Hybrid Cloud Management

The challenge

Technology is continuously growing and evolving, which often makes it difficult to keep track of the changes taking place. Businesses have been pushed to transform how they work and serve their customers, and this is placing new pressures on infrastructure, accelerating a move to the cloud.

Over the last 12 months many businesses have found more of their work being performed off the enterprise network than on it. More applications are running on cloud infrastructure than in the enterprise data centre. And more commercially sensitive data is being located outside the enterprise in cloud services than within it.

This rapid shift has meant that many organisations now have multiple cloud providers and an array of services across them. Combining multiple, simple cloud elements creates potentially paralysing levels of complexity. When you map this out across complex businesses and large geographies – precisely where the hybrid cloud is supposed to offer most value – it becomes even more challenging.

How can you effectively join up your "cloud crowd" to deliver the experience your customers and users expect?

As you accelerate your move to the cloud, there are also real security risks - you're potentially exposing your vital data and business-critical apps to a whole new level of vulnerability. The multi-cloud environment is a new landscape, with a new set of security threats. Migrating data and apps to this landscape is not just a copy-and-paste exercise – it requires careful consideration of an entirely new operational structure. And this has serious implications for security. It sounds obvious, but your data and services are going to be more distributed, and this has the potential to make security more challenging and compliance reporting a major headache.



Solving the puzzle with Hybrid Cloud Management

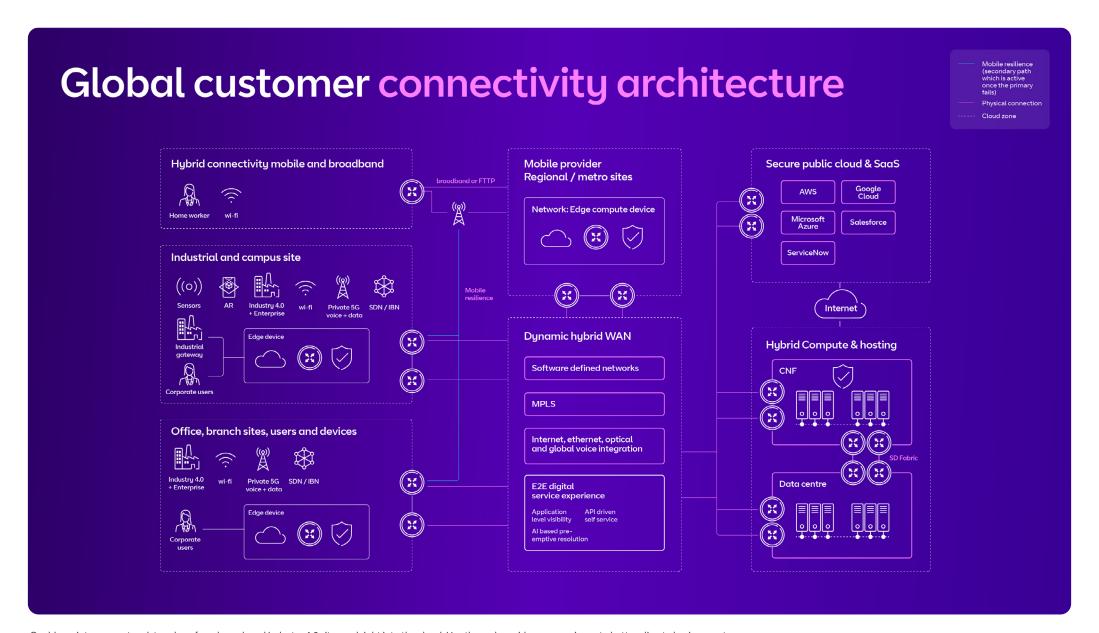
Through our Hybrid Cloud Managed Services and our Cloud Security Architecture, we deliver connectivity to every major cloud provider on every continent (excluding Antarctica), enabling services in days. We also provide and integrate a choice of security controls to manage data across hybrid cloud, so you can select the most efficient and appropriate environment for your data.

Our Hybrid Cloud Managed Services give you everything you need, with blueprinted designs and commercials, as well as network, security, and service wrap. They are designed to address the business challenges you face in a quality, cost-effective, and de-risked way.

Our objective is to define and develop:

- customer outcome-based contracts
- long run total cost of ownership (TCO) reduction
- PAYG consumption aligned to business velocity and appetite
- evergreen technology strategy with flexible integrations
- security by design, including managed identity, security controls and management options
- Networks-as-a-Service (NaaS) ordered through digital interactions.





Our blueprints span network topology from branch and Industry 4.0 sites and right into the cloud. Use them alongside our experience to better align to business outcomes.



The objectives of Hybrid Cloud Management

Hybrid Cloud Management helps your business regain control of its cloud assets and applications. Instead of developing a completely new infrastructure from scratch, it allows you to build on what you have and scale more rapidly, deploying innovation and new applications faster, increasing automation and moving your applications closer to the customer.

Consolidate your infrastructure and suppliers

Our hybrid cloud expertise delivers a consistent set of managed services across your public and private cloud platforms. We work with best-in-class cloud partners to bring business management, scale and innovation to our customers. Successfully reducing overall cloud spend by identifying mismanaged resources, eliminating waste, reserving capacity for higher discounts, and right-sizing computing services. And we also offer our own unique set of integrated services across cloud, network and security.

Hybrid networking objectives

- Implement a 'cloud-first' approach.
- · Reduce costs and optimise resourcing.
- Simplify management of complex multi-cloud services.
- Avoid end-of-life technology issues.
- Improve governance and visibility across cloud providers.
- Build towards Zero Trust with identity, access, network segmentation, device posture management.
- Optimise data security with cloud security policies and sharing secured by encryption
- Monitor and automate threat detection and response.



See joined up across the cloud providers **Business Support** Billing Service catalogue Reporting Ordering Service desk Knowledge base System or Portal Cloud managed Connect Hubrid cloud Cost optimisation Agile delivery Edge, Al, IoT, ML Cloud practice services data services Technical desk (ITIL) Traffic management Data compliance and Cloud visibility PaaS Al-event management Smart transformation security machine learning Infrastructure consulting Configuration Content delivery Usage reporting DB /App capability management / APM management network · Backup, snapshots, Performance Digital experience replication, (array /host), AI -Analytics Loop balancer Proactive monitoring management Microservices Digital transformation deduplication, cloning · Data warehousing and reporting Governance · Domain name service · Migration assessment · Micro data centre Security Data cost optimisation VM and storage admin . RPA Security · Network security Containers reporting Serverless computing Connect Data migration between Hyper automation Identity management Performance Cost management Containers public and private Digital workplace · Cost optimisation IoT management multicloud without Cost reduction Immutable management • Base backup file and refactoring the data infrastructure • Device lifecycle Reservation image backup management Business continuity management DevOps · Base security services Disaster recovery as a Spend tracking · CI/CD anti-virus and anti service · Budget reporting malware Cloud bursting Tools and Service Backup and Plaubooks: create, push. Cost **Provisioning and** Monitoring **Packaging** Inventory and Identity services management recovery configure, deploy, secure management orchestration and analytics and delivery classiffication management **Public Cloud** ITIL Alibaba Cloud **Private Cloud AWS** Google Azure

Our approach to Hybrid Cloud provides an ITIL based structure to agree where data resides and how it is managed and secured.





Why implement Hybrid Cloud Management?

As well as more choice and control over how you manage your customer and business data, there are significant and measurable benefits to be gained by deploying Hybrid Cloud Management. You can distribute your workloads and data across both private and public clouds to suit your business and budget; move data to where it's needed to accelerate innovation, without having to create new supply contracts; and optimise your growth strategy with new digital services and business models.

You'll also be able to:

- increase agility with better buying power to optimise costs
- reduce unpredictability of public cloud TCO
- augment your existing architecture to extend your security
- mitigate risk, manage compliance and enhance data security
- re-think your security attack surface, considering data, applications, assets and services
- remove "cloud crowd" complexity whilst maintaining autonomy and control
- use a flexible OpEx based commercials model
- buy less hardware, minimising assets and reducing the need for CapEx
- design, build and measure your cloud performance using our experience and expertise.



Global cloud architectures Company data centre Mobile Third party Home workers data centre workers workers Internet Google Cloud Google Drive Box Salesforce Microsoft Azure AWS Microsoft Office365 laaS / PaaS providers **MPLS** Headquarters Production / Office distribution





Why now?

Cloud is now mainstream and constantly evolving as more and more connectivity and security is added. By optimising user experience globally, you can use the cloud to gain a competitive edge in your markets.

Key benefits

- Use our Hybrid Cloud Cost Optimisation model through a combination of insight, cost optimisation, increased governance and automation, we quickly bring back any control that's been lost.
- Cloud services increase agility and achieve more predictable costs.
- De-risk your governance on cloud data and improve your security posture with a hybrid cloud managed service environment.
- Reduce CapEx for this year and move to predictable OpEx.
- Start digital transformation, it's key for users and customers. In a world defined by experiences can you afford to give a lesser or slower experience than your competitors? And what effect will that have on your business and market share?
- Security will need your attention; you need a policy and strategy to review and keep cloud threats mitigated. You are responsible for the security of your data stored in the cloud.





Key considerations

Identifying and specifying the right hybrid cloud management solution depends on managing three areas of risk – choosing the right connectivity, choosing where and who to connect to, and the security of infrastructure and data. Addressing these considerations helps us develop a blueprint customised to the specific needs of your business.

Choosing cloud connectivity

- Do you want to use public cloud or private cloud for mission critical apps and data? Can you integrate all these services and manage them from a single portal easily?
- Is there an ecosystem for your business vertical i.e. SaaS, laaS, PaaS etc.?
- How will you manage the migration of users and data into the cloud?
- Will you need independent monitoring capability to hold hyperscalers to performance and service level agreements?
- Do you have the capacity to manage your developed multi-cloud sourcing strategy or will that require additional investment?
- · Would bandwidth optimisation bring any cost advantage?
- Could a managed service across your clouds offer value?

Key actions

- Model costs using historic network data. Tariffs will vary based on connectivity and traffic across the world based on a per-use basis.
- Define how much time you need to set-up contracts, negotiate terms, deploy, manage, and iterate change.
- Develop a 'Cloud Centre of Excellence' to bring together network, cloud, and security aspirations and clarify objectives with your peers.
- If using in-house skills, develop a robust training and retention programme.





Who and where will you connect?

- What customer / private data can you store in the cloud and are you restricted geographically?
- Some legacy apps will not transform into cloud operating stacks. What will you do with them and do you need to retain a data centre?
- What effect will moving apps to the cloud have on performance and, specifically, latency? Will cloud-based apps work as needed? How can you measure and control them?
- Which regions and geographies will you need to connect into to offer the best experience, regardless of where your users are working?
- Can you accelerate the performance of SaaS applications to improve user experiences?

Key actions

- Look at local compute providers who may be better connected and offer lower tariffs for storage of data that doesn't easily migrate to public cloud.
- Quantify the savings you could make by connecting into different geographies and model against anticipated costs.
- Choose a trusted and credible network partner with a strong portfolio and history of customer transformations who can help you manage suppliers and build your business case for change.





Security

- How is the cloud-shared security model implemented within your organisation?
- Can you demonstrate that your controls provide sufficient data security?
- Does the migration of data into the cloud affect your overall security posture?
- Do you know who is accessing which resources and applications, and when?
- Can you detect threats and monitor for data leaks to meet regulatory reporting requirements?
- How do you ensure you remain compliant as sensitive data migrates to the cloud?
- Can you control different business units subscribing to cloud services independently of network / security?
- Are you able to scale your security policy as your number of cloud services increases?

Key actions

- Understand the security controls available from the cloud providers, assess how they work together and determine how it affects your security posture.
- Create a cohesive security policy across different management systems and configurations for different cloud platforms and data locations.





Why us?

We're a top rated global networked IT provider, supporting global growth and local needs consistently and at scale. We privately pre-connect more than 220 third party data centres globally and over 30 data centres from third party cloud service providers. We also run our own computer storage facilities across all continents. We have our own Private Cloud that we can deploy in our own data centres as a shared infrastructure, or dedicated in any data centre. We can combine that with Public Cloud, cloud connectivity, SD-WAN, data centre and security for a full managed IT solution with infrastructure across all IT planes, globally and at scale, with help from our Smart Transformation service to guide you in your journey.

Our hybrid cloud expertise can deliver a consistent set of managed services across different public and private cloud platforms. We have many accredited / certified cloud experts around the world.

We employ 650 highly skilled compute experts, available globally to support your projects locally, offering the integrated solutions that you need in a cloud project: capability across network, security, IT, consulting, and cloud migration to drive scale and innovation.

We work with the best-in-class cloud partners to deliver optimal services our customers want. Plus, we have an extensive set of capabilities across cloud, network and security and the ability to bolt these on through integrated service delivery. We're gold certified for Microsoft in nine areas and have similar levels of certifications with Cisco, VMWare, AWS, Citrix, Oracle, SAP, and leading infrastructure providers.

We have commercial models that enable you to flex up or down as your business requires, aligned with public cloud models. For example, our managed service fees are directly proportional to your spend on public cloud infrastructure. We can deliver a flexible security approach addressing our customers business aims, investments, outsourcing model, cyber maturity and risk appetite.



Our methodology

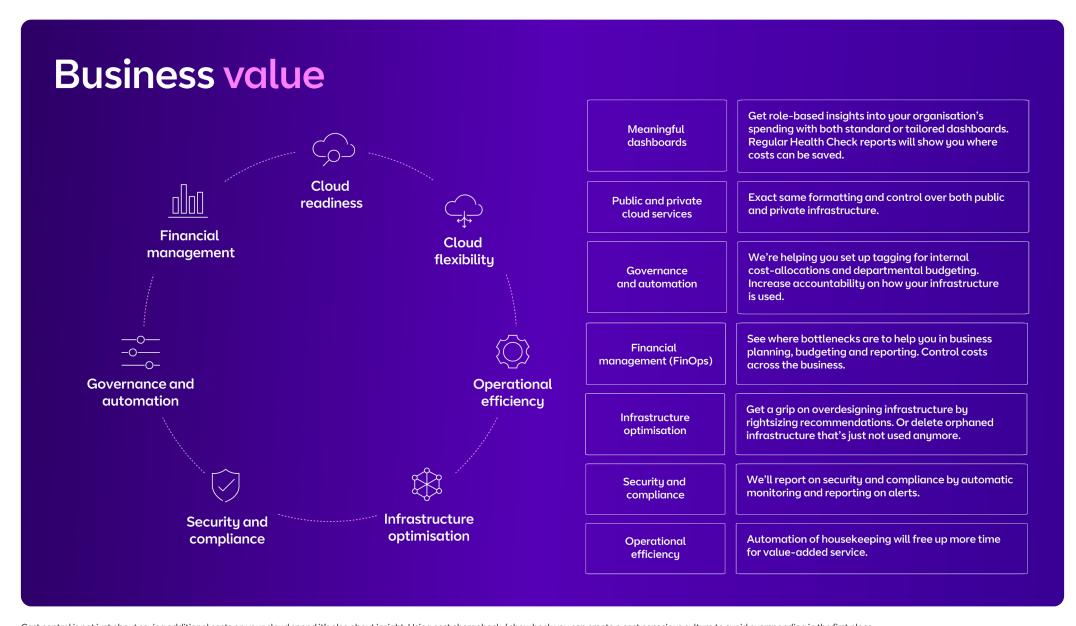
We've a unique approach to supporting our customers through their digital transformation journeys, developed using our experience of delivering successful transformations for multiple global organisations.

Our approach includes help to:

- define blueprints using artifacts to design and steer customers to the right solutions
- build transition plans which reduce risk and speed up the delivery of outcomes
- develop service models to automate and orchestrate change.







Cost control is not just about saving additional costs on your cloud spend it's also about insight. Using cost chargeback / show back you can create a cost conscious culture to avoid overspending in the first place and hold departments individually accountable.





Global, consistent hybrid cloud deployment at scale

- We help you assess and migrate workloads to drive scale.
- We offer choices of public clouds, and hybrid cloud solutions for the things that can't go public.
- We help connect and integrate the old and the new.
- (4) We keep you secure and your data protected.
- We deliver managed services with visability and control.







Customer references

Case studies

BT for global business

Getting David Lloyd Leisure's IT in shape

Read case study

BT for global business

Putting the power behind Hotelbeds' soaring business

Read case study

Press releases

BT for global business

BT nurtures partnership with Syngenta to support global connectivity and innovation culture

Read press release

BT for global business

BT launches a new range of managed security and advisory services for Microsoft Azure Sentinel

Read press release





Would you like to talk to our experts?

We're ready and waiting to help you take the next step in solving your infrastructure puzzle. To find out more, get in touch with your account manager.

See more blueprints

Offices worldwide

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