



Stunning Visualizations Played a Central Role in TP ICAP's Path to Success

Executive Summary

- Company: TP ICAP
- Industry: Financial/
Data Analytics
- Location: London,
United Kingdom
- Solution: Device42 Core +
Application Mapping

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ABOUT TP ICAP

[TP ICAP](#) are UK-based professional intermediaries that play a pivotal role in the world's financial, energy and commodities markets. By matching buyers and sellers, they create liquidity and price discovery in these markets, providing insight and context to clients.

TP ICAP operates a hybrid model where brokers provide business-critical intelligence to clients. It's supplemented by proprietary screens for historical data, analytics and execution functionality. A leading Global provider of proprietary over-the-counter pricing information, TP ICAP's Clients include banks, insurance companies, pension and hedge funds, asset managers, energy producers and refiners as well as risk and compliance managers and charities.

With a market reputation for honesty, integrity, and excellence, TP ICAP's IT systems and are the backbone of the business. Furthermore, due to the nature of financial markets, TP ICAP is subject to strict regulatory requirements while customers expect (and demand) 100% system uptime.

THE CHALLENGE

Facing the unavoidable closure of the two primary London offices and their associated data centers, TP ICAP used the opportunity to optimize their data center strategy to better support their business objectives. Furthermore, a significant portion of the server estate and associated hardware in their four data centers was approaching the End-of-Life (EOL) and/or End-of-Service (EOS) point.

This being the case, TP ICAP looked at the resultant migration project as an opportunity to make their IT more efficient by both consolidating down from four data centers to two, while upgrading hardware and processing density to make the two that are left far more efficient, both lowering overall cost while at the same time, boosting overall processing power.

Key Goals and Strategies Include:

TP ICAP decided to look to the cloud first when formulating their new data center strategy, both to gain agility and to take advantage of the flexibility and economies large-scale cloud vendors are able to offer customers.

The following guidelines were established to guide migration project planning going forward:

- **Think “Cloud First”**—if a cloud option is available, TP ICAP will leverage it over self-hosting.
- **Reduce data center footprint by 50%**—Take TP ICAPs overall data center deployment from four DCs down to two strategic DCs, both by taking advantage of processing power, memory, and storage density improvements that are now available and by consolidating existing IT systems where possible.
- **Replace and/or upgrade old hardware and software**—With a focus on improving performance, functionality and security, any hardware or software at or approaching EOSL should be replaced or upgraded.
- **Boost overall IT and data center agility**—Implement and/or Improve existing automation, wherever possible, to allow for self-service across the board to maximize IT efficiency.

THE SOLUTION

To discover and map the existing infrastructure, including hardware, software, services, and interdependencies, TP ICAP turned to Device42's Enterprise Application Discovery. TP ICAP also considered it paramount that the discovery solution they utilized could perform discovery without requiring their existing networks to be re-architected. Furthermore, they were not interested in a solution that required deployment of agents to perform discovery.

With a goal of re-architecting their existing data centers and by proxy, core IT deployment, the ability to map running processes and services and to document associated network connections was also critical to their understanding of dependencies, while providing actionable insights to help with planning all stages of the project. It was estimated that with Device42, they could reduce planning time and overall effort by upwards of 25%.

A UNIQUE APPROACH TO VISUALIZATION: DEVICE42 DISCOVERY DATA + CIRCOS

TP ICAP combined discovery data from Device42 with a product called Circos, bringing a unique flavor of visualization to their data center migration project. Circos visualizations make it easy to summarise hundreds (or thousands!) of data flows in a single diagram, which is easy to interpret and enables quick identification of issues and anomalies.

TP ICAP's unique approach to visualizations has offered them a better understanding of their unique application topology. Furthermore, by combining Device42's comprehensive discovery with Circos, which is open source, there was no need to contract or spend hundreds of hours custom designing their own tools for discovery or displaying visuals—and with far better results.

By visualizing Device42 data in Circos, TP ICAP can quickly and easily:

- Understand dependencies, identify unknown devices and IPs, and easily separate internal from external (cross MAN, WAN & firewalls) data flows.
- Identify ["Zombie" servers](#) (servers without an "owning" application) including those running processes, dataflows between other servers, and access from desktops.
- Resolve "Zombie" server issues over 75% faster.
- Prioritize investigation of unresolved devices and IPs by network connection volume and the importance of what they connect to.

THE FUTURE

TP ICAP continues to build on the foundations of the strong CMDB, continuing to improve operational reliability and efficiency. Current initiatives include:

- Automated recycling of IT assets (servers, databases, storage, etc.) based upon detection of unused assets—including full integration with the ITSM change processes.
- Smart hints and tips for application owners based upon analysis of network data flows and running processes to help them improve the accuracy of their application modelling—including detection of anomalies and potential security issues.

To learn more, call +1 (844) 424-2422 or visit

www.device42.com