

G-CLOUD 15 SERVICE DEFINITION

Database architecture support

Cloud Support



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Overview

Aspire Systems provides a Database Architecture Support service focused on helping you in designing, improving, and assuring your database platforms that underpin modern digital services, and reporting solutions. We help organisations ensure their databases are secure, resilient, scalable, and aligned with business and technical requirements across cloud, hybrid, and on-premises environments.

We offer a variety of support services across the data architecture landscape:

- Architecture and design
- Cloud database platform
- Performance and optimisation
- Resilience and recovery
- Security and compliance
- Migration and modernisation
- Operational support and assurance

Our experience spans a wide range of database technologies, including SQL Server, Azure SQL, MySQL and modern cloud-native data platforms such as Azure Cosmos DB. This breadth of capability is particularly

valuable when supporting organisations as they modernise legacy systems, move to cloud architectures, or adopt hybrid environments.

Over many years our teams have designed, refined, and supported database estates underpinning transactional systems, APIs, reporting platforms and other integrated digital services.

Our developers and architects have deep expertise in advanced database optimisation, cloud engineering, and automation, allowing us to consistently create and support scalable, secure, high performance database foundations for your applications. We support the database architecture process end-to-end. Whether you need assistance designing a new database schema, implementing it as part of a wider solution, or optimising and refining the performance of an existing platform, our team can help.

Our capability also extends across cloud consulting, cost optimisation, database engineering best practices, managed database services, and database migrations, meaning we're ready support you throughout the evolution of your data platforms.

Our clients



Our approach

We believe that technology should enable business goals not drive them. That's why we offer services and support tailored to the way you work. We use best of breed processes and industry standards, combined with our own unique methodology to ensure you receive the very best in quality and value for money.

Experience

The extensive experience of our staff in real world application development means that we provide the right technology for your requirements, and our rigorous testing procedures ensure quality assurance throughout. Aspire Systems employs rigorous coding standards to facilitate the readability and maintainability of source code. All development is reviewed against these standards throughout the project lifecycle.

Methodology driven

Our agile approach to software combines commonly accepted best practices, such as an iterative, user-focused development process and use of industry standard design patterns. Aspire Systems has employed this approach successfully on many development projects.

Reuse

Our application development framework and suite of products allow us to increase productivity by spending more time on meeting the business requirements of our clients, rather than the low level nuts and bolts of the system.

The benefits

- Systems that reduce effort and increase the efficiency of processes
- More timely, accurate data from which valuable analysis and reporting can be conducted
- Cost savings by reducing the time taken to capture, validate and report on your organisations key data
- An agile collaborative approach to the design, delivery and management of your system implementation
- A highly qualified team with experience in delivering complex systems
- Lightweight, reusable components ensure cost effective rapid delivery

Our Services

- Innovative cloud solutions and cloud adoption consultancy
- Analysis, design, and development of bespoke applications
- Database development and integration
- Secure application delivery through web technology
- Multilingual applications including bilingual Welsh / English interfaces
- Business intelligence and flexible reporting solutions (Including Power BI)

- Automated data validation
- Systems integration
- Technical project management
- Secure data exchange
- Comprehensive support and maintenance
- Social media integration
- Mobile Web and Apps
- Azure App Service, Azure Functions, Azure AI Search
- Responsive web design and user experience (UX) design
- Geographical and mapping solutions (including Google and Bing maps integration)

Technologies

Web and Windows based solutions

- Microsoft .NET
- Microsoft Azure
- Web services and API (REST, SOAP, OAuth authorisation)
- XML, XSLT, JSON
- React, Angular, HTML5 , CSS, JavaScript, JQuery, AJAX
- Microsoft SQL Server

Business Intelligence

- Microsoft Power Platform (Power BI, Power Apps)
- Business Objects
- Microsoft SQL Server Analysis Services (SSAS)
- Microsoft SQL Server Reporting Services (SSRS)

Content and Collaboration Platforms

- Microsoft (Office) 365
- Umbraco
- Microsoft SharePoint Online

Government and Industry Standards

- Government Open Standards principles
- W3C Web Content Accessibility Guidelines (WCAG 2.2)

Standards and accreditations

ISO

Aspire Systems operates to the ISO 9001:2015 standard as a business and on individual projects. The project manager and team members have all worked within ISO 9001 accredited environments and have had individual projects audited as part of accreditation renewal. Aspire Systems first acquired accreditation in September 2006.

Aspire Systems operate in accordance with the ISO 27001:2022 standard and first acquired accreditation in March 2015. A number of our systems process sensitive data and frequently undergo penetration testing by

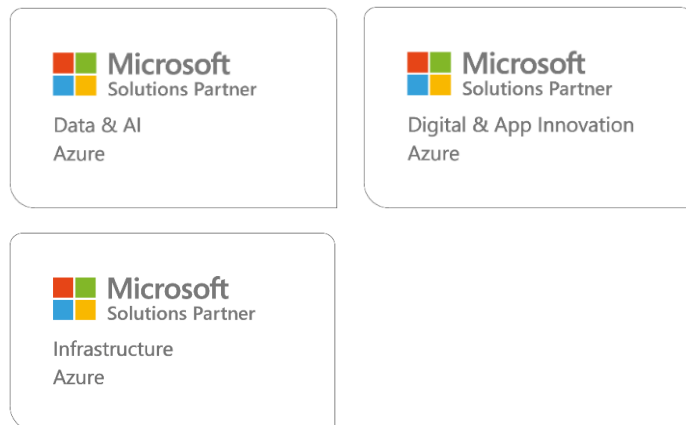
external security experts. We have a solid understanding of security in web applications and develop all of our systems according to the recommendations of OWASP (open web application security project) and other industry best practise.

Cyber Essentials Plus

Cyber Essentials is a Government-backed and industry supported scheme to guide businesses in protecting themselves against cyber threats. Aspire Systems is fully accredited against the Cyber Essentials and Cyber Essentials Plus schemes.

Technical Accreditation

The following Microsoft accreditations are held by Aspire Systems and its staff:



The following Umbraco accreditations are held by Aspire Systems and its staff:



The following Scrum accreditations are held by Aspire Systems and its staff:



Experience

The following is a small selection of Aspire Systems' comprehensive experience in offering this service. For more of our work please take a look at our website <https://www.aspiresys.com/uk/insights>

WJEC – Appointees Management Portal

WJEC are an examination board that provides examinations, professional development and educational resources to schools and colleges across the Wales, Northern Ireland and England under the brands WJEC or Eduqas. To deliver this service the WJEC relies on thousands of external education professionals who are referred to as Appointees and contracted to deliver individual assessments. Aspire Systems have played a key role in transforming how the network of appointees is managed. We delivered a modern, reliable system designed to streamline the recording and administration of appointee data and their activity on each assessment.

Aspire Systems supported WJEC in modernising a legacy WebForms application whose large SQL Server database relied heavily on stored procedures. We redesigned and rationalised the schema, transitioned the solution to Entity Framework, and delivered a full, issue-free data migration. The modernised architecture significantly improved maintainability, reduced technical debt, and provided a scalable foundation for ongoing development.

- Modernisation of legacy SQL schema and stored-procedure driven architecture
- Full Entity Framework transition
- Safe migration of all historical data
- Improved performance and maintainability
- Introduced automated testing to data-layer changes
- Implementation of migration scripts to ensure reliable deployments
- Optimised indexes to support high volume transactional workloads



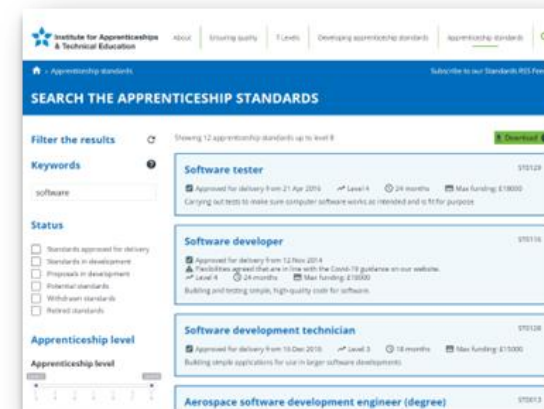
Skills England – Trailblazer Portal and Apprenticeship Builder

The Skills England Apprenticeship Builder and Trailblazer Portal plays a central role in supporting the design, development and publication of apprenticeship standards across England. Apprenticeships must follow a structured development process, and Skills England needed a system that could manage the lifecycle of each standard, from initial employer collaboration to public release. Working closely with Skills England, Aspire Systems developed a cloud hosted platform that provides employers, reviewers and Skills England staff with a consistent workflow for creating apprenticeship standards.

Originally built within Umbraco CMS, the solution expanded significantly over time as the volume, relationships, and the complexity of requirements of apprenticeship data increased. The CMS was no longer suitable for storing large amounts of structured and versioned data, especially where standards progressed through several development stages, required audit trails, and needed to be accessed by multiple user groups with different permissions. This created a need for a more robust data architecture capable of handling complex relational structures, high data integrity requirements and long-term scalability. To address this, Aspire redesigned the platform's data layer by introducing SQL Server as the source for structured data while retaining Azure Cosmos DB for audit, historic revisions and long-term traceability. This hybrid model allowed key apprenticeship entities such as occupational profiles, KSBs (knowledge, skills and behaviours), assessment plans and draft submissions to be normalised, searchable and efficiently queryable, while

preserving the system's ability to track version history and maintain a complete development audit trail.

- Extraction of apprenticeship data from the legacy Umbraco CMS into a dedicated SQL Server database designed for structured, relational datasets
- Design and implementation of a normalised schema supporting occupational profiles, KSBs, assessment plans, versioning and workflow states
- Introduction of Azure Cosmos DB to store historic revisions and audit history for long-term traceability
- Consolidation of employer-submitted Trailblazer content into a consistent, queryable relational structure



G-Cloud details

Information Assurance

Since we offer specialist consultancy, development and support services we are able to comply with any Impact Level accreditation required when developing the solution.

Backup / Restore / Disaster Recovery

A robust backup and maintenance plan will be supplied where required. Should a failure occur the plan will set out the series of steps that must be taken to restore the service in accordance with the agreed SLAs.

Our approach to project management allows us to evaluate and identify suitable responses to risks, set tolerances for risks and ultimately select risk responses that will ensure project delivery is achieved. We have experience of creating many varied and tailored plans for our existing SharePoint customers.

On-boarding and Off-boarding processes/scope

On-boarding and Off-boarding process will be discussed and confirmed with a Aspire Systems Account Director during initial engagement. Typically there would be no cost associated with entry to the service.

Pricing

Please see pricing document.

Service management details

For Support projects or projects that contain a support element the following service management procedures will be followed.

Enquiries will be received via email or telephone.

All communication and associated actions will be logged in the Issue Log, which will be accessible 24/7 via the project Extranet (SharePoint).

Enquiries that result in changes to the system will be communicated to the client prior to work commencing. Changes to systems will be transferred to the live and/or staging environment by Aspire Systems (as applicable) directly upon acceptance and all relevant documentation will be updated. Aspire Systems will advise the client of completed changes to the live environment.

Service Levels

All calls will be categorised by Aspire Systems as follows:

- Category 1

These are problems with the system for which there are no workarounds and have a serious impact on the processes of the system and the ability of the users to perform essential tasks. The problems may relate to data or the software itself.

- Category 2

These are problems which affect part of the system but do not prevent continued use but do limit the effectiveness of the system. Processes can continue and workarounds are available.

- Category 3

User generated queries requiring no modifications to the system or data, but will require guidance to arrive at a satisfactory conclusion.

The SLAs offered would depend on the type of support being provided and would be agreed at the start of the support period. The following response times would typically be offered:

Category	Response time	Investigation time
1	30 minutes	3 hours
2	1 hour	7 hours
3	7 hours	15 hours

Under our existing frameworks, 100% of calls have been actioned within the agreed SLA.

Change control

Issues that result in changes to the system will be subject to formal change control and communicated to the client for agreement prior to work commencing. Changes to the system will be transferred to the live environment directly upon acceptance and all relevant documentation

will be updated. We will advise the client of completed changes to the live environment.

System monitoring

During a busy support period, system performance and activity would be monitored to identify any potential problems before they occur. This typically includes:

- Monitoring event logs
- Checking that backups have completed successfully
- Monitoring storage space

We recognise that at critical times such as the day new functionality goes live, additional system monitoring should take place. This will ensure that unexpected issues can be identified and resolved with minimum impact to users.

Resources

The support service team will partly be provided by the same consultants who undertake project work. All consultancy staff will be trained in the implementation of the helpdesk service to ensure a uniform service is provided.

We will establish and maintain a test environment to allow support requests to be identified and resolved in an efficient manner.

Financial recompense model for not meeting service levels

The details of any financial recompense model would be determined based upon the size and scope of the project and the level of technical or

organisational uncertainty on the side of the client. This will be decided during final contract negotiations.

Training

Our approach is one of flexibility and we seek to work in an integrated collaborative manner with the client, fostering an environment that promotes knowledge transfer throughout the project.

In order for the client staff to support software applications it is important for us to pass on knowledge of the systems and technologies used. We always aim to develop software that can be administered as far as possible by the client.

Both formal and informal tailored training and mentoring can be provided maximising the benefits of training time.

Examples of training could include:

- Training in the use of service management features
- SharePoint training
- Umbraco training
- Configuration of bespoke system functionality
- Training on how to undertake user acceptance testing
- Mentoring

Ordering and invoicing process

Ordering

The ordering process generally constitutes the client accepting a written proposal for the work, which details the project deliverables, costs and timescales.

Invoicing

Aspire Systems payment terms are 30 calendar days from the date of invoice. Invoicing will be based on the type of the project. For development projects this is typically 10% on specification signoff, 70% on delivery for User Acceptance and 20% on final signoff.

Termination terms

By consumers (i.e. consumption)

- Time and Materials projects

Termination terms will vary depending on the service offered, and will be agreed at the time of service commencement. Our termination notice for consulting, development and deployment activities is 2 calendar weeks (Termination Period). Any actual days worked, (according to timesheets) up to the end of the Termination Period will become immediately payable by the client. Any finalisation of deliverables will need to be performed at that time.

- Fixed Price projects

For fixed price/fixed scope projects the client will be liable for the full cost of the fixed price projects if it is terminated early. Aspire Systems will be prepared to examine whether / how clients' costs can be minimized if larger / longer term projects are terminated early.

- Resale of 3rd party Cloud services

Where Aspire Systems is reselling 3rd party services to the client as part of our cloud services, clients will be required to comply with the standard terms of service offered by 3rd party suppliers. These will be clearly communicated prior to service commencement. Should early termination by the Consumer attract contract penalties from any 3rd party, Aspire Systems will pass these penalties to the Consumer. Any such penalties will be payable in accordance with any terms expressed by the 3rd party.

By the Supplier (removal of the G-Cloud Service)

The G-Cloud termination terms are agreed within the framework agreement. In general, all services purchased under this framework can continue to be supplied to consumers should the framework be withdrawn by the Supplier.

Consumer responsibilities

The proposal from Aspire Systems to the client will make clear the contribution required from the client. Generally this will include providing business knowledge during workshops, reviewing outputs and involvement in user acceptance testing.