



GCloud 14 Service Definitions

Lot 1 – Cloud Hosting Lot 2 – Cloud Software Lot 3 – Cloud Support

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About Rowe

Who we are

- Digital consultancy, est. 2008
- Plymouth based, but with staff all over the UK
- Established network of specialist partner organisations
- Active social responsibility & volunteering programmes

What we do

- Enterprise solutions architecting, designing, developing and operating
- Government and public sector, as well as private sector
- Specialising in Geospatial MetOcean, defence & transport
- Cloud data migration, hosting, management and provisioning solutions



As an established technology service provider operating out of the South West, we apply knowhow and expertise to help our clients with their digital journey.

Through Agile software engineering practices, exploiting the power of the cloud and unlocking value in data, we deliver innovative cutting-edge services and solutions.

Working within a Quality Management framework and being ISO 9001 and ISO 27001 certified, our ethos is one of continuous improvement, working together and sharing knowledge. We are committed to achieving consistently high customer satisfaction and are passionate about delivering effective and innovative software solutions.





About Rowe

Our ways of working



"One-Team" Working as one with the client Supporting other suppliers No blame culture



Re-use Intellectual capital Components Techniques



Flexibility / Agility

Flexible in how we work Can respond quickly to change Client retains control & IPR Knowledge transfer



Experienced Team

Multi-skilled / T-Shape High ratio of experienced staff Geospatial & MetOc Specialists



Partnership Approach

Successful long-term relationships

Support journey



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How we organise our services



Digital, data and technology strategy Enterprise, business, security architecture Data modelling Cloud migration strategy

Solutions architecture and design Full stack development – Python, Java, Node, PHP, web technologies Customer facing and back -office systems API and database design and build

> 24x7 managed operations Monitoring, scaling and security Infrastructure-as-Code – Terraform, CloudFormation/CDK DevOps and Automation

Technical Design Authority Testing assurance Security assurance

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Advisory Services

Rowe provides a comprehensive range of advisory services. Our expertise spans key areas including digital, data, and technology strategy, ensuring alignment between organisational objectives and innovative technological solutions. We provide tailored guidance on crafting enterprise and business architectures that prioritise security, safeguarding valuable assets against evolving threats.

Our proficiency in data modelling enables our clients to harness the full potential of their information resources, facilitating informed decisionmaking and streamlined operations. Additionally, our strategic insights extend to cloud migration, offering guidance on seamless transitions to cloud environments. By leveraging our advisory services, organisations can navigate the complexities of today's digital ecosystem with confidence, unlocking new opportunities for growth and resilience.





Advisory Services – Cloud Delivery Partner

Service Description:

Rowe acts as a bridge between your organisation and your cloud computing services, offering a range of capabilities and expertise to help you navigate the world of cloud technologies and ensure a smooth and successful cloud journey.

Features:

- Strategy: Develop cloud strategy that aligns with business goals.
- Migration and Implementation: Plan/execute/ensure minimal disruption to your operations.
- Optimisation: We manage your cloud infrastructure optimising costs/resources.
- Security: Our robust security measures protect your valuable assets.
- Compliance: Implement best practices and ensure you comply regulations.
- Training/Support: We train your staff to use/manage cloud effectively.
- Expertise: Our deep understanding of cloud will simplify complexity.
- Efficiency: Our cloud management saves you time and resources
- Reduced Costs: Our cloud usage optimisation reduces your costs.
- Acceleration: Get your applications/services up and running faster.

Benefits:

- Improved efficiency and accessibility of data.
- Cost savings with optimised storage and reduced environmental impact.
- Modernisation of outdated/legacy data infrastructure.
- Smooth transition from legacy to modern platforms.
- Flexibility to scale solutions based on needs.
- Centralised management and control of data.
- Maximise the value of organisational Cloud assets.
- Timely insights for informed strategic decisions.
- Support for evolving data needs and business requirements.
- Adaptable platforms to meet changing data demands.



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Advisory Services – Cloud Maturity Assessment

Service Description:

Features:

Our cloud maturity assessment is a checkup for your organisation's cloud journey. It helps you understand how to get the most out of the cloud. We use a Cloud Maturity Model (CMM) framework to advise on stages of cloud adoption, from ad-hoc use to fully integrated cloud strategies.

- Strategy: Determine how well-defined is your cloud adoption plan
- Alignment: How your strategy aligns to business objectives
- People: Determine how skilled your staff are and capability gaps
- Processes: Review your processes to manage the cloud effectively
- Security: Clarify your attitude to security risk and identify vulnerabilities
- Governance: Determine if your cloud resources are compliant with policy/regulation
- Cost Management: Optimise your cloud spending
- Business Case Support: High-level business case justifying improvement funding

- Determine areas of focus to optimise cloud adoption
- Document as-is and to-be, and plot journey against the CMM
- Document roadmap for cloud adoption
- Determine capabilities and ability to against roadmap
- Actionable recommendations for improvement
- Flexible engagement options to suit your cloud journey
- Best practice advice tailored to organisational objectives
- Takes advantage of Rowe's experience in cloud adoption and migration



Advisory Services – Cloud Maturity Assessment for AWS

Service Description:

Our cloud maturity assessment is a checkup for your organisation's cloud journey. It helps you understand where you stand and how to get the most out of the cloud. We use AWS Well Architected Framework to advise on stages of cloud adoption, from ad-hoc use to fully integrated cloud strategies.

Features:

- Output State of the second state of the sec
- Measures Operational Excellence/Security/Reliability/Performance Efficiency/Cost Optimisation
- People: Determine how skilled your staff are and capability gaps
- Processes: Review your processes to manage the cloud effectively
- Security: Clarify your attitude to security risk and identify vulnerabilities
- Governance: Determine if your cloud resources are compliant with policy/regulation
- Cost Management: Optimise your cloud spending
- Business Case Support: High-level business case justifying improvement funding
- Considers strategy: Determine how welldefined is your cloud adoption plan
- Alignment: How your strategy aligns to business objectives

Benefits:

- Determine areas of focus to optimise cloud adoption
- Document as-is/to-be, plot journey against the AWS Well Architected Framework
- Document roadmap for cloud adoption
- Determine capabilities and ability to against roadmap
- Actionable recommendations for improvement
- Flexible engagement options to suit your cloud journey
- Best practice advice tailored to organisational objectives
- Takes advantage of Rowe's experience in cloud adoption and migration
- Takes advantage of Rowe's credentials as part of the APN.



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Advisory Services – Cloud Maturity Assessment for Azure

Service Description:

Our cloud maturity assessment is a checkup for your organisation's cloud journey. It helps you understand where you stand and how to get the most out of the cloud. We use Azure Well Architected Framework to advise on stages of cloud adoption, from ad-hoc use to fully integrated cloud strategies.

Features:

- Undertaken by certified Azure consultants
- Measures Operational Excellence/Security/Reliability/Performance Efficiency/Cost Optimisation
- People: Determine how skilled your staff are and capability gaps
- Processes: Review your processes to manage the cloud effectively
- Security: Clarify your attitude to security risk and identify vulnerabilities
- Governance: Determine if your cloud resources are compliant with policy/regulation
- Cost Management: Optimise your cloud spending
- Business Case Support: High-level business case justifying improvement funding
- Considers strategy: Determine how welldefined is your cloud adoption plan
- Alignment: How your strategy aligns to business objectives

- Determine areas of focus to optimise cloud adoption
- Document as-is/to-be, plot journey against the Azure Well Architected Framework
- Document roadmap for cloud adoption
- Determine capabilities and ability to against roadmap
- Actionable recommendations for improvement
- Flexible engagement options to suit your cloud journey
- Best practice advice tailored to organisational objectives
- Takes advantage of Rowe's experience in cloud adoption and migration
- Takes advantage of Rowe's Azure credentials and experience.



Advisory Services – Enterprise Architecture Services

(3)



Tailored approach using expertise in

TOGAF, Agile EA and Zachman



Advisory Services – Strategy Services

Service Description:

Developing strategy focused on cloud, digital, data and technology to ensure the right roadmap for a cloud migration for your organisation.

Features:

- Digital Strategy: delivering value through digitalisation aligned to business drivers
- Optimising use of digital and emerging technologies, e.g. machine learning
- Data and Information Strategy: developing a data-driven business model
- Decision making with data analytics
- Technology Strategy: delivering the right technology and approach to cloud
- The right technology approach, e.g. opensource, buy-or-build, SaaS, PaaS, IaaS
- Optimal re-use of existing technology and reduction of technical debt
- Cloud Migration Strategy: how to move your organisation to Cloud
- Choosing the right Cloud platform, such as AWS or Azure
- Roadmap for change; actionable strategy through achievable roadmap

- We help you define your strategy and develop your vision
- We tailor our approach to the needs of your organisation
- We ensure an actionable strategy through a delivery roadmap
- We engage key stakeholders at every stage
- We deliver clear and unambiguous outputs to inform decision making
- We undertake cost-benefit analysis to identify and realise cost-savings
- We help define your Target Operating Model



Delivery Services

our customers' diverse technological needs. From solutions architecture and design to full-stack development in Python, Java, Node, PHP, and various web technologies, we offer tailored solutions to drive your projects forward. Whether it's customer-facing interfaces or back-office systems, we specialise in developing robust, user-friendly applications that align seamlessly with your business objectives.

> Our delivery services include API and database design and build, ensuring efficient data management and seamless integration across platforms. You can trust in our expertise to bring your vision to life, delivering innovative solutions that empower your business to thrive in today's dynamic digital landscape.

Our delivery services encompass a comprehensive array of expertise to meet





Delivery Services – Advanced Technology Consultancy

Service Description:

At Rowe, we help you Identify and deliver value from advanced technologies with confidence, realising business benefit. Our service offers both advice and delivery expertise in artificial intelligence (AI/ML), Internet of Things (IoT), Blockchain, Digital Twin, and big data analytics.

Features:

- Tailored discovery sessions to identify opportunities for advanced technology usage
- Readiness assessments to gauge organisation maturity and inform strategy
- Agile delivery with Alpha/Beta/Delivery of MVP in target areas
- Innovation workshops aligned to Rowe innovation team for idea generation
- Understand how AI/ML can support business objectives
- Determine how IoT can improve organisational responsiveness
- Build Digital Twins that benefit your organisational what-if analysis
- Understand how Blockchain/distributed ledger technologies align to business goals
- Design/build big data platforms/tools to help IT extract valuable insights
- Rowe are cloud and technology agnostic, providing vendor independence

- Emerging Technologies Integration: Incorporate cutting-edge advancements into your processes.
- Hybrid/Multi-Cloud Strategies: Designing and managing complex cloud environments
- DevOps Automation: Implementing tools/practices to automate software development/deployment
- Cybersecurity Expertise: Providing advanced security solutions for threat detection
- Disaster Recovery Planning/Execution: Developing and executing comprehensive BCDL plans.
- A comprehensive suite of IT services in AWS and Azure.
- Compliance Management: Navigate industry regulations/data privacy laws like GDPR



Delivery Services – Alpha

Service Description:

Rowe specialise in delivering tailored Alpha services, informed by insights gleaned during a projects Discovery phase. With expertise across all GDS stages, including Alpha, we bring invaluable experience and knowledge to each project. Our Alpha phase serves as a vital bridge, feeding insights into the Beta phase for continued refinement.

Features:

- GDS Compliance, adherence to GDS Service Standard ensures regulatory alignment.
- Iterative Learning, we learn, assess, and experiment with different solutions.
- Rapid Prototyping including testing assumptions and hypotheses with prototypes.
- Validate assumptions and insights to ensure solution viability.
- Laying the groundwork for successful Beta phase transition.
- Our proven process ensures efficiency and effectiveness.

- GDS compliance, aligning with government standards and regulations.
- Iterative learning by refining solutions based on real-world feedback.
- Rapid prototyping with fast iterations informs decisionmaking and progress.
- Validate assumptions allows us to mitigate project risks and uncertainties.
- Setting the stage for a successful Beta phase and beyond.
- Maximising project efficiency and effectiveness overall.



Delivery Services – API Configuration & Deployment

Service Description:

Provision of API Management Gateway and Portal expertise for the design, development, and configuration of enterprise grade API solutions for public and private cloud environments, including AWS, Azure and Google/GCP.

Features:

- Design/Configuration and Deployment of API Portal and Management Gateway solutions
- Experienced in license and API key management
- High volume API transaction and big data optimisation
- Gateway optimisation for dynamic data (e.g. weather, environment, realtime etc.)
- Evaluation and selection of commercial API management solutions
- API mapping between 3rd Party solutions and cloud platform providers
- 3rd Party and AWS Developer Portal Customisation (including Drupal/JavaScript)
- Portal CMS configuration and API documentation (e.g. Swagger)
- AWS, Azure, Google/GCP and on-premise expertise. Experts in cloud migration.

- © COTS/OTS & Open Source Integration
- B2C and B2B Experience
- Experience with CA Layer7/Cloud, WSO2/WS02, Apigee/Tyk/Mashery/Wicked, IBM API Connect
- Experts in Amazon API Gateway, Developer Portal and key management
- Adept at preparing, navigating and delivering projects through gate processes
- Agile approach (digital by design): Scrum, Kanban, Continuous Integration, TDD
- Experienced in technical and project management (Prince 2, MSP)
- Authentication/authorisation and billing/monetisation strategy expertise e.g. Amazon Cognito, SAML
- Public sector security procedures and accreditation (TAD/ITAD/ITADS/RMADS/CE+/ISO27001) expertise
- Experienced with IL3 to IL5+ environments. SC/DV Consultants.



Delivery Services – API Management, Configuration & Development Services

Service Description:

Provision of API Management Gateway and Portal expertise for the design, development, configuration, hosting and through life support of enterprise grade API solutions for public and private cloud environments, including AWS, Azure and Google/GCP.

Features:

- Design/Configuration and Deployment of API Portal and Management Gateway solutions
- Experienced in license and API key management
- High volume API transaction and big data optimisation
- Gateway optimisation for dynamic data (e.g. weather, environment, realtime etc.)
- Evaluation and selection of commercial API management solutions
- API mapping between 3rd Party solutions and cloud platform providers
- 3rd Party and AWS Developer Portal Customisation (including Drupal/JavaScript)
- Portal CMS configuration and API documentation (e.g. Swagger)
- AWS, Azure, Google/GCP and on-premise expertise. Experts in cloud migration.
- Hosting and through-life support.

- © COTS/OTS & Open Source Integration
- B2C and B2B Experience
- Experience with CA Layer7/Cloud, WSO2/WS02, Apigee/Tyk/Mashery/Wicked, IBM API Connect
- Experts in Amazon API Gateway, Developer Portal and key management
- Adept at preparing, navigating and delivering projects through gate processes
- Agile approach (digital by design): Scrum, Kanban, Continuous Integration, TDD
- Experienced in technical and project management (Prince 2, MSP)
- Authentication/authorisation and billing/monetisation strategy expertise e.g. Amazon Cognito, SAML
- Public sector security procedures and accreditation (TAD/ITAD/ITADS/RMADS/CE+/ISO27001) expertise
- Experienced with IL3 to IL5+ environments. SC/DV Consultants.



Delivery Services – AWS Development & Transition

Service Description:

Provision of AWS development, and configuration of AWS based cloud solutions. Secure, scalable, robust - leveraging AWS PaaS, SaaS and IaaS offerings.

Features:

- Migration of legacy applications to the cloud
- Design, development and deployment of new systems to AWS
- Evaluation of legacy systems and how to leverage for AWS
- Re-architecting systems for cloud deployment
- Systems Integration (e.g. CMS (Bloomreach/Joomla/Drupal/Wagtail), payment systems, ServiceNow)
- Design review and development of cloud road maps
- Utilise API Gateway/Portal, EC2, S3, SNS/SQS, RDS, VPC, ECS, Lambda
- SIEM and automated monitoring via CloudWatch/CloudTrail
- Automate deployment with Infrastructureas-Code (CloudFormation/TerraForm)
- Automating DevOps pipelines with CodeCommit, CodePipeline, CodeBuild and CodeDeploy

Benefits:

- Migration of on-premise systems to harness AWS PaaS
- Provision of scaleable relational databases e.g. PostgreSQL/PostGIS, Aurora
- Provision of scaleable NoSQL databses e.g. MongoDB, DynamoDB
- Establishing microservice platforms and utilising containerisation e.g. Docker, ECC
- Expertise in Java and JEE based applications
- Expertise migrating to GOV.UK PaaS (Platform as a Service)
- Experience in defence, geospatial, meteorology/weather and oceanography/hydrography (MetOc) domains
- Provision of Continuous Integration/Deployment (CI/CD) e.g. Travis, Jenkins/CloudBees
- Business Intelligence through AWS Quick Site
- Fully managed service options



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Delivery Services – AWS Development, Transition & Support

Service Description:

Provision of AWS development, configuration, hosting and through life support of AWS based cloud solutions. Secure, scalable, robust leveraging AWS PaaS, SaaS and IaaS offerings.

Features:

- Migration of legacy applications to the cloud
- Design, development and deployment of new systems to AWS
- Evaluation of legacy systems and how to leverage for AWS
- Re-architecting systems for cloud deployment
- Systems Integration (e.g. CMS (Bloomreach/Joomla/Drupal/Wagtail), payment systems, ServiceNow)
- Design review and development of cloud road maps
- Utilise API Gateway/Portal, EC2, S3, SNS/SQS, RDS, VPC, ECS, Lambda
- SIEM and automated monitoring via CloudWatch/CloudTrail
- Automate deployment with Infrastructure-as-Code (CloudFormation/TerraForm)
- Automating DevOps pipelines with CodeCommit, CodePipeline, CodeBuild and CodeDeploy

- Migration of on-premise systems to harness AWS PaaS
- Provision of scaleable relational databases e.g. PostgreSQL/PostGIS, Aurora
- Provision of scaleable NoSQL databses e.g. MongoDB, DynamoDB
- Establishing microservice platforms and utilising containerisation e.g. Docker, ECC
- Expertise in Java and JEE based applications
- Expertise migrating to GOV.UK PaaS (Platform as a Service)
- Experience in defence, geospatial, meteorology/weather and oceanography/hydrography (MetOc) domains
- Provision of Continuous Integration/Deployment (CI/CD) e.g. Travis, Jenkins/CloudBees
- Business Intelligence through AWS Quick Site
- Fully managed service options



Delivery Services – Beta

Service Description:

Rowe specialise in delivering robust Beta services, building upon insights gained from the Discovery and Alpha phase. With a proven track record, we bring invaluable experience to every project. Our Beta phase serves as a pivotal stage for refining and enhancing solutions, preparing them for full-scale deployment ensuring longterm success.

Features:

- Iterative refinement for improvement of solutions based on user-feedback.
- The beta phase lays groundwork for scalable, sustainable solutions.
- We prioritise user needs validated with real-world testing.
- We ensure solutions meet regulatory requirements and standards.
- We prepare for seamless integration with any existing systems.
- Solution performance and security for optimal user experience and safety.
- GDS Compliance, adherence to GDS Service Standard ensures regulatory alignment

- Refining solutions for enhanced effectiveness and efficiency.
- Preparation for future growth and evolving user needs.
- Prioritising user needs improves satisfaction and engagement.
- Regulatory Compliance by mitigating risks, ensure adherence to regulatory standards.
- Value for money by facilitating smooth integration with existing infrastructure.
- Enhanced solution performance for optimal user experience.
- GDS compliance, aligning with government standards and regulations.



Delivery Services – CKAN Consultancy

Service Description:

Rowe offers comprehensive CKAN consultancy services, transforming data into actionable insights. Our customised data catalogs, specialised data engineering, and strategy consultation empower organisations to maximise their data potential. With extensive real-world experience, our CKAN implementations adhere to GDS design standards for optimal performance and usability.

Features:

- Tailored CKAN solutions aligned with realworld use cases.
- CKAN deployments built to meet GDS design standards.
- Resilient and scalable CKAN deployments using microservices.
- CKAN capabilities for user registrations and authentication.
- Integration with external authentication providers for seamless user authentication.
- Full Technology Stack Expertise
- Backend and frontend customisations to meet specific organisational needs.
- Enhancements based on GDS standards for improved user experience.
- Specialised data engineering services to optimise data management and processing.
- Expert guidance on data strategy to maximise value

- Unlock the potential of your data for informed decision-making.
- Ensure adherence to GDS design standards for regulatory compliance.
- CKAN deployments designed for scalability and resilience.
- Simplified user registrations and authentication processes.
- Seamlessly integrate with external authentication providers for enhanced user experience.
- Access to expertise across the full technology stack for CKAN
- Customised CKAN implementations to meet your end-to-end requirements.
- UX/UI improvements to GDS standards for enhanced usability.
- Specialised data engineering services for efficient data processing.
- Expert consultation to develop data strategies aligned with organisational goals.



Delivery Services – Cloud API Design & Development

Service Description:

Provision of API Management, Portal and Gateway configuration and development. Experienced in Business/Technical Analysis, Requirement Gathering/Elaboration, System Design, Solutions Architecture, Software Development, Systems Configuration, Deployment, Technical Leadership and Project Management in public and private cloud environments, including AWS, Azure, Google/GCP, and GOV.UK PaaS.

Features:

- API Design and Configuration: REST/RESTful, HAL/HATEOUS, SOAP/SOA, Serverless/Lamda
- Service Discovery & Meta Data Management (ISO 19115/19119, MGMP, CSW)
- Web Services: HTTP/HTTPS, FTP, OGC WCS/WMS/WMTS/WFS/WPS/WMC/OWS Context, OpenAPI/Swagger, GIS
- Integration: Java Spring, JMS, JDBC/Hibernate/JPA/JDO, JSP, Servlets, JMX, JAXB, JNI
- RDBMS Databases Integration: Oracle, Derby, SQLServer, PostgreSQL/PostGIS, SQL, MySQL, DB/2
- Big Data/NoSQL: DynamoDB, MongoDB, Solr, Lucene, ElasticSearch/Elasticache, Reddis
- Middleware: JBoss, Apache, Tomcat, Jetty, Websphere, ActiveMQ/Fuse, MQSeries, BPM
- Platforms: AWS API Gateway, WSO2/WS02, IBM API Connect (plus JavaScript/CSS/HTML/Drupal)
- Data Formats: XML/KML/GML/HTML, NetCDF, GRIB, HPAC, PP, JSON, CSV, Tiling
- AWS, Azure, Google/GCP and on-premise expertise. Experts in cloud migration.

- COTS Integration (IBL Visual Weather, IBM HPSS, Fuse, MQSeries)
- Open Source Integration (GeoServer, GeoWebCache, GeoNetwork, Apache/JBoss/Tomcat/Camel, BPM)
- Experienced with WSO2/WS02, Tyk, Apigee and GOV.UK PaaS
- Experts in Amazon API Gateway, Developer Portal and key management
- Adept at preparing, navigating and delivering projects through gate processes
- Agile approach (digital by design): Scrum, Kanban, Continuous Integration, TDD
- Experienced in secure, scalable and robust solutions.
- Authentication/authorisation and billing technology/strategy expertise e.g. Amazon Cognito, SAML
- Public sector security procedures and accreditation (TAD/ITAD/ITADS/RMADS/CE+/ISO27001) expertise
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Delivery Services – Cloud API Design, Development & Management

Service Description:

Provision of API Management, Portal and Gateway configuration, development, hosting and through life support. Experienced in Business/Technical Analysis, Requirement Gathering/Elaboration, System Design, Solutions Architecture, Software Development, Systems Configuration, Deployment, Technical Leadership and Project Management in public and private cloud environments, including AWS, Azure, Google/GCP, and GOV.UK PaaS.

Features:

- API Design and Configuration: REST/RESTful, HAL/HATEOUS, SOAP/SOA, Serverless/Lamda
- Service Discovery & Meta Data Management (ISO 19115/19119, MGMP, CSW)
- Web Services: HTTP/HTTPS, FTP, OGC WCS/WMS/WMTS/WFS/WPS/WMC/OWS Context, OpenAPI/Swagger, GIS
- Integration: Java Spring, JMS, JDBC/Hibernate/JPA/JDO, JSP, Servlets, JMX, JAXB, JNI
- RDBMS Databases Integration: Oracle, Derby, SQLServer, PostgreSQL/PostGIS, SQL, MySQL, DB/2
- Big Data/NoSQL: DynamoDB, MongoDB, Solr, Lucene, ElasticSearch/Elasticache, Reddis
- Middleware: JBoss, Apache, Tomcat, Jetty, Websphere, ActiveMQ/Fuse, MQSeries, BPM
- Platforms: AWS API Gateway, WSO2/WS02, IBM API Connect (plus JavaScript/CSS/HTML/Drupal)
- Data Formats: XML/KML/GML/HTML, NetCDF, GRIB, HPAC, PP, JSON, CSV, Tiling
- AWS, Azure, Google/GCP and on-premise expertise. Experts in cloud migration.

- COTS Integration (IBL Visual Weather, IBM HPSS, Fuse, MQSeries)
- Open Source Integration (GeoServer, GeoWebCache, GeoNetwork, Apache/JBoss/Tomcat/Camel, BPM)
- Experienced with WSO2/WS02, Tyk, Apigee and GOV.UK PaaS
- Experts in Amazon API Gateway, Developer Portal and key management
- Adept at preparing, navigating and delivering projects through gate processes
- Agile approach (digital by design): Scrum, Kanban, Continuous Integration, TDD
- Experienced in secure, scalable and robust solutions.
- Authentication/authorisation and billing technology/strategy expertise e.g. Amazon Cognito, SAML
- Public sector security procedures and accreditation (TAD/ITAD/ITADS/RMADS/CE+/ISO27001) expertise
- Separate Sep



Delivery Services – Cloud Data Delivery

Service Description:

Expert provision of Business/Technical Analysis, Requirement Gathering, System Design, Solutions Architecture, Software Development, System Configuration & Deployment, Accreditation/Assurance, Technical Leadership, Project Management and Performance Tuning and Optimisation for data delivery solutions to be hosted in public and private cloud environments (AWS/Azure/GCP).

Features:

- Data routing solutions e.g. Apache NiFi/Camel, Spring Data, FTP, API
- RDBMS Databases: Oracle, Derby, SQLServer, Postgres/PostGIS, SQL, MySQL, DB/2, DBA
- Big Data Solutions/NoSQL: MongoDB, Hadoop, Lucene, Solr
- Middleware: JBoss, Apache, Tomcat, Jetty, Websphere, ActiveMQ/Fuse, MQSeries, BPM
- Web Services: HTTP/HTTPS, FTP, OGC WCS/WMS/WFS/WPS/CSW/WMC/OWS Context, SOAP, REST/RESTful, SOA
- Java, Spring IoC/Boot/Integration/Data, JMS/JDBC/JPA/JMX/JSP/JAXB/JNI, MicroServices
- Data Formats: XML/KML/GML, NetCDF/GRIB1/GRIB2, HPAC, PP, JSON, CSV, ISO19115/ISO19119/ISO19139, OWC
- ETL (Extract/Transform/Load) of complex datasets
- DevOps: CI/CD, Docker/Kubernetes, ECS/EKS/Fargate, Jenkins/Travis, CodeBuild/CodePipeline/CodeDeploy

- Data and meta-data management (e.g. CKAN, GeoNetwork)
- Experts in distributed, scalable and high availability systems
- Adept at preparing, navigating and delivering projects through gate processes
- Agile (digital by design): Scrum/XP, Continuous Integration, TDD/BDD (Cucumber/Gherkin/Spock/Groovy)
- Experienced in technical and project management (Prince 2, MSP)
- Strong communication and engagement with stakeholders at all levels
- Dashboards (e.g. Grafana, Prometheus, QuickSite)
- Elastic Stack e.g. ElasticSearch, ElasticCloud, App Search, ELK, Logstash, Kibana
- Graph database expertise (e.g. OrientDB, GraphQL, SPARQL, Neptune)
- Knowledge Management Expertise (SKOS/OWL/RDF, SKOSMOS/VocBench))



Delivery Services – Cloud Data Delivery & Management

Service Description:	Features:	Benefits:
Expert provision of Business/Technical Analysis, Requirement Gathering, System Design, Solutions Architecture, Software Development, System Configuration & Deployment, Accreditation/Assurance, Technical Leadership, Project Management and Performance Tuning and Optimisation for data delivery solutions to be hosted in public and private cloud environments (AWS/Azure/GCP). Full systems life cycle support/managed service options.	Data routing solutions e.g. Apache NiFi/Camel, Spring Data, FTP, API	Data and meta-data management (e.g. CKAN, GeoNetwork)
	API Management (AWS API Gateway, NGINX, CA Layer7, WSO2)	Experts in distributed, scalable and high availability systems
	RDBMS Databases: Oracle, Derby, SQLServer, Postgres/PostGIS, SQL, MySQL, DB/2, DBA	Adept at preparing, navigating and delivering projects through gate processes
	Big Data Solutions/NoSQL: MongoDB, Hadoop, Lucene, Solr	Agile (digital by design): Scrum/XP, Continuous Integration, TDD/BDD (Cucumber/Gherkin/Spock/Groovy)
	Middleware: JBoss, Apache, Tomcat, Jetty, Websphere, ActiveMQ/Fuse, MQSeries, BPM	 Experienced in technical and project management (Prince 2, MSP)
	Web Services: HTTP/HTTPS, FTP, OGC WCS/WMS/WFS/WPS/CSW/WMC/OWS Context, SOAP, REST/RESTful, SOA	Strong communication and engagement with stakeholders at all levels
	Java, Spring IoC/Boot/Integration/Data, JMS/JDBC/JPA/JMX/JSP/JAXB/JNI, MicroServices	Dashboards and monitoring (e.g. Grafana, Prometheus, QuickSite)
	Data Formats: XML/KML/GML, NetCDF/GRIB1/GRIB2, HPAC, PP, JSON, CSV, ISO19115/ISO19119/ISO19139, OWC	Elastic Stack e.g. ElasticSearch, ElasticCloud, App Search, ELK, Logstash, Kibana
	OWCETL (Extract/Transform/Load) of complex datasets	Graph database expertise (e.g. OrientDB, GraphQL, SPARQL, Neptune)
	DevOps: CI/CD, Docker/Kubernetes, ECS/EKS/Fargate, Jenkins/Travis, CodeBuild/CodePipeline/CodeDeploy	Knowledge Management Expertise (SKOS/OWL/RDF, SKOSMOS/VocBench))



Delivery Services – Cloud GIS Configuration

Service Description:

Provision of cloud based GIS services using open source and proprietary solutions. Full design, development and DevOps configuration . Support across a variety of domains including transport, defence, environmental, earth observations (EO), space etc. Target platforms include AWS, Azure, MODCloud and private secure cloud.

Features:

- Configuration and development of GeoServer, GeoNetwork & MapProxy
- Service Discovery & Meta Data Management (ISO 19115/19119, MGMP, CSW)
- Building, configuring and deploying geospatial catalogues
- Configuring tile serving solutions (e.g. OpenMapTiles, Tileserver-GL)
- Setup, design and configuration of ESRi
- Building Geospatial datasets and databases
- Extract, transform & load (ETL) of geospatial data
- Web Services: HTTP/HTTPS, FTP, OGC WCS/WMS/WMTS/WFS/WPS/WMC/OWS Context, OpenAPI/Swagger
- Data Formats: XML/KML/GML/HTML, NetCDF, GRIB, HPAC, PP, JSON, CSV, Tiling
- Extending and configuring OGC CITE/TeamEngine test suites

- COTS Integration (IBL Visual Weather, ESRi)
- Open Source Integration (GeoServer, GeoWebCache, GeoNetwork, Apache/JBoss/Tomcat/Camel, BPM)
- OGC Compliant web services: WMS, WFS, WCS, WMTS, CSW, WPS
- Reduced licensing costs
- Compliance testing with OGC CITE tools
- Agile approach (digital by design): Scrum, Kanban, Continuous Integration, TDD
- Experienced in technical and project management (Prince 2, MSP)
- Authentication/authorisation and billing technology/strategy expertise e.g. Amazon Cognito, SAML
- Configuration of UI's using OpenLayers, Leaflet, Angular, JavaScript
- ESRi Deployment (Arc Online, Maritime Chart Server, Portal, Web AppBuilder)



Delivery Services – Cloud GIS Configuration, Hosting & Support

Service Description:

Provision of cloud-based GIS services using open source and proprietary solutions. Full design, development, DevOps, configuration and/or managed service. Support across a variety of domains including transport, defence, environmental, earth observations (EO), space etc. Target platforms include AWS, Azure, MODCloud and private secure cloud.

Features:

- Configuration, hosting and development of GeoServer, GeoNetwork & MapProxy
- Service Discovery & Meta Data Management (ISO 19115/19119, MGMP, CSW)
- Building, configuring and deploying geospatial catalogues
- Configuring and hosting tile serving solutions (e.g. OpenMapTiles, Tileserver-GL)
- Setup, design and configuration of ESRi
- Building Geospatial datasets and databases
- Extract, transform & load (ETL) of geospatial data
- Web Services: HTTP/HTTPS, FTP, OGC WCS/WMS/WMTS/WFS/WPS/WMC/OWS Context, OpenAPI/Swagger
- Data Formats: XML/KML/GML/HTML, NetCDF, GRIB, HPAC, PP, JSON, CSV, Tiling
- Extending and configuring OGC CITE/TeamEngine test suites

- COTS Integration (IBL Visual Weather, ESRi)
- Open Source Integration (GeoServer, GeoWebCache, GeoNetwork, Apache/JBoss/Tomcat/Camel, BPM)
- OGC Compliant web services: WMS, WFS, WCS, WMTS, CSW, WPS
- Reduced licensing costs
- Compliance testing with OGC CITE tools
- Agile approach (digital by design): Scrum, Kanban, Continuous Integration, TDD
- Experienced in technical and project management (Prince 2, MSP)
- Authentication/authorisation and billing technology/strategy expertise e.g. Amazon Cognito, SAML
- Configuration of UI's using OpenLayers, Leaflet, Angular, JavaScript
- ESRi Deployment (Arc Online, Maritime Chart Server, Portal, Web AppBuilder)



Delivery Services – Data Analytics

Service Description:

Drive evidence-based decision-making with data analytics. At Rowe, we build robust data pipelines and visualisations, utilising skills in data analysis, web analytics, and experimentation techniques. We can integrate data from various sources for customised reporting and visualisation ensuring scalable ETL processing for costeffective data preparation.

Features:

- Fully managed Big Data Analytics and analytics management solutions.
- Real-Time Recommendations based on dynamic data analysis.
- Identifying and mitigating fraudulent activities in real-time.
- Anticipating equipment failures to optimise maintenance schedules.
- Cloud Analytics Software Services offering analytics tools and platforms.
- Data Integration and ETL, integrating/processing data from multiple sources.
- Reporting and Data Visualisation
- Analysing user behaviour and performance metrics within applications.
- Analysing both Structured and Unstructured data types for insights.

- Data-driven insights for informed decision-making.
- Empowering better strategic and operational decisions.
- Immediate access to relevant data for timely actions.
- Detecting and preventing fraudulent activities to safeguard assets.
- Cost Savings/optimising maintenance costs by anticipating failures.
- Solutions that grow with your data and organisational needs.
- Thorough examination of data for deeper insights.
- Increased efficiency and productivity, streamlining processes and resource optimisation.
- Customised analytics solutions to address specific organisational challenges.



Delivery Services – Data Ingestion, Cleansing & Analytics

Service Description:

Features:

At Rowe, we have been empowering organisations with advanced analytics and insights for informed decision-making for 15 years. We offer tailored data ingestion, cleansing, and analytics services, leveraging cloud-based ELT/ETL services for efficient processing of large datasets. Benefit from contextual analytics, automation, and accelerated project delivery for enhanced value.

- Cloud-based ELT/ETL Services providing efficient data processing and integration.
- Bulk and Real-time Data-Ingestion for seamless ingestion of large datasets
- Support for Structured, Unstructured, and Semi-structured data
- Data Science and Engineering Expertise for data analysis and engineering.
- Advanced analytics and predictive modelling capabilities.
- Standardised Delivery Process providing consistent and efficient delivery workflows.
- Off-the-shelf and custom analytics solutions.
- Rapid establishment of baseline metrics and core analytics.
- Improved efficiency in project delivery processes.

- Insights for informed organisational decisions.
- Streamlined data processing workflows.
- Insights tailored to specific organisation contexts.
- Automated data handling for increased efficiency.
- Value-driven insights and decision support.
- Saster project completion and delivery.
- Increased operational efficiency and effectiveness.
- Reduced time to value from data.
- Simplified data management and processing workflows.



Delivery Services – Data Platform

Service Description:

Rowe has extensive experience in developing tailored data platforms. Our solutions ensure security, resilience, and scalability, meeting clients' end-to-end requirements. From designing and building modern cloud-based platforms to seamless migration of legacy data, we ensure optimal data accessibility and environmental sustainability. We empower organisations with actionable insights for informed decision-making.

Features:

- Data Platform and Architecture Services
- Public/Private Cloud Hosting (AWS, Azure, GCP, and private cloud).
- Focus on reducing environmental impact and storage costs.
- Upgrade outdated data silos with modern solutions.
- Experienced in seamless migration of legacy data to new platforms.
- Modern platforms for efficient data management.
- Capabilities across major cloud platforms for scalability.
- Data ingestion, storage, and delivery for complete data lifecycle management.
- Optimised Data Accessibility
- Empower organisations with actionable insights from data.

- Improved efficiency and accessibility of data.
- Cost Savings with optimised storage and reduced environmental impact.
- Modernisation of outdated/legacy data infrastructure.
- Smooth transition from legacy to modern platforms.
- Flexibility to scale data solutions based on needs.
- Centralised management and control of data.
- Maximize the value of organisational data assets.
- Timely insights for informed strategic decisions.
- Support for evolving data needs and business requirements.
- Adaptable platforms to meet changing data demands.

Delivery Services – Database Migration

Service Description:

Managed migration of on premise or legacy databases to public and private cloud environments (AWS/Azure/GCP/IBM). Full systems life cycle support/managed service options.

Features:

- RDBMS Databases: Oracle, Derby, SQLServer, Postgres/PostGIS, SQL, MySQL, DB/2, DBA
- Big Data Solutions/NoSQL: MongoDB, Hadoop, Lucene, Solr
- Middleware: JBoss, Apache, Tomcat, Jetty, Websphere, ActiveMQ/Fuse, MQSeries, BPM
- Java, Spring IoC/Boot/Integration/Data, JMS/JDBC/JPA/JMX/JSP/JAXB/JNI, MicroServices
- Data Formats: XML/KML/GML, NetCDF/GRIB1/GRIB2, HPAC, PP, JSON, CSV, ISO19115/ISO19119/ISO19139, OWC
- ETL (Extract/Transform/Load) of complex datasets
- DevOps: CI/CD, Docker/Kubernetes, ECS/EKS/Fargate, Jenkins/Travis, CodeBuild/CodePipeline/CodeDeploy

- Experienced includes AWS, Google/GCP and Azure.
- Experts in distributed, scalable and high availability systems
- Adept at preparing, navigating and delivering projects through gate processes
- Agile (digital by design): Scrum/XP, Continuous Integration, TDD/BDD (Cucumber/Gherkin/Spock/Groovy)
- Experienced in technical and project management (Prince 2, MSP)
- Strong communication and engagement with stakeholders at all levels
- COTS Integration (WSO2/WS02/API Gateway/IBM HPSS)
- Innovative solution design and architecture. SC/DV Consultants.
- Strong knowledge of public sector security principles and accreditation (TAD/ITAD/ITADS/RMADS)
- AWS Partners.



Delivery Services – Databricks Consultancy

Service Description:

Features:

Rowe offers comprehensive Databricks consultancy services on AWS, Azure and Google Cloud, a unified, open analytics platform designed for working with big data. We offer advisory, delivery and live operations support for your Databricks implementations, and are experts in building fully featured data platforms, including ingestion, storage and analytics capabilities.

- Building data pipelines: Transforming and moving data for analysis.
- Data warehousing: Storing/managing large datasets for querying and reporting.
- Data exploration/visualisation: Uncovering insights and trends in your data.
- Machine learning: Building AI/ML models for predictions or classifications.
- Open-Source Integration: Flexibility and integration with open-source tools.
- Cloud-Based: Major cloud platforms like AWS, Azure, and GCP.
- Collaboration: Enable data scientists and analysts to work together
- Security: Robust security to protect data with access control/encryption.
- Manage/analyse/leverage the power of your data at scale.

- Unlock the potential of your data for informed decision-making.
- Ensure adherence to GDS design standards for regulatory compliance.
- Databricks deployments designed for scalability and resilience.
- Simplified user registrations and authentication processes.
- Integrate with external authentication providers for enhanced user experience.
- Access to expertise across Databricks and related technologies
- Customised implementations to meet your end-to-end requirements.
- UX/UI improvements to GDS standards for enhanced usability.
- Specialised data engineering services for efficient data processing.
- Expert consultation to develop data strategies aligned with organisational goals.



Delivery Services – Defence Cloud Delivery & Support

Service Description:

Specialist provision of defence related cloud management, development and support. Adoption of public and private cloud, including AWS, Azure and Oracle. Expertise across OFFICIAL, OFFICIAL-SENSITIVE (OS) and SECRET environments, including MODCloud.

Features:

- Cloud agnostic: experience across AWS, Azure, Oracle and on-premise
- Languages: Java/Spring, Python/Flask, PhP/Laravel, Fortran, C/C++/C#
- RDBMS Databases: Oracle, Derby, SQLServer, PostgreSQL/PostGIS, SQL, MySQL, DB/2, DBA
- Data & big-data specialists: securely managing large payloads
- Middleware: JBoss/Apache/Tomcat/Jetty/Websphere, ActiveMQ/Fuse, MQSeries, BPM
- Web Services: HTTP/HTTPS, FTP, OGC WCS/WMS/WFS/WPS/CSW/WMC/OWS Context, SOAP, REST/RESTful, SOA
- Web/Portal: Javascript (Angular/JQuery/Dojo/OpenLayers/Leaflet), HTML, CSS, XSLT, Flex, ESRi
- Data Formats: NetCDF/GRIB1/GRIB2, HPAC/DTSV, PP, JSON, XML/GML/KML, ISO19115/ISO19139/MGMP, OWC
- Open Standards, DGIWG Profiling, Spatial Data Infrastructure (SDI), Geo/GIS Expertise

- Experts in Meteorology, Oceanography and Hydrography (GeoMetOc) systems
- DevOps: CI/CD, Containerisation, Docker/Kubernetes, ECS/EKS/Fargate, Jenkins/Travis
- Specialists in Tactical Decision Aids (TDA), C4ISR/C2 and GIS (GeoServer/GeoNetwork/MapProxy/ESRi)
- Experienced with Secure-by-design (SbD) assurances and accreditation
- Agile (digital by design): Scrum/XP, Continuous Integration, TDD/BDD, Cucumber/Gherkin/Spock/Groovy
- Experienced in technical coordination and project management (Prince 2, MSP)
- Private and public cloud experience (AWS/Azure, MOD Cloud/UKCloud/Crown Hosting)
- Open Source & COTS Integration (IBL Visual Weather, WADER/AREPS/WxCC/ArcGis Enterprise)
- Experienced in Information Assurance (SAC/CISSP/CLAS), security principles and accreditation
- Interoperability testing and initiative support (e.g. NATO CWIX, SANDBOX/EC/Information Warrior)



Delivery Services – Discovery

Service Description:

At Rowe, we recognise that the success of digital service delivery hinges on a solid foundation established during the Discovery phase. Our service goes beyond conventional approaches, fostering collaboration between our team and government stakeholders, ensuring a comprehensive understanding of user needs, business objectives, ways of working and project constraints.

Features:

- Unified team delivering client synergy and knowledge sharing.
- Thorough problem understanding including assessing existing systems for reuse.
- Prioritising user needs, facilitating feedback loops.
- Active stakeholder involvement, aligning to project objectives.
- Rapid prototyping with early validation and risk mitigation.
- Leverage data analytics and guiding evidence-based decisions.
- Thorough risk assessments and developing mitigation strategies.
- Accounting for future scalability by laying sustainable groundwork.
- Adhere to compliance standards, ensuring data security.
- Facilitating knowledge transfer to empower stakeholders.

- Equipping stakeholders with actionable insights.
- Delivering intuitive user experiences to enhance overall discovery satisfaction.
- Save time and resources, minimising costly reworking.
- Ensures alignment with organisational objectives and end user needs.
- Mitigate project risks, enhance predictability.
- Accelerate time to market for government services.
- Foster stakeholder satisfaction and ownership.
- Ensure solutions meet legal requirements and GDS standards.
- Accommodate evolving user needs and future growth.
- Empowering teams to ensure long-term project sustainability.



Delivery Services – Elastic Consultancy

Service Description:

Rowe offers comprehensive Elastic Search and Elastic Cloud consultancy services, to power your searches of data across your cloud deployments. This facilitates faster searches, even in huge datasets, simplifies your cloud deployments and reduces cost, and provides enhanced security across your cloud-based applications.

Features:

- Managed Services: Use of ElasticStack (Elasticsearch/Kibana/etc) for data analysis
- Leverage super-fast searches and in-depth data analysis.
- Search and Indexing; reusable components/interfaces to power search applications
- Easily scale resources up/down based on your needs
- Search/schema migration; existing solutions (e.g. Apache Solr) to ElasticSearch
- Manage your data with searchable snapshots/data rollups/lifecycle management
- Security: use features like encryption, access control, single sign-on
- Security: integrate existing user authentication models (e.g. Azure AD)
- Documentation: our value-add is to provide best practice guidance

- Unlock the potential of your data for informed decision-making.
- Ensure adherence to GDS design standards for regulatory compliance.
- Elastic deployments designed for scalability and resilience.
- Simplified user registrations and authentication processes.
- Seamlessly integrate with external authentication providers for enhanced user experience.
- Access to expertise across the full technology Elastic Stack
- Customised Elastic implementations to meet your end-to-end requirements.
- UX/UI improvements to GDS standards for enhanced usability.
- Specialised data engineering services for efficient data processing.
- Expert consultation to develop data strategies aligned with organisational goals.

Delivery Services – Fire & Rescue Cloud Delivery & Support

Service Description:

Design, development, modernisation, cloud migration and support of Fire & Rescue systems for FRS's and central government, including Incident Reporting Systems (IRS) and wider systems integration.

Features:

- Cloud agnostic: experience across AWS, Azure, Oracle and on-premise
- Data collection through dynamic, configurable web-forms
- RDBMS Databases: Oracle, Derby, SQLServer, PostgreSQL/PostGIS, SQL, MySQL, DB/2, DBA
- Big Data Solutions/NoSQL: MongoDB, Hadoop, Lucene, Solr, ElasticSearch
- Langauges: Java/Spring, Python/Flask, C#/.Net, C/C++, Fortran
- Web Services: HTTP/HTTPS, FTP, OGC WCS/WMS/WFS/WPS/CSW/WMC/OWS Context, SOAP, REST/RESTful, SOA
- Web/Portal: Javascript (Angular/JQuery/Dojo/OpenLayers/Leaflet) , HTML, CSS, XSLT, ESRi
- WCAG Compliance
- XML, JSon, CSS, XSLT
- Open Standard APIs: REST/RESTFul, SOAP/XLS

- Discovery, Alpha, Beta and Live delivery
- DevOps: CI/CD, Containerisation, Docker/Kubernetes, ECS/EKS/Fargate, Jenkins/Travis
- Cloud automation, landing-zones
- Adept at preparing, navigating and delivering gate processes
- Agile (digital by design): Scrum/XP, Continuous Integration, TDD/BDD, GDS
- Experienced in technical coordination and project management (Prince 2, MSP)
- Private and public cloud experience (AWS/Azure, MOD Cloud/UKCloud/Crown Hosting)
- Open Source & COTS Integration
- Experienced in Information Assurance (SAC/CISSP/CLAS), security principles and accreditation
- Interoperability , HOGaAP


Delivery Services – Java System Modernisation, Cloud Migration & Support

Service Description:	Features:	Benefits:
Specialist provision of Java engineering to modernise and secure legacy applications prior to migration to	Java: Spring IoC/Boot/Integration/Data, JMS/JDBC/JPA/JMX/JSP/JAXB/JNI, MicroServices	Meteorology, Oceanography and Hydrography systems specialists: conception to deployment
the cloud.	Frameworks: Hazelcast, RESTeasy, Ehcache, Struts, BIRT, Freemarker, Camel, Apache, Dropwizard	DevOps: CI/CD, Containerisation, Docker/Kubernetes, ECS/EKS/Fargate, Jenkins/Travis
	RDBMS Databases: Oracle, Derby, SQLServer, PostgreSQL/PostGIS, SQL, MySQL, DB/2, DBA	 Build modernization: Ant, Maven, Gradle, GitHub Actions
	 Big Data Solutions/NoSQL: MongoDB, Hadoop, Lucene, Solr, ElasticSearch 	Adept at preparing, navigating and delivering gate processes
	Middleware: JBoss/Apache/Tomcat/Jetty/Websphere, ActiveMQ/Fuse, MQSeries, BPM	Agile (digital by design): Scrum/XP, Continuous Integration, TDD/BDD, Cucumber/Gherkin/Spock/Groovy
	Web Services: HTTP/HTTPS, FTP, OGC WCS/WMS/WFS/WPS/CSW/WMC/OWS Context, SOAP, REST/RESTful, SOA	 Experienced in technical coordination and project management (Prince 2, MSP)
	Web/Portal: Javascript (Angular/JQuery/Dojo/OpenLayers/Leaflet), HTML, CSS, XSLT, Flex, ESRi	Private and public cloud experience (AWS/Azure, MOD Cloud/UKCloud/Crown Hosting)
		Open Source & COTS Integration
	Platforms: Linux/Unix/Windows/iSeries, MODCloud, VMWare, Mobile, DII, JMNIAN, DGS	Experienced in Information Assurance (SAC/CISSP/CLAS), security principles and
	Data Formats: NetCDF/GRIB, HPAC/DTSV, PP, JSON, XML/GML/KML, ISO19115/ISO19139/MGMP, OWC	 accreditation Interoperability testing
	 Open Standards, DGIWG Profiling, Spatial Data Infrastructure (SDI), Geo/GIS Expertise 	

Delivery Services – Legacy Migration & Modernisation

Service Description:

Rowe navigates legacy systems with expertise in digital transformations for large organisations and large datasets. Our process involves assessing complex data rules, developing transformation scripts for data cleansing/reclassification, and enhancing metadata for new structures. Modernising and migrating legacy IT infrastructure ensures seamless transitions and improved efficiency.

Features:

- Legacy IT modernisation mitigating technical debt and cyber risks.
- Expertise in migrating legacy systems to cloud.
- Upgrade and re-engineer legacy services for efficiency.
- Customised ETL scripts for seamless data migration.
- Safely retire outdated systems to streamline operations.
- Assessment and roadmap development for modernisation.
- Evaluate legacy challenges against target vision for transformation.
- End-to-end execution and assurance of migration projects.
- Ensure security and regulatory compliance throughout modernisation.
- Maximise ROI through strategic modernisation initiatives.

- Reduced technical debt from legacy systems.
- Mitigate risks associated with outdated technology and systems.
- Leverage benefits of cloud infrastructure and services.
- Improved operational efficiency with streamlined processes and enhanced system performance.
- Maintain data integrity, continuity and availability during migration.
- Clear path for modernisation aligned with organisational goals.
- Ensure adherence to regulatory requirements throughout migration.
- Enable rapid response to changing market and technology trends.
- Optimise resource utilisation and reduce maintenance costs.
- Enhanced data quality and accessibility for informed decision-making.



Delivery Services – Meteorological & Oceanographic Cloud Delivery & Support

Service Description:

Specialist provision of Hydrographic, Geospatial, Meteorological and Oceanographic (Hydro/METOC/GEOMETOC) software and consulting services including Business Analysis/Discovery, Concept Development, System Design/Architecture/Development/Configuration & Deployment, Strategy, Planning and Project Management for solutions hosted in secure cloud environments, in both UK and international domains. We also offer managed services and through-life support.

Features:

- Cloud agnostic: experience across AWS, Azure, Oracle and on-premise
- Frameworks: Hazelcast, RESTeasy, Ehcache, Struts, BIRT, Freemarker, Camel, Apache, Dropwizard
- RDBMS Databases: Oracle, Derby, SQLServer, PostgreSQL/PostGIS, SQL, MySQL, DB/2, DBA
- Big Data Solutions/NoSQL: MongoDB, Hadoop, Lucene, Solr, ElasticSearch
- Langauges: Java/Spring, Python/Flask, C#/.Net, C/C++, Fortran
- Web Services: HTTP/HTTPS, FTP, OGC WCS/WMS/WFS/WPS/CSW/WMC/OWS Context, SOAP, REST/RESTful, SOA
- Web/Portal: Javascript (Angular/JQuery/Dojo/OpenLayers/Leaflet), HTML, CSS, XSLT, Flex, ESRi
- Platforms: Linux/Unix/Windows/iSeries, MODCloud, VMWare, Mobile, DII, JMNIAN, DGS
- Data Formats: NetCDF/GRIB, HPAC/DTSV, PP, JSON, XML/GML/KML, ISO19115/ISO19139, S57/S-57/S-100/S100
- Open Standards, DGIWG Profiling, Spatial Data Infrastructure (SDI), Geo/GIS Expertise

- Meteorology, Oceanography and Hydrography systems specialists: conception to deployment
- DevOps: CI/CD, Containerisation, Docker/Kubernetes, ECS/EKS/Fargate, Jenkins/Travis
- Cloud automation, landing-zones
- Adept at preparing, navigating and delivering gate processes
- Agile (digital by design): Scrum/XP, Continuous Integration, TDD/BDD, Cucumber/Gherkin/Spock/Groovy
- Experienced in technical coordination and project management (Prince 2, MSP)
- Private and public cloud experience (AWS/Azure, MOD Cloud/UKCloud/Crown Hosting)
- Open Source & COTS Integration (IBL Visual Weather, WADER/AREPS/WxCC/ArcGis Enterprise)
- Experienced in Information Assurance (SAC/CISSP/CLAS), security principles and accreditation
- Interoperability testing and initiative support (e.g. NATO CWIX, SANDBOX/EC/Information Warrior)



Delivery Services – Microsoft Azure Development & Transition

Service Description:	Features:	Benefits:
Supports development of Microsoft Azure based cloud deployment, leveraging Azure PaaS and	Migration of legacy applications to the cloud	Transition of on-premise systems to harness Azure PaaS
laaS offerings.	Design, development and deployment of new systems to Azure	Provision of scaleable relational databases e.g PostgreSQL/PostGIS, AzureSQL Datas
	Evaluation of legacy systems and how to leverage for Azure	Provision of scaleable NoSQL databses e.g. MongoDB, CosmosDB
	Re-architecting systems for cloud	Stablishing microservice platforms
	deployment	Expertise in Java and JEE based applications
	Establishing DevOps pipelines and ways of working	Experience in large public sector and enterprise domains
	Design review and development of cloud road maps	Experience in defence, geospatial, meteorology/weather and
	Utilise Azure API Management/Gateway,	oceanography/hydrography (MetOc) domains
	Portal, Azure DevOps, APIM	Data analytics platform specialists: Power BI,
	Service monitoring Azure Alerts and Azure Service Health	data catalogues/hubs (CKAN/GeoNetwork)
	 Serverless functions and analytics 	Data lake/warehouse/lakehouse decision/implementation
		Experienced with Databricks, Snowflake and ETL (extract/transform/load)



Delivery Services – Microsoft Azure Development, Transition & Support

Service Description:	Features:	Benefits:
Supports development of Microsoft Azure based cloud deployment, leveraging Azure PaaS and	Migration of legacy applications to the cloud	Transition of on-premise systems to harness Azure PaaS
laaS offerings.	Design, development and deployment of new systems to Azure	Provision of scaleable relational databases e.g. PostgreSQL/PostGIS, AzureSQL Datas
	Evaluation of legacy systems and how to leverage for Azure	Provision of scaleable NoSQL databses e.g. MongoDB, CosmosDB
	Re-architecting systems for cloud	Establishing microservice platforms
	deployment	Expertise in Java and JEE based applications
	Establishing DevOps pipelines and ways of working	Experience in large public sector and enterprise domains
	Design review and development of cloud road maps	 Experience in defence, geospatial,
	Utilise Azure API Management/Gateway, Portal, Azure DevOps, APIM	meteorology/weather and oceanography/hydrography (MetOc) domains
	Service monitoring Azure Alerts and Azure Service Health	Data analytics platform specialists: Power BI, data catalogues/hubs (CKAN/GeoNetwork)
	Serverless functions and analytics	Data lake/warehouse/lakehouse decision/implementation
		Experienced with Databricks, Snowflake and ETL (extract/transform/load)



Delivery Services – MODCloud

Service Description:

Secure and mission-configurable cloud solutions tailored for Defence operations. Rowe brings over 13 years of experience supporting military systems and services across on premise, cloud and standalones systems. Target environments include; server, laptop and containerisation within public cloud, MODCloud, MOD Net, Thundercloud, OP-Net, NATO and nation specific infrastructure.

Features:

- Consultancy, R&D, architecture design, hyperconvergence, operational support.
- Accredited Cloud Environments meeting MODCloud Security Principles.
- Development, test, and operational environments for mission-critical apps.
- Government Digital/Data Strategy Support
- Technical Design Authority (TDA) Support
- Provisioning solutions in line with Navy Digital Data programme.
- GDS/Cabinet Office guidelines compliance
- Military GeoMetOc systems support
- Classifications, support for systems at various levels of classification.
- Fully vetted team SC to DV

- Empowering MOD with secure and configurable cloud solutions.
- Compliance Assurance, meeting MOD and government security principles.
- Mission-Critical secure environments for enterprise-level applications.
- Support for government digital and data strategy initiatives.
- Ensuring expert technical decisions within MOD environments.
- Tailored solutions aligned with Navy Digital Data programme.
- Adherence to GDS and Cabinet Office guidelines.
- Experience, over 13 years of supporting military systems and services.
- Support for systems across various levels of classification.
- Versatile deployment options across public and specific infrastructures.

Delivery Services – Open Data Integration (ODI) Consultancy

Service Description:

Rowe excels in open data initiatives, both creating open data initiatives in the Cloud, and consuming open data within cloud data platforms, fostering transparency, innovation, and collaboration. Our consultancy aims to boost open data adoption, leading to improved public services with better decision-making and cost reduction.

Features:

- Availability: supporting the core principle of open availability
- Machine-Readable: easy analysis/integration with other datasets through CSV/JSON/XML
- Licensing: either permissive licensing or more restrictive for sensitive data
- Metadata: information about data, source/format/definition of terms/update frequency.
- Regularly Updated: Keeping data current and refreshed at regular intervals
- Data available to everyone, regardless of location/background/technical expertise/disabilities
- Interoperable: adherence to common standards/formats, allowing for seamless integration
- Discoverable: Providing searchable online portals and catalogues
- Reusable: fostering innovation and creativity in various fields.
- Automation: Readily integrated with automated systems/workflows, enabling data-driven processes.

- Unlock the potential of your data for informed decision-making.
- Ensure adherence to GDS design standards for regulatory compliance.
- Open-data deployments designed for scalability and resilience.
- Simplified user registrations and authentication processes.
- Integrate with external authentication providers for enhanced user experience.
- Access to expertise across open data and related technologies
- Customised implementations to meet your end-to-end requirements.
- UX/UI improvements to GDS standards for enhanced usability.
- Specialised data engineering services for efficient data processing.
- Expert consultation to develop data strategies aligned with organisational goals.



Delivery Services – Oracle Migration

Service Description:	Features:	Benefits:
Migration of Oracle solutions to cloud based environments, using open source database	On-prem Oracle to native cloud solution	Experienced includes AWS, Google/GCP and Azure.
technologies.	Support for Big Data solutions/NoSQL: MongoDB, Hadoop, Lucene, Solr	Experts in distributed, scalable and high availability systems
	Middleware: JBoss, Apache, Tomcat, Jetty, Websphere, ActiveMQ/Fuse, MQSeries, BPM	 Adept at preparing, navigating and delivering projects through gate processes
	Java, Spring IoC/Boot/Integration/Data, JMS/JDBC/JPA/JMX/JSP/JAXB/JNI, MicroServices	Agile (digital by design): Scrum/XP, Continuous Integration, TDD/BDD (Cucumber/Gherkin/Spock/Groovy)
	Data Formats: XML/KML/GML, NetCDF/GRIB1/GRIB2, HPAC, PP, JSON, CSV,	Experienced in technical and project management (Prince 2, MSP)
	ISO19115/ISO19119/ISO19139, OWCETL (Extract/Transform/Load) of complex	Strong communication and engagement with stakeholders at all levels
	datasetsDevOps: CI/CD, Docker/Kubernetes,	COTS Integration (WSO2/WS02/API Gateway/IBM HPSS)
	ECS/EKS/Fargate, Jenkins/Travis, CodeBuild/CodePipeline/CodeDeploy	Innovative solution design and architecture. SC/DV Consultants.
	Migration to other DBs, e.g. Derby, SQLServer, Postgres/PostGIS, MySQL, DB/2	Strong knowledge of public sector security principles and accreditation (TAD/ITAD/ITADS/RMADS)

AWS Partners.



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Delivery Services – PHP Development

Service Description:

Features:

Rowe specialise in delivering tailored PHP solutions, leveraging industry-leading frameworks like Laravel amongst others. Our team of experienced PHP developers is dedicated to delivering high-quality solutions. From custom application programming to database development and migrations, we provide end-to-end PHP development services to help you achieve your goals efficiently and effectively.

Web Application Development building robust web applications with PHP

- Integrate third-party APIs seamlessly into your existing PHP applications.
- Connect PHP applications with databases for data management.
- Ongoing maintenance and support services keeping your PHP applications secure.
- Enhance the performance of PHP applications for improved user experience.
- Implementation of security measures, protecting PHP applications from cyber threats.
- Designing scalable PHP solutions to accommodate growth and evolving needs.

- Customised PHP services tailored to your specific business requirements.
- Cost-Effective PHP solutions without compromising quality or functionality.
- Rapid development/deployment of PHP applications for faster time-to-market.
- Intuitive, accessible, and user-friendly interfaces for enhanced user experience.
- Seamless integration with existing systems and technologies for enhanced efficiency.
- Stable and reliable PHP applications that perform under heavy loads.
- Secure data transfer with robust encryption and authentication measures.
- Mobile-friendly PHP solutions for accessibility across devices and platforms.
- Dedicated support team available to address any issues or concerns.
- Knowledge sharing and upskilling for your teams as standard.



Delivery Services – Scientific Systems Modernisation, Migration & Support

Service Description:	Features:	Benefits:
Platform modernisation and development of scientific systems for migration, hosting and support within cloud environments.	Migrate from legacy to modern languages	Meteorology, Oceanography and Hydrography systems specialists
	Support for Fortran, Matlab, Python, Java, C/C++, C#/.Net	 DevOps: CI/CD, Containerisation, Docker/Kubernetes, ECS/EKS/Fargate,
	Cloud agnostic: experience across AWS, Azure, Oracle and on-premise	 Jenkins/Travis API Management and configuration including payment gateways
	Experienced in scientific data formats e.g. GRIB/NetCDF	 Adept at preparing, navigating and delivering gate processes
	Expose legacy services as microservices with REST APIs	Agile (digital by design): Scrum/XP/GDS, Continuous Integration, TDD/BDD
	Use of open standards	Experienced in technical coordination and project management (Prince 2, MSP)
	 Web/Portal: Javascript (Angular/JQuery/Dojo/OpenLayers/Leaflet) , HTML, CSS, XSLT, Flex, ESRi 	Private and public cloud experience (AWS/Azure, MOD Cloud/UKCloud/Crown Hosting)
		Open Source & COTS Integration e.g. IBL Visua Weather, ESri
		Experienced in Information Assurance (SAC/CISSP/CLAS), security principles and

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Interoperability expertise

accreditation



Delivery Services – Transport Systems Cloud Delivery & Support

Service Description:

Features:

Rowe's transport experience means we are able to assist you in defining, analysing and migrating your transport functions to the cloud. Working with public sector organisations we are able to consolidate your strategic transport systems and data across various transport modes, and manage these in live operation.

- Network data: including roads, railways, waterways, airports, and infrastructure
- Terminal data: including bus/train stations, airports, seaports, and warehouses
- Transportation modes/vehicle data: cars, buses, trains, airplanes, ships, bicycles
- Scheduling and Frequency: including demand responsive DRT/DDRT data
- Fares/Ticketing/Routes: including data from BODS/ABODS
- Intermodal transportation for optimal transport across transportation modes
- Sustainability: support for low carbon initiatives and grants/EV adoption
- Cloud agnostic platform support and live operation
- Alignment with DfT Transport Data Strategy and emergent transport standards

- Improved efficiency and accessibility of data.
- Cost Savings with optimised storage and reduced environmental impact.
- Modernisation of outdated/legacy data infrastructure.
- Smooth transition from legacy to modern platforms.
- Flexibility to scale data solutions based on needs.
- Centralised management and control of data.
- Maximise the value of organisational data assets.
- Timely insights for informed strategic decisions.
- Support for evolving data needs and business requirements.
- Adaptable platforms to meet changing data demands.



Operations Services

Our operations services offer round-the-clock managed support to keep your systems running smoothly, ensuring uninterrupted operations either in business hours, extended hours or 24x7, depending on your needs. We provide comprehensive monitoring, scaling, and security measures to proactively address potential issues and protect your infrastructure against threats.

Employing Infrastructure-as-Code principles through tools like Terraform, CloudFormation, and CDK, we streamline deployment processes and maintain consistency across environments, enhancing agility and reliability. Additionally, our expertise in DevOps and automation empowers efficient collaboration between development and operations teams, driving continuous improvement and accelerating time to market.

With our operations services, your systems will be in capable hands, equipped to handle the demands of today's digital landscape with precision and reliability.





Operations Services – API Management Services

Service Description:

Provision of API Management Gateway and Portal expertise for the hosting and through life support of enterprise grade API solutions for public and private cloud environments, including AWS, Azure and Google/GCP.

Features:

- Management of API Portal and Management Gateway solutions
- Experienced in license and API key management
- High volume API transaction and big data optimisation
- Gateway optimisation for dynamic data (e.g. weather, environment, realtime etc.)
- Evaluation and selection of commercial API management solutions
- 3rd Party and AWS Developer Portal Customisation (including Drupal/JavaScript)
- Portal CMS configuration and API documentation (e.g. Swagger)
- AWS, Azure, Google/GCP and on-premise expertise. Experts in cloud migration.
- Hosting and through-life support.

- COTS/OTS & Open Source Integration
- B2C and B2B Experience
- Experience with CA Layer7/Cloud, WSO2/WS02, Apigee/Tyk/Mashery/Wicked, IBM API Connect
- Experts in Amazon API Gateway, Developer Portal and key management
- Adept at preparing, navigating and delivering projects through gate processes
- Agile approach (digital by design): Scrum, Kanban, Continuous Integration, TDD
- Experienced in technical and project management (Prince 2, MSP)
- Authentication/authorisation and billing/monetisation strategy expertise e.g. Amazon Cognito, SAML
- Public sector security procedures and accreditation (TAD/ITAD/ITADS/RMADS/CE+/ISO27001) expertise
- Experienced with IL3 to IL5+ environments. SC/DV Consultants.



Operations Services – AWS Managed Service & Support

Service Description:

Features:

Provision of fully managed services, support and maintenance of bespoke solutions, developed inhouse or via a 3rd party, on AWS. We provide secure, robust and scalable managed service, following our ISO9001 and ISO27001 processes. As AWS partners we are well versed in migrating, hosting, supporting and maintaining cloud systems.

Scaleable hosting environment

- Resilient database and storage design
- Experts in Python/Django, Node and Java/Spring based services
- Repeatable build and deployment with DevOps (Infrastructure as code)
- System hosting, migration, configuration, development and support
- Full life-cycle management
- Business intelligence of system use with AWS QuickSite
- CMS expertise (Joomla, Wordpress, Wagtail, Bloomreach, Drupal)
- Experts in HTML, JavaScript, TypeScript (Angular/AngularJS) and CSS
- OX and Service Design expertise

- Ocst reduction
- Assured service
- Full service administration or basic service hosting
- Flexible SLAs by arrangement
- Certified AWS Experts
- Part of the AWS Partner Network (APN)
- Secure-by-design following AWS well architected principles
- FinOps optimisation to ensure value for hosted solutions
- Automated monitoring, alarms and scaling
- ITIL service management processes



Operations Services – AWS Management & Support

Service Description:	Features:	Benefits:
Provision of AWS hosting and through life support of AWS based cloud solutions. Secure,	Management of legacy applications in the cloud	Migration of on-premise systems to harness AWS PaaS
scalable, robust - leveraging AWS PaaS, SaaS and laaS offerings.	Management of new systems in AWS	Provision of scaleable relational databases e.g. PostgreSQL/PostGIS, Aurora
laas onerings.	Evaluation of legacy systems and how to leverage for AWS	 Provision of scaleable NoSQL databses e.g. MongoDB, DynamoDB
	Re-architecting systems for cloud deployment	 Establishing microservice platforms and utilising containerisation e.g. Docker, ECC
	Systems Integration (e.g. CMS (Bloomreach/Joomla/Drupal/Wagtail),	 Expertise in Java and JEE based applications
	payment systems, ServiceNow)Design review and development of cloud	Expertise migrating to GOV.UK PaaS (Platform as a Service)
	 road maps Utilise API Gateway/Portal, EC2, S3, SNS/SQS, RDS, VPC, ECS, Lambda 	Experience in defence, geospatial, meteorology/weather and oceanography/hydrography (MetOc) domains
	SIEM and automated monitoring via CloudWatch/CloudTrail	Provision of Continuous
	Automate deployment with Infrastructure- as-Code (CloudFormation/TerraForm)	Integration/Deployment (CI/CD) e.g. Travis, Jenkins/CloudBees
	Automating DevOps pipelines with	Business Intelligence through AWS Quick Site
	CodeCommit, CodePipeline, CodeBuild and	Eully managed convice entions

CodeDeploy

Fully managed service options

Operations Services – Cloud API Management Service

Service Description:

Features:

Provision of API Management, Portal and Gateway configuration, development, hosting and through life support. Experienced in Business/Technical Analysis, Requirement Gathering/Elaboration, System Design, Solutions Architecture, Software Development, Systems Configuration, Deployment, Technical Leadership and Project Management in public and private cloud environments, including AWS, Azure, Google/GCP, and GOV.UK PaaS.

- API Design and Configuration: REST/RESTful, HAL/HATEOUS, SOAP/SOA, Serverless/Lamda
- Service Discovery & Meta Data Management (ISO 19115/19119, MGMP, CSW)
- Web Services: HTTP/HTTPS, FTP, OGC WCS/WMS/WMTS/WFS/WPS/WMC/OWS Context, OpenAPI/Swagger, GIS
- Integration: Java Spring, JMS, JDBC/Hibernate/JPA/JDO, Python/Flask, PhP/Laravel
- RDBMS Databases Integration: Oracle, Derby, SQLServer, PostgreSQL/PostGIS, SQL, MySQL, DB/2
- Big Data/NoSQL: DynamoDB, MongoDB, Solr, Lucene, ElasticSearch/Elasticache, Reddis
- Middleware: JBoss, Apache, Tomcat, Jetty, Websphere, ActiveMQ/Fuse, MQSeries, BPM
- Platforms: AWS API Gateway, WSO2/WS02, IBM API Connect (plus JavaScript/CSS/HTML/Drupal)
- Data Formats: XML/KML/GML/HTML, NetCDF, GRIB, HPAC, PP, JSON, CSV, Tiling
- AWS, Azure, Google/GCP and on-premise expertise. Experts in cloud migration.

- COTS Integration (IBL Visual Weather, IBM HPSS, Fuse, MQSeries)
- Open Source Integration (GeoServer, GeoWebCache, GeoNetwork, Apache/JBoss/Tomcat/Camel, BPM)
- Experienced with WSO2/WS02, Tyk, Apigee and GOV.UK PaaS
- Experts in Amazon API Gateway, Developer Portal and key management
- Adept at preparing, navigating and delivering projects through gate processes
- Agile approach (digital by design): Scrum, Kanban, Continuous Integration, TDD
- Experienced in secure, scalable and robust solutions.
- Authentication/authorisation and billing technology/strategy expertise e.g. Amazon Cognito, SAML
- Public sector security procedures and accreditation (TAD/ITAD/ITADS/RMADS/CE+/ISO27001) expertise
- Separate Sep



Operations Services – Cloud Data Management

Service Description:

Expert provision of Business/Technical Analysis, Requirement Gathering, System Design, Solutions Architecture, Software Development, System Configuration & Deployment, Accreditation/Assurance, Technical Leadership, Project Management and Performance Tuning and Optimisation for data delivery solutions to be hosted in public and private cloud environments (AWS/Azure/GCP). Full systems life cycle support/managed service options.

Features:

- Data routing solutions e.g. Apache NiFi/Camel, Spring Data, FTP, API
- API Management (AWS API Gateway, NGINX, CA Layer7, WSO2)
- RDBMS Databases: Oracle, Derby, SQLServer, Postgres/PostGIS, SQL, MySQL, DB/2, DBA
- Big Data Solutions/NoSQL: MongoDB, Hadoop, Lucene, Solr
- Middleware: JBoss, Apache, Tomcat, Jetty, Websphere, ActiveMQ/Fuse, MQSeries, BPM
- Web Services: HTTP/HTTPS, FTP, OGC WCS/WMS/WFS/WPS/CSW/WMC/OWS Context, SOAP, REST/RESTful, SOA
- Java, Spring IoC/Boot/Integration/Data, JMS/JDBC/JPA/JMX/JSP/JAXB/JNI, MicroServices
- Data Formats: XML/KML/GML, NetCDF/GRIB1/GRIB2, HPAC, PP, JSON, CSV, ISO19115/ISO19119/ISO19139, OWC
- ETL (Extract/Transform/Load) of complex datasets
- DevOps: CI/CD, Docker/Kubernetes, ECS/EKS/Fargate, Jenkins/Travis, CodeBuild/CodePipeline/CodeDeploy

- Data and meta-data management (e.g. CKAN, GeoNetwork)
- Experts in distributed, scalable and high availability systems
- Adept at preparing, navigating and delivering projects through gate processes
- Agile (digital by design): Scrum/XP, Continuous Integration, TDD/BDD (Cucumber/Gherkin/Spock/Groovy)
- Experienced in technical and project management (Prince 2, MSP)
- Strong communication and engagement with stakeholders at all levels
- Dashboards and monitoring (e.g. Grafana, Prometheus, QuickSite)
- Elastic Stack e.g. ElasticSearch, ElasticCloud, App Search, ELK, Logstash, Kibana
- Graph database expertise (e.g. OrientDB, GraphQL, SPARQL, Neptune)
- Knowledge Management Expertise (SKOS/OWL/RDF, SKOSMOS/VocBench))



Operations Services – Cloud Development, Transition & Consultancy

Service Description:

Expert provision of Business/Technical Analysis, Requirement Gathering & Elaboration, System Design, Solutions Architecture, Software Development, System Configuration & Deployment, Accreditation, Assurance, Technical Leadership, Project Management and Performance Tuning and Optimisation for solutions to be hosted in public and private cloud environments. Full systems life cycle support.

Features:

- Java: Java SE/EE, Spring IoC/Boot/Integration/Data, JMS/JDBC/JPA/JMX/JSP/JAXB/JNI, MicroServices
- Frameworks: Hazelcast, RESTeasy, Ehcache, Struts, BIRT, Freemarker, Camel, Apache, Dropwizard
- RDBMS Databases: Oracle, Derby, SQLServer, Postgres/PostGIS, SQL, MySQL, DB/2, DBA
- Big Data Solutions/NoSQL: MongoDB, Hadoop, Lucene, Solr
- Middleware: JBoss, Apache, Tomcat, Jetty, Websphere, ActiveMQ/Fuse, MQSeries, BPM
- Web Services: HTTP/HTTPS, FTP, OGC WCS/WMS/WFS/WPS/CSW/WMC/OWS Context, SOAP, REST/RESTful, SOA
- Web: Flex, Javascript, AngularJS, JQuery, Dojo, HTML, CSS, XSLT
- Platforms: Linux/Unix/Windows/AS400/iSeries, Scripting, Mobile, CygWin
- Experienced with GOV.UK PaaS (Platform as a Service)
- Systems Engineering (using UML, Enterprise Architect), Environmental Analysis

- Expertise with AWS (EC2/ECR/Fargate/S3/RDS) and Azure
- Experts in distributed, scalable and high availability systems
- Adept at preparing, navigating and delivering projects through gate processes
- Agile (digital by design): Scrum/XP, Continuous Integration, TDD/BDD (Cucumber/Gherkin/Spock/Groovy)
- Experienced in technical and project management (Prince 2, MSP)
- Migration and integration expertise
- Strong communication and engagement with stakeholders at all levels
- COTS Integration (IBL Visual Weather/CA Layer 7 API Gateway/IBM HPSS)
- Innovative solution design and architecture. SC/DV Consultants.
- Strong knowledge of public sector security principles and accreditation (TAD/ITAD/ITADS/RMADS)



Operations Services – Cloud DevOps Transitioning & Support

Service Description:

Features:

Establishment and support of cloud based DevOps processes providing Continuous Integration and Deployment (CI/CD) services, including automated build pipelines, infrastructure-as-code, and release and operations managements.

Infrastructure-as-code expertise (CloudFormation, Terraform)

- Continuous Integration server configuration: Jenkins, Travis, Bamboo, CludBees
- AWS native experience: CodeBuid, CodePipeline, CodeDeploy
- GitHub, GitLab, Bitbucket and other Git related source control management
- Creation of detailed cloud migration roadmaps and strategies

- Fully managed service options
- Repeatable and secure deployment
- Expert mentoring and coaching for upskilling staff
- Secure, scalable and robust solutions
- Automation experts
- Secure management of credentials and keys



Operations Services – Cloud GIS Hosting & Support

Service Description:

Provision of cloud based GIS services using open source and proprietary solutions. Full design, development, DevOps, configuration and/or managed service. Support across a variety of domains including transport, defence, environmental, earth observations (EO), space etc. Target platforms include AWS, Azure, MODCloud and private secure cloud.

Features:

- Hosting and management of GeoServer, GeoNetwork & MapProxy
- Service Discovery & Meta Data Management (ISO 19115/19119, MGMP, CSW)
- Deploying and managing geo-spatial catalogues
- Hosting tile serving solutions (e.g. OpenMapTiles, Tileserver-GL)
- Management of ESRi
- Managing Geospatial datasets and databases
- Extract, transform & load (ETL) of geospatial data
- Web Services: HTTP/HTTPS, FTP, OGC WCS/WMS/WMTS/WFS/WPS/WMC/OWS Context, OpenAPI/Swagger
- Data Formats: XML/KML/GML/HTML, NetCDF, GRIB, HPAC, PP, JSON, CSV, Tiling
- Extending and configuring OGC CITE/TeamEngine test suites

- COTS Integration (IBL Visual Weather, ESRi)
- Open Source Integration (GeoServer, GeoWebCache, GeoNetwork, Apache/JBoss/Tomcat/Camel, BPM)
- OGC Compliant web services: WMS, WFS, WCS, WMTS, CSW, WPS
- Reduced licensing costs
- Compliance testing with OGC CITE tools
- Agile approach (digital by design): Scrum, Kanban, Continuous Integration, TDD
- Experienced in technical and project management (Prince 2, MSP)
- Authentication/authorisation and billing technology/strategy expertise e.g. Amazon Cognito, SAML
- Configuration of UI's using OpenLayers, Leaflet, Angular, JavaScript
- ESRi Deployment (Arc Online, Maritime Chart Server, Portal, Web AppBuilder)



Operations Services – Defence MetOc Cloud Support

Service Description:

Features:

Specialist provision of defence Hydrographic, Geospatial, Meteorological and Oceanographic (METOC/GEOMETOC) software and consulting services including Business Analysis/Discovery, Concept Development, System Design/Architecture/Development/Configuration & Deployment, Strategy, Planning and Project Management for solutions hosted in secure cloud environments, in both UK and international domains. We also offer managed services and through life support.

- Java: Spring IoC/Boot/Integration/Data, JMS/JDBC/JPA/JMX/JSP/JAXB/JNI, MicroServices
- Frameworks: Hazelcast, RESTeasy, Ehcache, Struts, BIRT, Freemarker, Camel, Apache, Dropwizard
- RDBMS Databases: Oracle, Derby, SQLServer, PostgreSQL/PostGIS, SQL, MySQL, DB/2, DBA
- Big Data Solutions/NoSQL: MongoDB, Hadoop, Lucene, Solr, ElasticSearch
- Middleware: JBoss/Apache/Tomcat/Jetty/Websphere, ActiveMQ/Fuse, MQSeries, BPM
- Web Services: HTTP/HTTPS, FTP, OGC WCS/WMS/WFS/WPS/CSW/WMC/OWS Context, SOAP, REST/RESTful, SOA
- Web/Portal: Javascript (Angular/JQuery/Dojo/OpenLayers/Leaflet), HTML, CSS, XSLT, Flex, ESRi
- Platforms: Linux/Unix/Windows/iSeries, MODCloud, VMWare, Mobile, DII, JMNIAN, DGS
- Data Formats: NetCDF/GRIB1/GRIB2, HPAC/DTSV, PP, JSON, XML/GML/KML, ISO19115/ISO19139/MGMP, OWC
- Open Standards, DGIWG Profiling, Spatial Data Infrastructure (SDI), Geo/GIS Expertise

- Meteorology, Oceanography and Hydrography systems specialists: conception to deployment
- DevOps: CI/CD, Containerisation, Docker/Kubernetes, ECS/EKS/Fargate, Jenkins/Travis
- Specialists in Tactical Decision Aids (TDA), C4ISR/C2 and GIS (GeoServer/GeoNetwork/MapProxy/ESRi)
- Adept at preparing, navigating and delivering gate processes
- Agile (digital by design): Scrum/XP, Continuous Integration, TDD/BDD, Cucumber/Gherkin/Spock/Groovy
- Experienced in technical coordination and project management (Prince 2, MSP)
- Private and public cloud experience (AWS/Azure, MOD Cloud/UKCloud/Crown Hosting)
- Open Source & COTS Integration (IBL Visual Weather, WADER/AREPS/WxCC/ArcGis Enterprise)
- Experienced in Information Assurance (SAC/CISSP/CLAS), security principles and accreditation
- Interoperability testing and initiative support (e.g. NATO CWIX, SANDBOX/EC/Information Warrior)



Operations Services – Enterprise Architect & Registry

Service Description:

Our Enterprise Architect & Registry Cloud Services hosting provides a fully managed service for hosting Sparx Systems EA models as well as other types of registries. It provides easy access to people within teams, and optionally to external customers and consultants anywhere around the world. Features:

- Scaleable hosting environment
- Resilient database
- Supports NATO, MOD and DGIWG standards e.g DGIF/NGIF
- Supports modelling based on open standards
- Platform able to host client supplied or bespoke registries
- Capable of hosting DGIWG DCE

- Increased collaboration
- Efficient management
- Assured service

- Able to host DGIWG DCE
- Full service administration or basic service hosting
- Flexible SLAs by arrangement



Operations Services – Microsoft Azure Managed Service & Support

Service Description:

Features:

Provision of fully managed services, support and maintenance of bespoke solutions, developed inhouse or via a 3rd party, on Azure. We provide secure, robust and scalable managed service, following our ISO9001 and ISO27001 processes. Our Azure certified consultants are well versed in migrating, hosting, supporting and maintaining cloud systems.

- Scaleable hosting environment
- Resilient database and storage design
- Experts in Python/Django, Node and Java/Spring based services
- Repeatable build and deployment with DevOps (Infrastructure as code)
- System hosting, migration, configuration, development and support
- Full life-cycle management
- Business intelligence of system use with Azure Databricks
- CMS expertise (Joomla, Wordpress, Wagtail, Bloomreach, Drupal)
- Experts in HTML, JavaScript, TypeScript (Angular/AngularJS) and CSS
- UX and Service Design expertise

- Cost reduction
- Assured service
- Full service administration or basic service hosting
- Flexible SLAs by arrangement
- Certified Azure Experts
- Secure-by-design following Azure well architected principles
- FinOps optimisation to ensure value for hosted solutions
- Automated monitoring, alarms and scaling
- ITIL service management processes



Operations Services – Microsoft Azure Management & Support

Service Description:	Features:	Benefits:
Operational supports and management of Microsoft Azure based cloud deployment,	Management of migrated legacy applications to the cloud	Transition of on-premise systems to harness Azure PaaS
leveraging Azure PaaS and IaaS offerings.	Management of new systems in Azure	Provision of scaleable relational databases e.g. PostgreSQL/PostGIS, AzureSQL Datas
	Evaluation of legacy systems and how to leverage for Azure	Provision of scaleable NoSQL databses e.g. MongoDB, CosmosDB
	Re-architecting systems for cloud deployment	 Establishing microservice platforms
	Establishing DevOps pipelines and ways of	Expertise in Java and JEE based applications
	workingDesign review and development of cloud	Experience in large public sector and enterprise domains
	road maps	Experience in defence, geospatial,
	Utilise Azure API Management/Gateway, Portal, Azure DevOps, APIM	meteorology/weather and oceanography/hydrography (MetOc) domains
	Service monitoring Azure Alerts and Azure Service Health	Data analytics platform specialists: Power BI,
	Serverless functions and analytics	data catalogues/hubs (CKAN/GeoNetwork)Data lake/warehouse/lakehouse

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decision/implementation

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Experienced with Databricks, Snowflake and ETL (extract/transform/load)

Governance Services

Our governance services provide essential oversight and assurance across key technical domains. Acting as a Technical Design Authority, we ensure that all technical solutions align with best practices and organisational standards, promoting consistency and quality throughout the development lifecycle.



Additionally, our testing assurance processes rigorously evaluate systems to guarantee functionality, reliability, and performance, mitigating risks and enhancing user experience. Security assurance is paramount in our governance framework, with robust measures in place to safeguard against cyber threats and ensure compliance with regulatory requirements.

Rowe are ISO27001:2022 accredited and hold a Cyber Essentials Plus certification.



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Governance Services – Assurance & Governance Services

Service Description:	Features:	Benefits:
Provision of assurance and governance functions at all stages of cloud migration	Expertise in establishing Technical Design Authority to support architectural strategy	We develop proportionate assurance and governance models
strategy and roadmap.	Integrity of design and alignment to Cloud strategy and roadmap	 We tailor our approach to the needs of
	Comprehensive testing assurance at all levels of Cloud migration	your organisationWe ensure an accountability through full
	Component level; automation, unit testing, regression testing, factory acceptance testing	traceabilityWe engage key stakeholders at every stage
	 System level; Full system testing, integration testing, end-to-end testing 	We deliver clear and unambiguous outputs to inform decision making
	User Acceptance Testing (UAT) and Operational Acceptance Testing (OAT)	
	Non-functional testing; load, stress and soak tests, full performance testing	
	Security assurance; security-by-design, defence-in-depth analysis	
	Security testing; CHECK/CREST penetration testing, cloud security assurance	
	Over the second seco	

treatment plan



Governance Services – Technical Design Authority

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Features: **Benefits:** Service Description: Service blueprints and design parameters Ensure sound technical decisions: (\mathfrak{d}) Our Technical Design Authority (TDA) service 3 undertaken by Rowe experts is to oversee and guide the technical align with best practices/meet direction of Cloud projects and products project requirements 3 Assessment of architecture, technical and schedule risks and issues within your organisation. We ensure you Promote consistency and efficiency: ١ align to business requirements and support ١ Assessment of compliance with contract enforces technical standards and the delivery of strategic business objectives documents, requirements and dependencies patterns and outcomes through your adoption of Cloud technologies, safeguarding investment 3 Assessment of compliance with ١ Bridging the gap between business in Cloud. architecture artefacts and high level designs and technology Assessment of key technical and ١ architecture options and designs

Production of options appraisals to support

senior management decisions

methodologies based on Agile

TOGAF/SABSA

operation; e.g. ITIL

Responsive project and programme

Experienced in adopting different

enterprise architecture approaches; e.g.

Experienced in industry standards for live

- Reduce risks and costs by ensuring well-designed and well-architected solutions
- Promote Innovation: stay updated on emerging technologies/explore their benefits



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Thank you













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