

CASE STUDY

NEW DATA CENTRE FOR LIECHTENSTEIN STATE ADMINISTRATION: EQUIPPED FOR FUTURE PROJECTS

By building a new data centre the Liechtenstein State Administration has created a solid foundation for current and future IT projects. In the data centre a modular high-density system solution from Datwyler provides high-speed connections between active components and a space-saving, expandable rack layout.

Liechtenstein's State Administration data centre is used by over 40 departments, from the Office of External Affairs to the Registrar's Office, from the Tax Authority to the Food Inspectorate. This includes the operation of around 160 specific applications, the majority of which are very performance-hungry.

In addition, eGovernment is making ever higher demands on the IT infrastructure. Even with upgrades and virtualisation solutions the State Administration was continually coming up against capacity limits.

In the end of 2009 this led to a resolution by the State Administration to construct new data centre. The aim was to establish on new premises a high-availability data centre conforming to Tier 3 requirements.

As part of this construction those in charge were looking for as space-saving a cabling solution as possible which – building on an initial basic installation – would leave room for further future expansion as required. One condition, therefore, was a modular system which was pre-assembled and simple to install.

High-density one-stop solution

With current and future projects in mind, the State Administration opted for a solution based on Datwyler's Modular High Density (MHD) system. Their prime concern here was to obtain an efficient one-stop solution – including a 20 year system guarantee.

Not the least of the deciding factors were the sound advice provided by Datwyler prior to installation, the high quality of the MHD products, and the positive experience gained from previous data centre projects. This includes continuous training of installation partners by the system supplier, thus ensuring that new installations and start-ups run smoothly.

Modular distribution panels

The MHD distribution panels make it possible to accommodate pre-assembled copper and fibre optic (FO) connections in a housing system of very high packing density. Another outstanding feature of the Modular High Density Solution is that, if required, a distribution panel can also be fitted with combination connections, i.e. with modules for copper and fibre optics.

The 40 IT racks in the computer centre were constructed to a "top of rack" configuration, with multiple cables fed in from above. For connection of the active components most of the racks contain one MHD panel each, fitted with two FO modules for 12 fibres each and two 6-fold copper modules. Six IT racks serve firstly as central patch racks for the fibre optic and copper multiple (so-called "trunk") cables in the data centre, and secondly for linking the carrier connections.

The existing panels still have enough space for additional modules simply to be slotted in during an extension.





Made-to-measure “trunk” cables

The cabling itself is effected with copper and fibre optic multiple cables which Datwyler supplies cut to the correct length and pre-assembled with connectors. This meant that even during basic installation no on-site assembly was required and installation could be carried out in a very short time without interrupting running operations – all this central to data centre projects.

The above aspects in combination with timely logistics by Datwyler ensured that installation at the Liechtenstein State

Administration data centre was completed on schedule in February 2010.

“It is ideal for us if the manufacturer and installer sort out the necessary conversion details independently after contract award, from the clarification of distances to test logs”, says Peter Kindle, head of IT at the Liechtenstein State Administration. “The cabling in the computer centre is neatly structured and, despite the high packing density, very clearly laid out. Moreover it gives us the flexibility and the necessary spare capacity to implement our planned projects and upgrades without major infrastructure modifications.”

In order to save the State Administration work during further expansion, Datwyler has a record of all the requisite data centre dimensions and data. This means that the manufacturer is now supplying ready-to-connect trunk cables of the correct size whenever required.

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