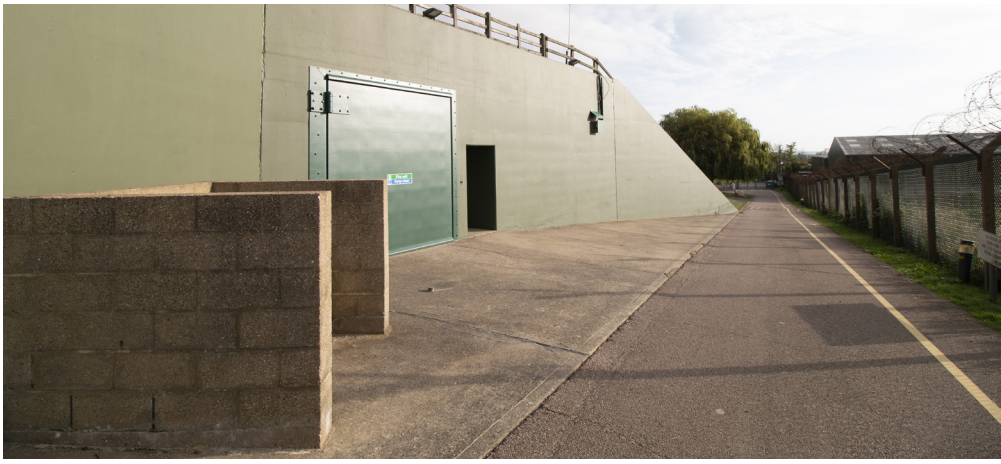
Customer: **Cyberfort**

DATA CENTRE IN OLD MILITARY BUNKER MAKES MOVE TO MULTI SENTRY



Multi Sentry's combination of performance, efficiency and compact footprint make it the ideal option for a cloud hosting data centre housed in an old underground nuclear bunker.

Operating since 1994, **Cyberfort** offers the highest level of protection for companies' business-critical data and applications with military grade security.

Housed in a former Ministry of Defence nuclear bunker in Kent and thanks to a unique underground design and ultra-secure location, its cloud hosting data centre (previously known as *'The Bunker'*) can offer clients enough protection to literally withstand any army.

With ever-changing demands on data, security has never been more of a priority, and Cyberfort offers a complete range of cloud, cybersecurity, colocation, and compliance services that help keep businesses protected 24/7/365.

UPS REFRESH REQUIRED

As an enterprise offering secure space where infrastructure can't afford to fail, having a reliable and fully working UPS is crucial to ensure Cyberfort and its customers continue to operate without disruption regardless of the situation.

However, the data centre's existing power protection setup comprising 6 x 80 kVA UPS was approaching its end of life, with the cost involved in maintaining and running these UPS systems becoming increasingly more expensive and unviable.

The decision was made to phase out the existing UPS and replace with newer, more efficient technology.

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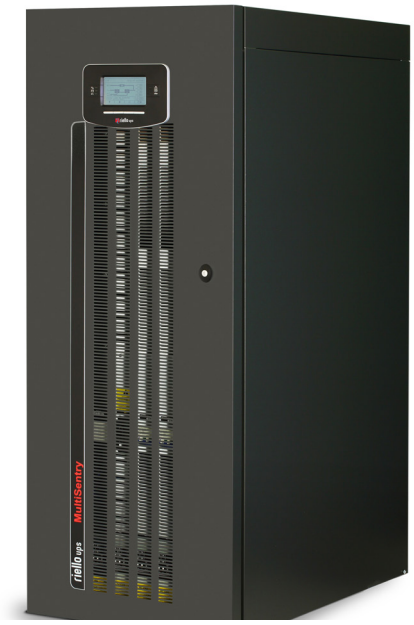
EXPLORING THE OPTIONS

Authorised Riello UPS reseller and service partner **Specialist Power Systems** is a long-standing supplier for Cyberfort, having looked after the UPS at both their sites in Kent and Newbury since 2008.

They were asked to specify a replacement, but the unique installation environment threw up several significant challenges.

The data centre is housed in a bunker 5 metres underground with only a relatively small opening available to lower the replacement equipment into place, while each item couldn't exceed a 1,000 kg lifting beam rating.

These factors limited the choice of solutions as some options simply wouldn't fit or would exceed the maximum weight capacity of the hoisting system used to lower the equipment down into the server rooms.



MAKING THE MOVE TO MULTI SENTRY

Taking into account the restrictions on space and weight, along with the need for a more efficient solution than the existing UPS, Specialist Power Systems recommended the Riello UPS **Multi Sentry (MST)** range as the optimum option.

Delivering exceptional performance and up to 96.5% efficiency in one of the most compact footprints in its category made the transformer-free MST the ideal fit for Cyberfort.

The 6 x end of life UPS would be replaced with 4 x 100 kVA MST units connected in parallel to deliver 300 kVA N+1 redundancy.

Due to the complex nature of the project, the transfer of the critical load from the existing UPS to the new one was staggered over a 12 month period, with the existing infrastructure having to remain in situ throughout.

This required Specialist Power Systems and its approved sub-contractor **Lewis Electrical** to undertake a range of onsite electrical installation works, including 2 new 630A electrical supplies from A and B substations, as well as new switchboards and distribution boards in various data halls across the facility.

Due to the phased transition period, all new infrastructure from the 2 site transformers had to run 102 metres from substation A and 146 metres from substation B, while all new LV cables had to be trenched 85 metres through an area already housing existing services.

Prior to the switch over between the old and new UPS, Specialist Power Systems also conducted comprehensive onsite load bank testing and battery autonomy testing to ensure the optimum system operation and runtime.

SUCCESSFUL OUTCOMES

One of the major considerations when designing any new UPS system is the total cost of ownership of the new system versus the existing units.

The new Multi Sentry units are considerably more efficient than the end of life UPS that were replaced. Indeed, the new installation cut the customer's electricity use by around £32,000 a year.

And despite the extremely complex nature of the project, it was completed ahead of schedule and on budget.

Adam Baverstock, Sales Director of Specialist Power Systems and the project lead, commented: "I think this was a unique project that really tested our engineers and installation team due to the difficult surroundings of the site, so to bring this project in budget and ahead of schedule was a credit to the teamwork needed."

While a **spokesperson for Cyberfort** added: "Specialist Power Systems have been with Cyberfort from the start, and with their experience, professionalism and guidance have helped us grow as a business.

"They have a pragmatic and proactive attitude that is customised to our needs. Specialist Power Systems have performed seamlessly throughout every project, delivering a quality installation every time."