France-IX, partner of EDF for its digital transformation

As a major and historic player in energy transition, the EDF group is an integrated energy company active in all businesses: generation, transmission, distribution, energy trading, energy sales, and energy services.

69 Bn €	**165 200**	**37,9 M**
turnover	employees worldwide	client sites worldwide including 28,1 in France

By joining France-IX, EDF is following in the footsteps of many French and international companies, demonstrating once again that the benefits of peering are not limited only to the telecom ecosystem and can meet specific business issues and challenges.

Initial need

With its own datacenters, two sites located in Normandy, the Direction of IT and Telecom Services (DSIT) of EDF acts as a real operator for all telecom aspects within the group, covering in particular the WAN links between the numerous EDF sites and Internet accesses.

In 2014, the DSIT launched a project to redesign all its long-distance telecom networks, including the network connecting the 650 sites in France and abroad to datacenters, as well as the group's Internet accesses. These accesses (via transit) historically end up in both datacenters.

The need was clear: to move these Internet accesses in order to improve incoming and outgoing connections and benefit from a better cost.

Solution

Pierre Violet, Head of the Telecom Program at EDF, is at the forefront of the group's connectivity needs. It is by browsing the members connected on the France-IX website that he noticed that many companies were present at the exchange point, such as Schneider Electric or Saint-Gobain.
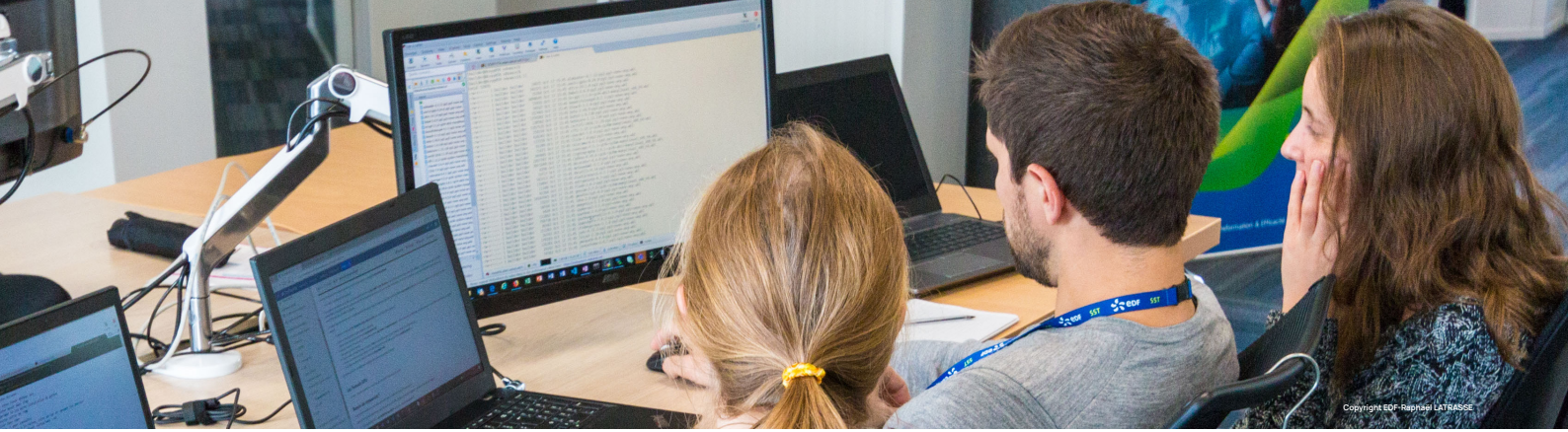

Pierre Violet
Head of the Telecom
Program at EDF

« In my mind, an exchange point brought together mainly operators but based on the information given by France-IX, we found out that public peering between companies was also commonly used and offered a real value for EDF. »

Expecting a natural increase in future traffic and already anticipating strong trends such as the inevitable migration to the Cloud and a growing evolution towards remote working, the team predicted that traffic, which used to be very internal to the group, would gradually move outwards.

« Peering appeared to us as a very attractive solution to get technical improvements, in terms of quality of service, by being as close as possible to destinations (especially content providers), which would allow us to reduce the load on our ISP links, to benefit from additional resilience through this additional path to reach our destinations, and finally, enable substantial savings. »

Copyright EDF-Raphaël LATRASSE

In a context of accelerated digital transformation, EDF was ready to make the shift to the Cloud with some of its services moving into SaaS mode and a planned migration to Office 365 already scheduled at the time. The presence of major Cloud players (including AWS, Microsoft, Salesforce) but also operators, who were going to help EDF cope with the increase of remote working, also motivated EDF's decision to join France-IX.

« We estimated at the time that at least 30% of our traffic could go through peering, a promise that has been largely kept today, since that share has varied between 35% and 50% since we started peering. »

BENEFITS

- Outstanding quality of service with a direct route to privileged Internet destinations;
- Lower and more controlled latencies;
- Access to strategic players (Cloud, operators, content providers);
- Optimisation of global Internet traffic by unloading its access via transit providers;
- Security and resilience;
- Optimised costs;
- Technical support.

Results

When joining France-IX in 2019, EDF chose to start with a 10G port. Since then, traffic has significantly increased in volume: the group started with 1 Gbps of traffic to reach in 2021 **more than 7 Gbps**. Today, EDF counts among its "Top Peers" Cloud players and content providers: **Microsoft, Google, Amazon**, but also carriers like **Bouygues Telecom et SFR**.

With sometimes 60,000 employees working remotely at the same time, which drives a lot of traffic with simultaneous high bandwidth sessions, peering with telecom carriers allows to accommodate the need while lowering the traffic on its transit-based Internet links.

Now endowed with a fully-fledged peering policy, allowing them to achieve peering agreements with strategic players, EDF has identified other destinations with which to enable public peering. *"We are also in discussions with the France-IX technical team to optimise access to other communities and services, so that we take full benefit of the advantages offered by peering."*

« Using peering involves no risk, but is an additional way to improve access to its Internet destinations at a reduced cost. With a very good overall availability rate of the France-IX platform (99.99%), its technical team is always available to answer our questions. Thanks to their support, we were able to adopt smoothly this new solution, which we are fully satisfied with today." »