



Frequently Asked Questions on Interact

What does Interact offer?

Interact offers a first to market machine learning tool that delivers reliable information on energy draw, use phase (Scope 2) carbon and embedded (Scope 3) carbon across all makes and models of servers in every geographical region. It also provides comparative cost analysis for decommissioning, migration, consolidation, new site creation and optimisation projects.

Why is Interact unique?

Interact is a powerful tool for sizing the server estate and delivering quick, accurate analysis on the total cost of ownership. We are the only company on the market with a comprehensive solution that encompasses carbon reporting, cost reduction and efficiency gains with wrap-around expertise on hardware configuration, software asset management, software development, sustainability and ESG risk management. Our tool is constantly reviewed and improved with the aid of a dedicated research facility and in-house software development.

How does Interact differ from a DCIM?

Interact doesn't just look at your current estate and catalogue the assets. It looks for the opportunities to refresh and consolidate your current estate into a new version that is more energy efficient, performant and carbon effective. While DCIM may let you know which hardware you have, Interact tells you how it is performing, what opportunities exist for improvement and how to make those changes – whether on configuration, replacement or upgrades.

| Use cases | DCIM | Interact |
|---|------|----------|
| Asset management | X | |
| Power monitoring for entire power chain (from the generator down to a specific outlet on a PDU) | X | |
| Environmental monitoring (temperature, pressure, humidity and air flow) | X | |
| Change management | X | |
| Capacity planning for IT and facility equipment | X | |
| Server energy efficiency (transactional operations per watt) | | X |
| Server Performance Benchmarks and maximum performance scores | | X |
| Cost analysis for existing infrastructure | | X |
| Server refresh recommendations to reduce Energy and Carbon | | X |
| Server refresh recommendations to reduce Total cost of ownership | | X |



interact.

Sustainable technology innovation

Why is Interact better than manufacturer performance analysis tools?

Server manufacturer tools such as [Dell's Enterprise Planning Tool](#) and [HPE Power Advisor](#) estimate the power consumption of servers at different load levels. However, these tools are vendor-specific and limited in the models they include (for example HPE's tool only includes G9 or newer models and Dell's does not include blades). Interact is able to offer previous generations across multiple manufacturers with one interface. More than that, it is the only tool to offer energy efficiency, performance measurements and cost projections incorporating capex and opex. This makes it a unique solution for refresh recommendations based on the data centre's total IT workload.

What cost analysis does Interact offer that has not been available before?

Decision makers have previously never been able to capture the cost of transformation projects, which means they have not been able to build a body of information to inform better decision making over time. Because Interact is non-invasive, it enables analysis of historical migration or consolidation. This information can be compared to other hypothetical options to carry out long-term understanding of the cost of transformation within complex organisations and which options work best long term.

What additional revenue does Interact enable?

Consolidation of hardware extends beyond the hardware saving. It also involves potential resale of unused, surplus software licensing, recovery of value on the server estate as well as space savings and maintenance costs. Our software tool is able to quantify reductions in energy spend and associated carbon while at the same time factor in purchase. Drawing upon decades of experience within the sector, we are able to offer unbiased advice on maximising revenue associated with refresh.

Does Interact cover the entire data centre hardware estate?

Interact is a server analysis tool born of front-line research and analysis of multiple makes and models of servers. Interact does not cover networking switches or storage because the data sets do not exist to the same level of accuracy as [SPECpower](#) provides for servers. We have chosen to draw (estimated to be 70% of the overall IT energy draw), rather than dilute effectiveness with less reliable information on networking and storage. In addition, the higher refresh rate on servers compared to switches and networking make these the best opportunity for increased efficiency gains over time.

Does Interact cover virtual machines?

Interact analysis is based on reliable market data sets on bare metal servers and their configurations. We know from our research that the energy draw of virtualisation depends on factors like the number of virtual machines and the type of workload. Measuring energy draw on bare metal is more accurate as a baseline for the virtual estate.



interact.

Sustainable technology innovation

What about if servers are tied to a particular application can't be replaced?

We are aware that some critical applications are run on legacy servers and cannot easily be replaced by another model. This is where the Interact component level analysis upgrades can still be carried out, which will reduce energy usage overall. Interact is the only tool that holds historical data going back through the server generations, putting us in the unique position of being able to offer efficiency gains on older servers as well as new.

Can Interact help with procurement and cost realisation on existing equipment?

Interact is a software provider which is specialised in providing vendor neutral analysis. However, our consultants have strong understanding of the resale market. We can offer objective, non-specific advice in how to buy equipment, components and IT Asset Disposition services from a variety of outlets. If you need more information on this, please ask for one of our consultants.

What is the ongoing research at Interact?

Interact was developed by scientific research and this is an ongoing part of the company DNA. These are our current areas of exploration:

- More accurate measurements of embodied carbon through international research project CEDaCI¹
- Effect of environmental conditions (temperature and pressure) on server's energy efficiency
- Effect of BIOS power modes on server's energy efficiency
- Effect of memory configuration on server's energy efficiency
- Effect of virtualisation on server's energy efficiency

¹ Interreg NW funded "Circular Economy for the Data Centre Industry" www.cedaci.org