

Platinum
Business
Partner

IBM



SCC and IBM Partnership Excellence



we partner.



Introduction



James Rigby, EMEA CEO, SCC

“SCC has partnered with IBM for almost 40 years. In that time, technology has changed the way the world does business and SCC has grown alongside IBM to serve the ever more complex needs of business.

“SCC bridges the gap between business need and technology to deliver world-class solutions that work. We know IBM inside out, from its technology to its people and vision. Whatever we do together delivers the strongest, most agile solution for business.”



Paul Brown, Vice President of Partner Growth, IBM UKI

“IBM’s relationship with SCC is hugely valued across the IBM organisation. This has developed over the years to a high-value multifaceted partnership in the market. In the last 10 years SCC’s IBM business has grown to become a large strategically positioned Partner.

“Maturity in this market also means SCC are regularly building complex offerings and programs, giving them a deep understanding of IBM and how to optimise offerings for customer benefit.”

SCC and IBM

The only UK IBM Platinum Business Partner
and Red Hat Premier Partner

SCC is Europe's largest independent and multi award winning IT services business. We serve UK commercial and public sector organisations including central government. We enable people to do business by planning, supplying, integrating and managing their IT. We make IT work through partnership, knowledge and passion: trusted to run IT infrastructure services for leading business across Europe for 40 years.

SCC serves thousands of businesses in more than 50 countries, operating out of 75 locations in the UK, France and Spain. We are supported by global delivery centres in Romania and Vietnam. We provide solutions that increase profitability, business performance, business agility and reduce cost.

SCC's core service offerings include:

- Managed services
- Professional services
- Supply chain services
- Specialist enterprise services
- Integrated SCC-IBM support services

We are:

- A Top 3 UK Data Centre & Cloud Services provider.
- Wide range of IBM consultancy, workshops, implementation and post delivery services.
- Fully certified for the sale and implementation of IBM Z Systems, Power Systems i/p and IBM Speciality Business Partner for IBM Storage.

simplify
the complex.

[Click Here to view the IBM Europe Latest Video](#)

SCC's IBM Professional Services

SCC's enterprise architects and consultants are a highly skilled team who are recognised as subject matter experts in their field. They provide quality business, project and technical consultancy ensuring project methodology and Quality Standards are adhered to, managing customer expectations ensuring solution design and implementation are based on technical best practice.

Consultation and Design architect

SCC's enterprise architects deliver pre- and post-sales services to customers with certified skills in IBM Power Systems (AIX, i/OS servers), IBM Z Systems as well as Red Hat Linux. Our enterprise architects assist customers in developing business strategies and detailed requirements supporting the implementation of new technologies particularly in the enterprise high availability area for servers and storage

For IBM Storage Solutions, the team has certified skills in Flash Systems, Spectrum Products and Hybrid Cloud Software Defined Storage. In addition, SCC's enterprise architects can deliver pre and post sales services for containerisation solutions based on Red Hat OpenShift and IBM Cloud Paks, with software provisioning, configuration management, and application-deployment delivered by Red Hat Ansible.

Document/Skills Transfer

To ensure that the project meets the agreed timescales, SCC's IBM consultants will also assist in the project governance. This includes attending regular review meetings, agreeing milestones, changes to the scope of work, taking necessary actions and issues before completing the project signoff documentation.

Once the project is complete, SCC can also supply additional educational workshops and skills transfer. This can be extended to include system health checks producing a report detailing any issues that may have been found and resolution strategies.

Implementation

Using a defined methodology, SCC's IBM specialists deliver a range of consultancy, workshops, implementation and post delivery services. These include Implementation Planning Workshops (IPW) which ensure the final design meets the requirements with agreement of all involved parties, project timescales and scoping the services required.

Once complete, Project Definition Workshops (PDW) follow, these define the installation, layouts, services, timescales, roles and responsibilities. They also help to populate the project plan and identify whether additional resources are required to meet the project timescales.

The team will also develop and deliver detailed testing plans as agreed at the IPW/PDW and if high availability is implemented, revisit the infrastructure at agreed times to undertake full failover testing.

During the implementation phase of the infrastructure

and before final sign-off of the project, documentation of the build will be delivered and any skills transfer agreed at the earlier workshops completed.

Remote Monitoring

SCC's System Monitoring Management service provides a monitoring service for your operating system instances across IBM Power systems and Storage infrastructure platforms. The service uses a bespoke monitoring capability that can enable alerts to be generated to provide early identification of system or application issues. In addition SCC delivers a monthly key indicator report of the systems health. An experienced consultant will have scheduled calls with your administrators or management to review the systems stability and performance.

SCC are highly experienced in monitoring any environment using the following operating systems and hardware:

- IBMi
- AIX
- VIOS
- Flash Storage systems



IBM Power Systems for your hybrid multi-cloud strategy

Your priority is our priority, especially during these challenging times. Get the security and reliability necessary for an effective hybrid multi cloud strategy with IBM Power Systems.

IBM Power Systems: accelerated computing servers

Build an intelligent infrastructure for modern analytics, HPC and artificial intelligence (AI). Achieve x46 faster machine learning performance on the most advanced accelerated computing servers.

Reduce cost and improve your cash flow

In times of uncertainty, the IT decisions you make matter more than ever before. With the Fair Market Value Leasing, IBM helps helps you:

- Minimise upfront cash expenses
- Add capacity and functionality during the lease as you grow
- Improve cash flow with predictable monthly payments
- Have a sustainable approach to IT lifecycle management

When data-intensive workloads are the bottom line, the hardware you buy should meet today's expectations and prepare you for the future.

The promise of hybrid multi-cloud

81% of enterprises are attempting a multi-cloud strategy. IBM Power Systems can help you simplify your journey.

- Secure and optimize your IT infrastructure
- Discover the multi-layered approach to server security that can minimise your vulnerabilities
- Rated 1st in OS reliability by ITIC
- ITIC recently surveyed over 1,000 global businesses to gain insight to server and server OS reliability

[Click HERE for more information on IBM Power Systems](#)



Capacity on demand

we supply.

To maintain a competitive advantage, you need an IT model that helps you adapt rapidly to the changing tech landscape.

That's where consumption-based IT thrives because it:

- Balances the flexibility of cloud infrastructure with the control, security and reliability you'd expect from your on-premises data centers
- Pays for IT resources and capacity on demand, reducing up-front CapEx and other costs associated with traditional procurement processes (i.e., energy, cooling, etc.)
- Enables rapid infrastructure expansion to accommodate the needs of new projects and workloads
- All of these benefits contribute to a greater alignment between the business and IT leaders. And when both sides of an organisation are aligned, you're better prepared to deliver innovative products and services to your customers

Why capacity planning is right for your business

Discover the benefits of a secure, flexible server capacity strategy:

- Granular metering
- Pay for use by the minute, plus get real-time and historical usage monitoring and analysis, giving you greater operating flexibility
- Lower costs

- Lower your initial base capacity by up to 50% and reduce compute capacity costs by 20-30%
- Security with scalability
- Get the security you expect from on-premises private cloud but with the added scalability you traditionally associate with public cloud

IBM Scale out consumption model

- Reduced up-front CapEx associated with traditional procurement processes
- Monthly fees – pay for only what use with metering by the minute
- Share resources across systems - Enables rapid infrastructure expansion to accommodate the needs of new projects and workload
- IBM's unique comprehensive approach to cloud (on-prem IT to public cloud provider)
- Up to 58% lower initial system price to drive a flexible financial acquisition
- Offers a single-pane-of-glass for monitoring and metering a complete POWER landscape

IBM Enterprise consumption model

Enterprise Pools 2.0

IBM Power Enterprise Pools 2.0 is a new IBM Power System branded the E980. E980 is designed to deliver an enhanced multisystem resource sharing and by-the-minute consumption of on-premise Power E980 compute resource. Processors and memory on servers which are all installed in a Power Enterprise Pool 2.0 are activated and made available instantly. Processor and memory usage are tracked and calculated across the pool on each server.

Switch on CPU Cores in per day increments:

- Flex up & Flex down capability
- Elastic Capacity can be allocated to any server within the solution
- CPU can be switched on instantly, Elastic CPU days do not attract a maintenance charge, it also includes IBM AIX & Power VM software

IBM Power Cloud

Only IBM Cloud delivers Power Systems as a service on a global, customizable and enterprise-grade scale.

- Cost-efficiency, pay-as-you-go billing options, end-to-end support, on boarding assistance and data centre resiliency and availability
- With decades of proprietary IBM Power Systems knowledge. We understand your POWER workload needs more than any other cloud provider—and we're ready to help
- IBM's portfolio includes unique enterprise capabilities, such as IBM Power, LinuxONE (Hyper Protect), bring your own Linux® (BYOL) VMware and the industry's only FIPS 140-2 Level 4 certified cloud hardware-security module (HSM)
- You specify the compute, memory, networking and storage per LPAR instance, plus deploy custom images
- Powered by IBM Power Systems: S-Class and E-Class systems running PowerVM
- AIX and IBM i: Choose from a catalog of support AIX and IBM i, images or bring your own
- Configure workloads with cores, types of cores, and memory resources, with dynamic resizing available
- Power Systems Virtual Server group enables provisioning of Power Virtual Server LPARs in the chosen region

This offering provides a way for clients to purchase an AIX or IBM i Power VM-based Virtual Server on IBM Cloud. With IBM Power Systems VS, clients can provision the CPU, Memory, Storage and Networking capability through the IBM Cloud catalog while also self-managing from the OS upwards. Clients can also consume additional IBM Cloud Services to build-out a cost-effective, secure, and scalable hybrid multi-cloud architecture.

IBM storage

Data-first infrastructure for hybrid multi-cloud

IBM FlashSystem storage, built with IBM Spectrum Virtualize software, is the simple answer for your enterprise deployments. Disk, Storage Class Memory (SCM) and IBM FlashCore technology brings flexibility with the performance needed for demanding workloads and AI-driven Easy Tier makes sure data is effortlessly positioned on the right storage for the right workload.

Data storage made simple for modern data

Whether you need to store more data and gain faster insights by applying AI and big data, to deploy applications in containers that improve data mobility, or to improve your cyber resiliency and data protection, IBM data storage provides simple storage solutions that address all modern data requirements and provide the key to your hybrid multi-cloud strategy.

Enterprise data storage infrastructure solutions for all your hybrid multi-cloud data needs

- **Flash storage** – turbocharge your flash access with end-to-end NVMe for accelerated performance and lower latency
- **Software-defined storage (SDS)** – manage your data growth and enable multicloud initiatives with file, block and object solutions
- **Data protection software** – protect your critical business data with an integrated approach to backup and disaster recovery

- **Hybrid flash storage arrays** – control costs with an optimized mix of storage media at an affordable price
- **Storage area networks (SAN)** – capitalise on enterprise-wide data sharing and collaboration with intelligent SAN switches, directors and routers
- **Tape storage** – improve data economics with tape storage solutions from the global market leader

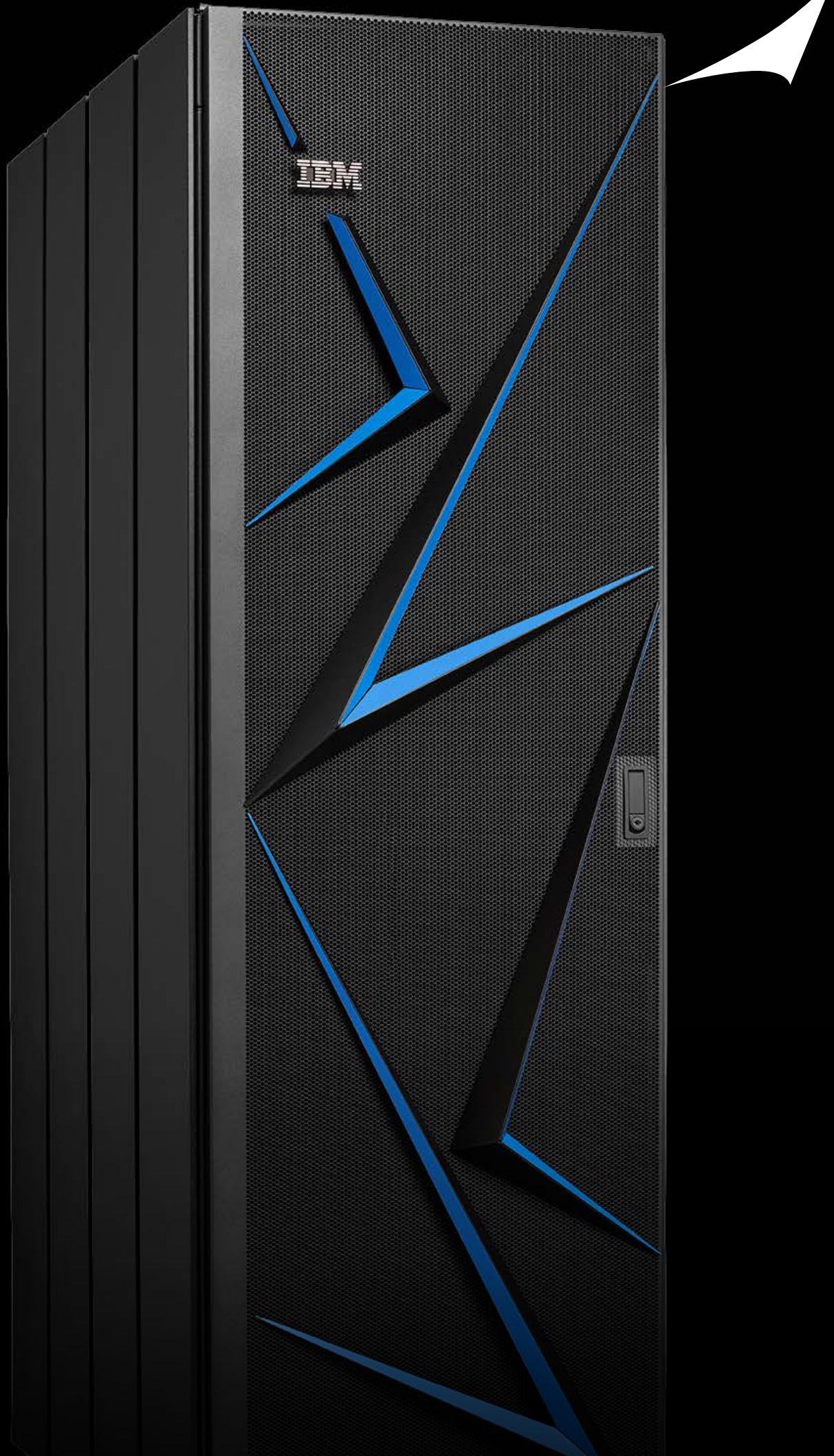
Client Storage Assessment (CSA)

For many enterprises, hardware costs, optimization of data placements, rapid data growth, and running out of physical space are among the most common storage challenges. While these are familiar challenges, the starting point for addressing them is a proper understanding of the current storage environment to guide building a plan for improvement.

Creating this understanding is often limited by inadequate tooling and the additional complexities introduced by multi-vendor environments. IBM Client Storage Assessment (CSA) is a no-charge offering

that helps to create this understanding. CSA provides in-depth insights into your current multi-vendor storage environment and builds a differential business case that compares the cost of continuing as today with aligning to a proposed alternative solution over a three year operating period.

we innovate.



Never overbuy with IBM's Storage Utility

IBM introduces new storage purchase options so you never overbuy again.

- **IBM Storage Software Utility offering** - pay as you grow option for IBM Spectrum Protect software
- **IBM Storage subscription offering** - a short-term commitment to select IBM Storage FlashSystems that can be cancelled any time after the initial 12 months
- **IBM Storage subscription offering** - giving customers a flexible multi-year subscription on IBM Storage. We identify your current and future needs and deploy the entire projected capacity on day-one giving you maximum performance for no disruptions during growth spurts
- No need for a vendor to disrupt your data center to add buffer capacity
- Eliminate the cumbersome procurement cycle when adding new capacity within the contract period
- Move high upfront costs to predictable quarterly charges aligned directly with business needs

IBM Flash Momentum

Flash Momentum is a new, fully flexible offering from IBM that refreshes your system after three years with no lock in. It is part of the comprehensive IBM FlashWatch program, which gives you complete confidence around the Acquisition, Operation and Upgrade phases of your storage lifecycle with IBM FlashSystem.

Highlights:

- You only pay for what you use
- Additional capacities are instantly available by easily provisioning what you need

[Click Here to view the Flash Momentum Video](#)

IBM Software systems

IBM Software systems and applications are designed to solve the most challenging needs of organisations large and small, across all industries, worldwide.

Today, organisations must monetise opportunities, accelerate profitability, innovate and reduce costs. SCC, in conjunction with IBM technologies, can open up an ecosystem of opportunity, creating smarter applications, optimise cloud infrastructure and accelerate data insights and innovation.

SCC together with IBM can work with you to unleash the power of:

- **Analytics** – engage with data so it can answer tough business questions, uncover patterns and pursue breakthrough insights
- **Cloud** – choose the right hybrid cloud solutions for your organisation and stay in control of data. Collaboration and Talent Solutions leverage real-time analytics with IBM Watson and deliver insights that put the tools for success in the hands of the digital workforce
- **Internet of Things (IoT)** – help combine Internet of Things data with other data sets to gain new insights, and apply them to make the physical world work better
- **IT Infrastructure (Systems)** – IBM Systems and Storage Solutions disrupt IT infrastructure and enable outpacing of technology breakthroughs by using Analytics, cognitive technologies and secure cloud capabilities

- **Security** – protect data and reputation with services and solutions that reduce risk while improving productivity and customer experience. SCC support the fight against cyber-crime by enabling businesses to prevent incidents, respond to threats quickly and minimise damage by malicious activity, helping them to transform their approach to cyber security from reactive to proactive

Cyber Security Service

SCC's Cyber Security Service (CSS) is a managed security service delivered by a dedicated and experienced Security Operations Team. Using the most advanced tools and technologies to detect malicious activity, we significantly reduce time to detection and improve capabilities to stop potential attacks. Our CSS is powered by a next generation SIEM platform that integrates and consolidates information from different sources, including infrastructure log correlation, threat intelligence feeds and advanced data analytics techniques.

The DETECT stage brings to customers the services that will address fundamental challenges around security operations and potential breaches.

SCC provides a Cyber Security Service (CSS) which delivers a full view of known and unknown security offences to your business by collecting data from multiple sources and proactively alerting when a threat is detected. Going further, CSS works in partnership with our clients and actively seeks to provide advice on the best course of action following detection of a threat. This service from SCC can help you meet your regulatory and security compliance requirements and is powered by IBM's market leading Q-Radar platform.

IBM Cloud Paks

A faster, more reliable way to modernize and move to the cloud.

As a Platinum level IBM Business Partner SCC is strongly positioned to provide our clients with all they need to deliver their IT Hybrid Cloud solutions. SCC operates a build once, deploy anywhere philosophy using open, secure and integrated IBM and Red Hat software technologies.

SCC is pleased to offer all the IBM Cloud Pak software solutions which provide an easy and powerful way to run high-quality, container-based enterprise software on a modern Kubernetes-based orchestration platform that enables high availability, scalability, and ongoing maintenance for enterprise applications, from a source you know and trust.

They include container images that are built and tested by product teams, capturing product expertise and best practices in a form factor that is easy to consume and deploy in a location of your choice, on-premises, in the cloud, or with pre-integrated systems. Images provided by IBM are regularly scanned for known security vulnerabilities and follow a rigorous process for managing newly identified issues.

IBM Cloud Paks also include pre-configured Helm charts that describe runtime environments for IBM software products based on established best practices and can be easily customized during the deployment process. They may also include Operators that build product-specific deployment and lifecycle

management expertise into the software.

These capabilities combine to provide a first-class deployment experience, integration with core platform services, and production-ready qualities of service. Certified IBM Cloud Paks built with Red Hat Certified Containers combine the expertise of IBM and Red Hat into trusted enterprise software solutions that provide fast, easy deployment with enterprise qualities of service and simplified, flexible pricing.

The new family of IBM Cloud Paks – including Cloud Pak for Applications, Cloud Pak for Data, Cloud Pak for Integration, Cloud Pak for Multi-cloud Management, Cloud Pak for Automation and Cloud Pak for Security – give our clients fully modular and easy to consume capabilities they need to bring their workloads to modern, cloud-based environments.

Equally, SCC can help you develop the culture and skills transformation required to deliver the next generation of modernised applications. SCC offerings cover a number of disciplines:

- **Advise** – Advising our clients on every step of their journey to cloud
- **Move** – Migrating and/or modernising applications and data
- **Build** – Helping to build innovative and insightful applications and experiences
- **Manage** – Managing, providing governance and optimising hybrid cloud environments

SCC can be your skilled and trusted IT partner using the best of breed software technologies from IBM and Red Hat using proven methods to deliver all your desired hybrid cloud solutions.



The mainframe is new again

Support your digital transformation and get the cloud you want – with the privacy and security you need.

IBM Mainframe – Introducing the z15. The new IBM Z single-frame and multi-frame systems bring security, privacy and resiliency to your hybrid cloud infrastructure

Why the z15?

- Deploy with agility
- Get ultimate uptime
- Gain flexibility in the cloud data centre
- Ensure data privacy with encryption everywhere
- Scale for business growth
- Reach new heights with AI and blockchain

Benefits

Cloud native – consistently develop, deploy, manage, orchestrate and automate. Build digital and AI-infused services that are developed — and deployed — anywhere in your cloud.

Encryption everywhere – the ideal platform for sensitive data and critical applications in the cloud, IBM Z can protect your data and manage privacy by policy across your ecosystem.

Cyber resilience – IBM z15 is designed to ensure isolation of workloads at scale to protect against insider and outsider attacks, deliver continuous service and mitigate downtime.

z15 systems are made for businesses of all sizes – from

start-ups to large enterprises – and are available through your choice of public, private or hybrid cloud.

Tailored Fit Pricing for IBM Z is a transformational pricing option for IBM Z software. It offers simple, transparent, and predictable pricing for IBM Z software running on the z/OS platform. It introduces two comprehensive alternatives to the Rolling 4 Hour Average (R4HA)-based pricing model, for both new and existing workloads:

The Enterprise Consumption Solution is a tailored usage-based pricing model, where compute is measured on a per-MSU consumed basis. MSU consumption is aggregated hourly, providing a measurement system that better reflects actual system utilization. Charges are based on the total MSUs consumed annually, which greatly assists clients with seasonal workload pattern variations.

The Enterprise Capacity Solution is a tailored full-capacity licensing model, offering the maximum level of cost predictability. Charges are referenced to the overall size of the physical environment. Charges are calculated based on the estimated mix of workloads running, while providing the flexibility to vary actual usage across workloads. Charges include increased capacity for development and test environments and reduced pricing for all types of workload growth

[Click HERE for more information on IBM's Z15 system](#)

LinuxONE III and IBM Data Systems

By integrating the new LinuxONE III as a key element in your hybrid cloud strategy, you add next-level security and stability to your cloud infrastructure, giving you both agile deployment and ultimate uptime.

LinuxONE

Move mission-critical apps and data to your hybrid cloud and fast.

While the Cloud brings the promise of flexibility, agility and openness, only 20% of workloads have been moved to cloud. Why? Companies need assurance that their data privacy and security will not be breached.

Why LinuxONE for your hybrid cloud strategy?

- **Cloud native** – consistently develop, deploy and orchestrate next-gen apps. Build new digital applications, that are developed once and deployed across your cloud
- **Encryption everywhere** – Protect your eligible data and manage privacy by policy with Data Privacy Passports wherever your data resides and moves
- **Cyber resilience** – minimise the impact of internal and external attacks by isolating workloads and ensure continuous service

- **Flexible compute** – take advantage of a platform available to businesses of all sizes, from start-ups to the largest enterprise. Choose your public, private or hybrid cloud

What IBM DS8900F can do for your business

IBM® DS8900F is the next generation of enterprise data systems built with the most advanced POWER9™ processor technology. Designed for data intensive and mission-critical workloads, DS8900F adds next-level performance, data protection, resiliency and availability across your hybrid multi-cloud solutions through ultra-low latency, better than seven 9's availability, transparent cloud tiering and advanced data protection against malware and ransomware.

- **Cloud Native** – accelerate tasks associated with developing, deploying, and maintaining cloud-native applications to unlock the unmatched value for mission critical workloads

- **Encryption Everywhere** – protect 100 percent of your data wherever it resides across your hybrid multi-cloud
- **Cyber Resilience** – continue delivering your business outcomes despite adverse cyber incidents, protecting your data from being modified or deleted
- **Flexible Storage** – deploy IBM DS8900F across businesses of all sizes and different needs through a variety of flexible racked and rack mounted configurations

[Click HERE for more information on IBM Linuxone](#)

[Click HERE for more information on IBM DS8900F system](#)

we advance.

LinuxONE

IBM

Get smart, single-source technology support with IBM Services

Save time and money with our expert technology support for over 30,000 IT products across all OEMs.

IBM Hardware and Software Support Services
Prevent downtime and keep your critical IBM systems running with around-the-clock technology support.

IBM Power Systems Hardware and Software Support
Tiered services options provide integrated 24x7 support for Power Systems technology.

Software Support – Service Extension
Extend technical support for your end-of-service IBM software.

IBM System Storage Hardware and Software Support
Maintain your powerful storage technology by relying on IBM's expertise, vast resources, and analytics tools.

IBM Z Hardware and Software Support
Our integrated hardware and software services are backed by our global support infrastructure, product expertise, and proprietary analytics tools.

Support for IBM Systems i, p, x and Blade technology
Keep your clients' IBM systems running and proactively prevent downtime with our trusted, global support network.

Warranty and Renewals
Configure warranty and maintenance plans to better match your IT needs and meet regulatory requirements.

IBM Multivendor Maintenance (MVM)
Simplify multi-vendor IT support management.

Save money
Up to 25% cost savings on IT support management.

Save time
Up to 20% less time spent on hardware support and managing vendors.

MVM combines the maintenance support of multiple OEM hardware and software products (including enhanced 3rd party "premium" services where available) in today's complex datacentre

environment. Our portfolio is supported and supplied by IBM (in some cases in collaboration with the OEM). Both can be aggregated into one single point solution for simplicity and accountability

One call for IT support
Managing the enterprise IT estate keeps getting more complex. IBM Technology Support Services simplifies the experience by integrating and maintaining hardware and software from virtually every vendor. That means with end-to-end IT support from IBM, you get a single, cost-effective source for keeping your entire IT environment running at peak performance. Problems are resolved before they become failures.

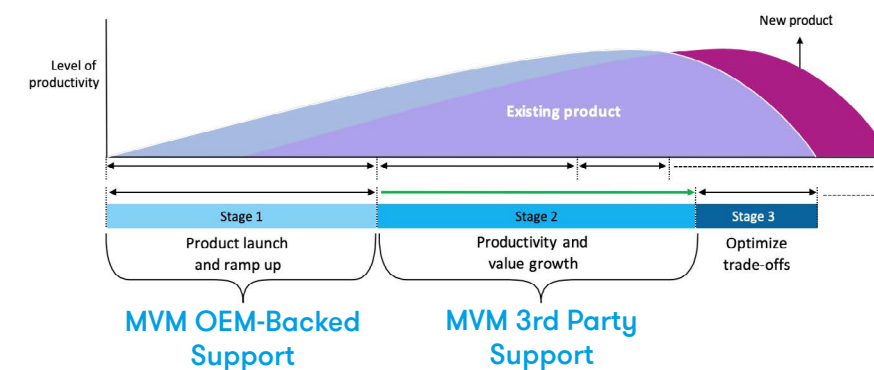
- Outages are less frequent
- IT staff gets more time to focus on solutions that move your business, and the world, forward
- Solve problems – 94% first-call hardware success rate.

Support for commercial open source software

- IBM has been supporting open source for 20+ years
- Support solutions are available for the Red Hat & SUSE product portfolios
- IBM technicians hold key industry certifications
- Premium support offerings are available including proactive and predictive services

[Click HERE for more information on IBM Open source software support](#)

[Click HERE for more information in IBM Multivendor Maintenance](#)



SCC Financing options

SCC can create a bespoke financing solution using either Rigby Capital or IBM Global Finance. Based on individual needs we take into account business strategy, cash flow, working capital, technology requirements and other unique factors.

SCC specialises in facilitating asset-inclusive service payment agreement from 12-60months, which can include end user devices, infrastructure, storage, print and mobile.

Additionally, SCC offers asset-level reporting, discovery tracking, lease or end of useful life management, regardless of brand or original supplier, on a "price per asset" per month basis.



we enable.

Customer Story

Over the last decade there has been a significant increase in the incidence of skin cancer and in the number of patients referred for possible skin cancer. The NHS has struggled to see and treat all of these patients within the target time periods. Visual interpretation by artificial intelligence has made major progress in the last 5 years. The Dermatology department took the opportunity to investigate the IBM Maximo Visual Inspection software to run a pilot project to investigate the possibility of building a AI model to help with skin cancer diagnosis in the NHS.

We assembled a library of 500 skin images all of which had confirmed histological diagnoses. 250 were basal cell skin cancer and 250 were non-cancer diagnoses. The images were labelled and used in the IBM Maximo Visual Inspection software to train a model for skin cancer diagnosis.

SCC were instrumental in overcoming the various barriers to the pilot project taking place and at all times provided excellent service to enable Dr Hampton to learn how to use the software and build a working AI model.

We are now moving forward with further discussions with IBM UK to hopefully build a collaboration and develop a larger project to build a model that could be deployed into the NHS with the aim of supporting clinicians in skin cancer diagnosis.

Customer background

Newcastle upon Tyne Hospitals NHS Foundation Trust is one of the Shelford Group of University Teaching Hospitals and an NHS Foundation Trust. It provides

acute medical services in Newcastle upon Tyne, England, at Royal Victoria Infirmary and Freeman Hospital, the Campus for Ageing and Vitality (the former Newcastle General Hospital site), Newcastle Dental Hospital, Newcastle Fertility Centre and the Northern Genetics Service.

The Freeman Hospital has an international reputation for leading-edge transplant surgery, for both children and adults. The team there performed Europe's first successful heart transplant for a child in 1987 and the Trust has continued to pioneer healthcare, performing the first single lung and the first dual lung transplants in Europe in the intervening years. At the RVI there is one of only two 'bubble units' in the country, where children with severe immune system problems are treated in a special air-tight isolation ward.

The Trust is a leader in healthcare research and development across a wide range of areas, delivering benefits not only for today's patients, but for the generations to come. Their work in partnership with Newcastle University is advancing scientific thinking and clinical practice in areas as important to all our futures as stem cell research, genetics and "ageing and vitality".

Business need

NUTH were in discussion with SCC to arrange a Pilot to evaluate the benefits of an AI solution in helping to detect basal skin cancer from photographs of patient's skin lesions.

This project would be up to 3 months in duration with the server supplied by SCC, using

the Maximo Visual Inspection software and images supplied by the trust.

The Trusts basal cell skin cancer (BCC) clinic currently performs 20-30 biopsies each week to confirm whether or not a skin lesion is definitely a tumour that needs excision of if it is something benign that can be left alone. The power of Maximo Visual Inspection could potentially reduce the need for these biopsies by predicting which lesions were cancer and which were benign. This would reduce the number of procedures for the patient and lead to considerable cost savings for the NHS.

The current standard of care includes a photograph of any skin lesion which is biopsied. The Trust used these images to train the Maximo Visual Inspection application to generate a system that can diagnoses basal cell skin cancer without the need for skin biopsy.

Assembling the BCC image bank took some time as the clinical images needed to be matched to diagnostic codes. The Trust used approximately 500 images to train the model, using patient data where the patient had already given consent for their image to be used for research and teaching. To give the software additional images, the Trust used the software's Augmentation settings to create additional images from the initial pool using the flip and rotate settings.

The Trusts Consultant working on this got far enough to understand the benefits of this type of solution along with what they had achieved.

Solution implementation

SCC supplied a Power system to the Trust for the PoC with the following configuration: A Power AC922 with 2 x 16 core POWER9 processor with NVLink 2.0, 1024 GB memory (using all DIMM slots for maximum bandwidth), 4 x NVIDIA V100 GPUs (SXM2 form factor, NVLink 2.0 attached), 1 x 4 port 10 Gb/s and 1 Gb/s Ethernet adapter (SFP+), 1 x 2 port 16 Gb/s fibre channel storage adapter, 2 x 1920 GB SSD.

SCC installed the Maximo Visual Inspection software on the server in their Warrington lab area, testing the solution to ensure it was ready to be deployed.

Working with the Trusts IT department, the server was installed and tested, with a demonstration of the software to ensure that it was ready for the Clinicians use.

SCC arranged training sessions with the Trust as well as delivered support during the PoC.

Benefit of the solution

The PoC provided the Trusts clinician with an insight into the use of Visual Inspection within the hospital and wider use within the NHS which could eventually lead to quicker diagnosis of Basel skin cancer. This could also incorporate utilising IBM Maximo Visual Inspection Edge to deploy multiple models that were trained in IBM Maximo Visual Inspection. This would deliver portable models which could be used by many users and on different systems, for example by GP's.

Contact Us

At SCC we have a dedicated IBM team of over 25 people. You can be confident that we have the best in the business looking after IBM requirements.

SCC's IBM Sales Team

IBM Enterprise Business

Manager

Richard Potts

07740 253853

richard.potts@scc.com

IBM Hardware & TSS manager

Sarah Hilton

07976 014124

sarah.hilton@scc.com

Commercial Territory Manager

Rob Howe

07976 013550

rob.howe@scc.com

IBM Hardware Commercial

Manager

Lee Crew

07976 014297

lee.crew@scc.com

IBM Software Manager

Steve Mecklenburgh

07976 013394

steve.mecklenburgh@scc.com

IBM Software Sales

Gregory Ayliffe

0777 08 777 80

greg.ayliffe@scc.com

Practice Manager

Chris Page

07976 014507

chris.page@scc.com

IBM Internal Team Leader

Gary Wilkinson

01925 853651

gary.wilkinson@scc.com

**Partner Client Executive for
SCC, IBM Partner Ecosystem**

Steve Boyle

07967-275694

steveboyle@uk.ibm.com



**Platinum
Business
Partner**

