information from these reports to evaluate their current and potential new provider relationships.

Typical outsourcing activities include, for example, technical support (levels 1, 2, 3), server monitoring, application performance monitoring, storage and database administration, hosting, colocation, disaster recovery, implementation, defining and setting up architectures, standards and policies, and transformation projects such as virtualization, consolidation and cloud enablement services.

In the case of standalone services, such as colocation and managed hosting, the service level/ support level of the services differs in the sense of a fully managed data center outsourcing contract. For example, a colocation provider offers facilities and infrastructure for hosting equipment, and some basic support services. All other infrastructure management aspects, on the other hand, are the responsibility of the customer. Customers can either manage these aspects by themselves or hand them over to a managed service provider.

ISG studies are intended to help provide forecasts of customer projects and purchase decisions in typical companies. When facing a major strategy transformation, infrastructure procurement versus leasing decisions, implementing agile practices, or automating the IT environment, enterprise customers are sure to benefit from a study that examines the entire ecosystem for a given service area.

Therefore, ISG studies consist of several quadrants that cover a range of services that are required by corporate customers, as illustrated in the figure below.

All dollar (\$) references are in U.S. dollars (\$USD)

Provider Classifications

The provider position reflects the suitability of IT providers for a defined market segment (quadrant). Without further additions, the position always applies to all company sizes classes and industries. In case the IT service requirements from enterprise customers differ and the spectrum of IT providers operating in the local market is sufficiently wide, a further differentiation of the IT providers by performance is made according to the target group for products and services. In doing so, ISG either considers the industry requirements or the number of employees, as well as the corporate structures of customers and positions IT providers according to their focus area. As a result, ISG differentiates them, if necessary, into two client target groups that are defined as follows:

- **Mid Market:** Companies with 100 to 4,999 employees or revenues between US\$20 million and US\$999 million with central headquarters in the respective country, usually privately owned.
- **Large Accounts:** Multinational companies with more than 5,000 employees or revenue above US\$1 billion, with activities worldwide and globally distributed decision-making structures.

Provider Classifications

The ISG Provider Lens™ quadrants are created using an evaluation matrix containing four segments (Leader, Product & Market Challenger and Contender), and the providers are positioned accordingly.

Leader

The Leaders among the vendors/providers have a highly attractive product and service offering and a very strong market and competitive position; they fulfill all requirements for successful market cultivation. They can be regarded as opinion leaders, providing strategic impulses to the market. They also ensure innovative strength and stability.

Product Challenger

The Product Challengers offer a product and service portfolio that provides an above-average coverage of corporate requirements, but are not able to provide the same resources and strengths as the Leaders regarding the individual market cultivation categories. Often, this is due to the respective vendor's size or weak footprint within the respective target segment.

Market Challenger

Market Challengers are also very competitive, but there is still significant portfolio potential and they clearly fall behind the Leaders. Often, the Market Challengers are established vendors that are somewhat slow to address new trends due to their size and company structure, and therefore have some potential to optimize their portfolio and increase their attractiveness.

Contender

Contenders still lack mature products and services or sufficient depth and breadth in their offering, but also show some strengths and improvement potential in their market cultivation efforts. These vendors are often generalists or niche players.

Provider Classifications (cont.)

Each ISG Provider Lens™ quadrant may include a service provider(s) which ISG believes has strong potential to move into the Leader quadrant. This type of provider can be classified as a Rising Star. Number of providers in each quadrant: ISG rates and positions the most relevant providers according to the scope of the report for each quadrant and limits the maximum of providers per quadrant to 25 (exceptions are possible).

Rising Star

Companies that receive the Rising Star award have a promising portfolio or the market experience to become a leader, including the required roadmap and adequate focus on key market trends and customer requirements. Rising Stars also have excellent management and understanding of the local market. This award is only given to vendors or service providers that have made significant progress toward their goals in the last 12 months and are expected to reach the Leader quadrant within the next 12-24 months due to their above-average impact and strength for innovation.

Not In

The service provider or vendor was not included in this quadrant. There might be one or several reasons why this designation is applied: ISG could not obtain enough information to position the company; the company does not provide the relevant service or solution as defined for each quadrant of a study; or the company did not qualify due to market share, revenue, delivery capacity, number of customers or other metrics of scale to be directly compared with other providers in the quadrant. Omission from the quadrant does not imply that the service provider or vendor does not offer this service or solution, or confer any other meaning.



Next-Gen Private/Hybrid Cloud - Data Center Services & Solutions Quadrants

ENTERPRISE CONTEXT

Colocation Services

This report is relevant for companies of all sizes in Switzerland that are evaluating colocation providers.

This quadrant addresses the current market positioning of colocation providers in Switzerland. It shows how the companies deal with the key challenges they face in the region. Integrating colocation computing resources into the overall hybrid cloud strategy of the respective company has the highest priority. Incorporating colocation resources can help companies reduce the expense of running their own data centers while enabling them to retain some control over the hardware and systems that regulate the applications hosted there.

The use of local data centers is particularly valued in Switzerland, because collaboration with cloud providers helps ensure compliance with the multitude of data protection and residency requirements that need to be fulfilled. This favors the trend among Swiss companies to strongly restructure their private data centers into colocation data centers.

When considering investments for a private data center, it needs to be noted that energy consumption and compliance regulations contribute to rising costs. This makes investment in sustainability concepts a worthwhile endeavor. Colocation providers are able to take on the costs and prioritize energy efficiency, and therefore, sustainability. This subsequently leads to reduced CO2 emissions.

IT executives should read this report to better understand the relative strengths and weaknesses of colocation providers and how their market approach may impact enterprise hybrid cloud strategies. In particular, it is about how using a colocation provider affects the management and operation of important workloads.

Software development and technology executives should read this report to understand the positioning of colocation providers and to gain a better understanding of how the range of services they render can impact the ongoing development of software products within an organization. Even if not all the applications hosted by a colocation provider are actively developed, new projects will likely need to be integrated into some of these systems.

Procurement, purchasing and vendor management professionals should read this report to develop a better understanding of the current colocation provider landscape in Switzerland.

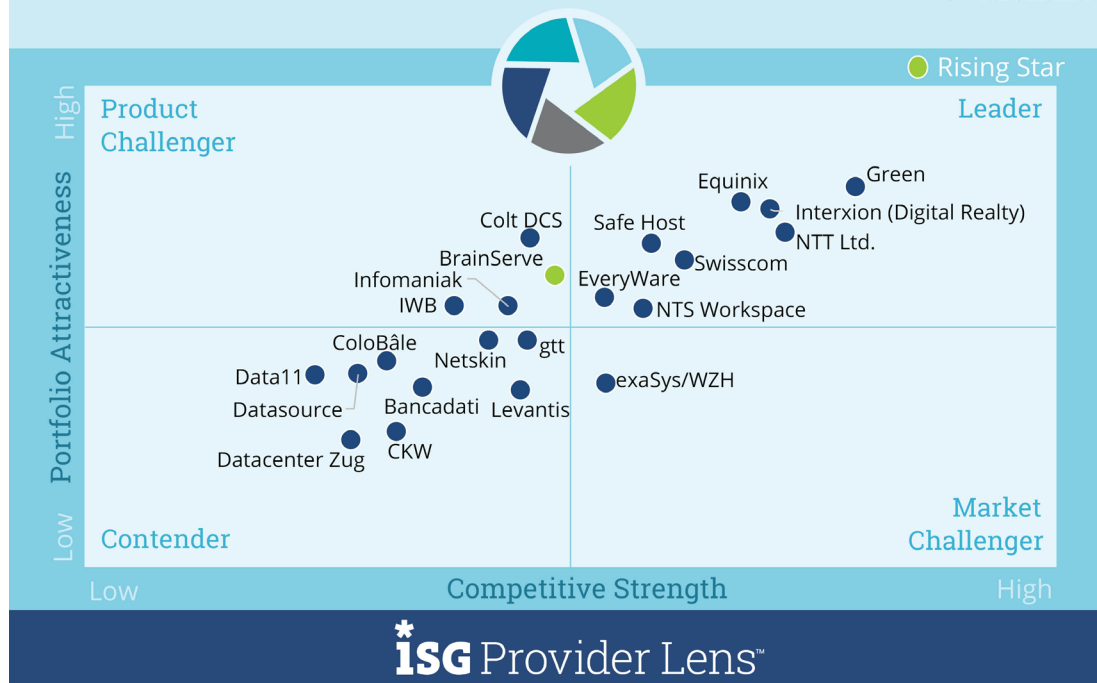
COLOCATION SERVICES

Definition

This quadrant evaluates providers that offer standardized data center operations as colocation services for midsize and large corporate customers. This includes the provision of a common access point for various hosting providers, system houses, network operators, telecommunications providers and end users. Colocation services are utilized by enterprise customers primarily because they make available data centers with standardized and sophisticated configurations. Moreover, they provide access to many network operators, and enable low latency and high bandwidth at affordable costs, which in turn allow the delivery of rich content or time-sensitive, latency-sensitive information to users in and outside metropolitan areas.

Next-Gen Private/Hybrid Cloud - Data Center Services & Solutions Colocation Services

2021
Switzerland



Source: ISG Research 2021

COLOCATION SERVICES

Eligibility Criteria

- Owned facilities that offer a standardized data center architecture design for colocation
- Provision of high quality data network technology and connectivity
- Guaranteed power density, designed for current and future technologies
- Provision of at least five physical security layers on the premises
- Proof of appropriate certifications such as SSAE 16, ISO 27001, ISO 9001, HIPAA, ISO 14001, ISO 22301, PCI DSS, NIST, FISMA, SOC Type 1, 2, EN 50600, etc.
- Ability to securely manage and maintain all data center devices and technology stacks
- Availability of SLAs regarding "hands & feet support" and hardware replacement
- Availability of facilities with internet exchange points with proximity to users and to the public cloud
- Offering disaster recovery and backup solutions
- Use of clean energy sources and solutions to reduce energy consumption, including zero carbon emissions and "Green Data Center" initiatives

COLOCATION SERVICES

Observations

Demand for colocation spaces and connectivity services continues unabated. This boom is set to continue over the next few years. Hardly a month goes by without a new data center being opened. Many providers are expanding their portfolios and responding to increasingly demanding customer requirements. For example, opportunities are being offered to test public cloud scenarios to identify the benefits and minimize risks prior to the implementation in a production environment. Smart hands offerings are improving, with some colocation operators offering housing and the ability to provide their own infrastructure, mostly virtual machines that customers can use in whole or in part as they choose. Interested parties include companies of all sizes, service providers, integrators and carriers, and as is increasingly being observed, public cloud providers as well.

The demand for connectivity has increased significantly. It is expected that connections to other partners can be made at short notice in the data centers via a meet-me room. Selection of carriers is expected to take place on site. In selected data centers in the region outside Zurich, a fast, low-latency direct connection to the SwissIX internet exchange hub is offered via fiber optic ring. Major hyperscalers are increasingly using colocation facilities to set up their own PoPs, with the aim of guaranteeing customers fast accessibility to their data centers. The data centers are not only being built near the SwissIX internet exchange hub near Zurich, but also in other leading commercial areas. There are two reasons for this. First, companies want their colocation partner to be close to them, and second, edge computing for IoT applications plays an important role. Large amounts of data can be processed on-site with low latency of less than 5ms, which a remote public cloud data center with ~70 ms latency cannot do. Driven by the high energy costs and also the sensitivity for more sustainability in Switzerland, there has been a strong focus on energy efficiency in recent years when new data centers are constructed.

GREEN



Overview

Green is one of the largest colocation service providers in Switzerland. It currently manages five carrier-neutral data centers and a total colocation area of approximately 20,000 m² in the Zurich area. Satisfied customers from the segments of hyperscalers, IT integrators, service providers and enterprises, including those with a strong presence in the financial sector, use Green's colocation services. Green is constantly gaining new customers of all sizes, that are all convinced of its impressive offering. The company offers partners a unique ecosystem in all facets around digitalization and modernization that can be built on the Green platform.



Strengths

Big investment plans: Green is consistently pursuing its growth targets. It has invested half a billion CHF for a large site in Dielsdorf. A second campus is being built on the site. At completion, it will consist of three large high-density data centers and office buildings and will provide a good base for hyperscalers, integrators and enterprises. The groundbreaking ceremony has already taken place.

Secure colocation data center: The data centers offer an unsurpassed security standard and ensure a high level of protection against failure. This is attested to by numerous certifications and a FINMA-compliant audit it has received. Green's Datacenter West has been awarded the Management and Operations (M&O) stamp, the highest and most promising certification awarded by the Uptime Institute, and is the only one of its kind in Switzerland to date. The M&O assessment covers all aspects that are part of a safe operation.

Sustainability is of prime importance: Green takes great efforts and measures to keep energy consumption and carbon footprint to a minimum. It consumes electricity only from sustainable sources.

Extensive connectivity: More than 50 carriers host their network in Green data centers and offer fast direct connections to partners or service providers. Fast connections are provided at short notice via the company's own backbone. Green also hosts SwissIX in its data centers. A separate backbone connection is available for companies that have business relationships in Asia. Green's data center infrastructure is used by public cloud providers, including hyperscalers. It is guaranteed that data is kept safely in Switzerland and never goes outside its borders.



Caution

Green invests exclusively in data center expansions in the greater Zurich area. Investments in other economic areas are not planned as of now. Companies are looking for and want efficient colocation partners in their area. Green would, therefore, do well if it considers investments outside of the greater Zurich area.



2021 ISG Provider Lens™ Leader

Green is a successful, foresighted provider of colocation solutions for customers and cloud service providers of all sizes. Its diligence and safety are second to none.



Methodology



METHODOLOGY

The research study “ISG Provider Lens™ 2021 – Next-Gen Private/Hybrid Cloud - Data Center Services & Solutions” analyzes the relevant software vendors/service providers in the Switzerland market, based on a multi-phased research and analysis process, and positions these providers based on the ISG Research methodology. The study was divided into the following steps:

1. Definition of Next-Gen Private/Hybrid Cloud - Data Center Services & Solutions market
2. Use of questionnaire-based surveys of service providers/vendor across all trend topics
3. Interactive discussions with service providers/vendors on capabilities and use cases
4. Leverage ISG's internal databases and advisor knowledge and experience (wherever applicable)
5. Detailed analysis and evaluation of services and service documentation based on the facts and figures received from providers and other sources.
6. Use of the following key evaluation criteria:
 - Strategy & vision
 - Innovation
 - Brand awareness and presence in the market
 - Sales and partner landscape
 - Breadth and depth of portfolio of services offered
 - Technology advancements



Authors and Editors



Heiko Henkes, Author
Director Advisor

Heiko Henkes is a Director and Principal Analyst at ISG; in his role as Global IPL Content Lead, he is responsible for strategic business management and acts as thought leader of ISG's team of research analysts. His core competencies are in the areas of defining derivations for all types of companies within their IT-based business model transformation. He builds the bridge between IT trend topics and acts as keynote speaker on current and future IT trends. Heiko has over 12 years' experience in IT consulting, primary and secondary market research and provider GTM strategies.

His research Focus: Digital Business Transformation, Cloud and Edge Computing, Mobile Business, Change Management and Mixed Reality



Wolfgang Heinhaus, Author
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Mr. Heinhaus has in-depth technical and business know-how and more than 30 years of experience as IT manager, IT consultant and project manager to contribute to ISG client projects. His main areas of expertise comprise IT service performance and IT sourcing strategy as well as data center project planning and implementation. His IT outsourcing skills include IT infrastructure, servers and networks (LAN and WAN), including data centers and the cloud.

Wolfgang has worked successfully for clients from multiple industries, where he acted as advisor on IT infrastructure topics such as server environments, networks or data center security.

Wolfgang has completed training in business management at SGD Darmstadt.

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Katharina Kummer is a research analyst at ISG and is responsible for supporting and co-authoring Provider Lens™ studies on Public Cloud Transformational Services, Private Hybrid Cloud Data Center, Data Analytics, Microsoft Ecosystem and Cloud Native – Container Services. Her areas of expertise lie in cloud, data centers, cloud native services, digital linguistics and NLP. Katharina develops content from an enterprise perspective and author the global summary report. Along with this, she supports the lead analysts in the research process and ad-hoc research assignments and writes articles about niche technologies, market trends and insights.

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