



axellera platform service definition

(G-Cloud 10)

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Date: 15 May 2018 **Version:** 1.0 **Classification:** public
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2 Axellera Rapid Application Delivery (RAD) Platform

The Axellera RAD Platform gives your organisation the ability to create custom fit applications through configuration and workflow, case, and data definitions. Applications in that out of the box can combine

- > Workflows and Business Process Management
- > Case Managements (think CMMN) and Collaborations
- > Powerful data integration from any number of sources covering SQL and no-sql databases, a wide variety of files from XLS & .CSV to XML, JASON and beyond
- > A powerful semantic data dictionary that presents data and processes in the language of the user
- > A powerful process engine middleware that manages the execution of process flows, workflows, BPM Orchestrations and CMMN style case actions across as many different environments and nodes as may be needed.

Any application delivered using Axellera RAD also has many key enterprise application features like

- > Fine grain role-based access management for any field, action, or object
- > Easy integration with the authentication technologies your organisation prefers
- > Powerful audit trails
- > Automated resilience, scaling and high availability

3 Axellera RAD Common Uses Cases

The Axellera' RAD platform is highly configurable and can be deployed flexibly for a broad range of applications including but limited to:

- > Rapidly create complete applications which may require complex time critical workflows, have to integrate many with many often complex data sources/systems/external workflows and provide all the enterprise class attributes like auditability, fine grain role based access control, integration into corporate authentication systems etc.
- > Creating complex CMMN style case management logic easily and quickly. To support knowledge workers you often need to create rich domain specific information structures to

support cases and consistent actions and checkpoints on casework without constraining the work of the case work professional. Axellera RAD makes creation of such case work work flows and collaborations easy.

- > Creating powerful complex event processing logic with robust workflows and smart business action triggers.
- > Improving the performance and manageability and integration of legacy point solutions and isolated data silos into joined up business processes without having to replace existing systems;
- > Managing “Big Data” (i.e. multiple terabytes up to petabytes): smart data discovery and quality assurance, automated data transformation, fast querying, secure re-distribution, and automated reporting and workflow triggers;
- > Sorting slow query performance, again without replacing existing systems, where one or more SQL database(s) are facing challenges because of the complexity of the queries they’re running or the scale of the data they’re processing;
- > Generating real time dashboards and reporting from multiple data sources;
- > Bridging from a set of legacy data stores to a modern business information platform (e.g. Tableau, QlikView), particularly where performance improvement is needed versus direct connection to the data stores;
- > As a smart and highly economic ETL (Extract, Transform & Load) tool;
- > Transforming legacy data into a new dataset which is compliant with a specified ontology or data dictionary;
- > Automatically verifying legacy data compliance with an ontology or data dictionary.

4 Service Overview

4.1 Products

The RAD Platform can be configured for a number of functions:

- > **Low Code Platform** – Rapidly create complete applications which may require complex time critical workflows, have to integrate many with many often complex data sources/systems/external workflows and provide all the enterprise class attributes like

auditability, fine grain role based access control, integration into corporate authentication systems etc.

- > **Workflow BPM Platform** – Rapidly define dependency driven workflows and Business process management orchestrations that respond to business events and combine queries, analytics, request response calls to APIS/WEB APIS etc
- > **Case Management I(CMMN) Platform** – Rapidly define CMMN style case management workflows/collaborations and all the data/ information needed for your domain.
- > **Big Data, AI, Machine Learning Platform** – Rapidly ingests even petabyte scale data with automated smart data preparation and transformation. Allows you to query the data using SQL on Hadoop and/or distribute it securely to other systems. Use Spark Machine Learning and other ML/AI capabilities to perform complex machine learning tasks. Weave AI/ML and other query and analytics tasks into complex actions and workflows that can integrate with many other systems if needed.
- > **Data Management Platform** – Brings together multiple data sources and quality assures and manages them as a single data repository for re-distribution to other systems or for fast direct querying and reporting.
- > **Data Discovery Platform** – Tames large, often fast changing, collections of structured, semi-structured and unstructured data and documents, cleaning, transforming and unifying it into a single repository, and - if desirable – verifies compliance with a data dictionary or ontology.
- > **Smart Big Data Virtual Appliance** – Provides a query and dashboard solution powered by Spark and Hadoop for deployment into any data centre to combine data from multiple data sources and provide ultrafast query/dashboard performance.
- > **SQL Database Query Platform** – Delivers massive query acceleration for SQL databases, joining up multiple SQL (and other) data sources into a single, highly performant and SQL-queryable, data repository. Low cost to implement and operate as you can port existing SQL queries and apply SQL existing skills.
- > **ETL & Data Integration System** – Replaces traditional ETL with smart data discovery and orchestrated/automated data transformation, validation and redistribution. Extracts, intelligently cleans, integrates, transforms and loads data of any size and complexity within or into the data centre(s) of your choice.

Each of these product configurations can draw on the full power and feature set of the Data Platform, allowing you to deploy it for multiple purposes and thereby to maximise your return on investment from the deployment.

5 Key Features

The key features of the Data Platform, which can be utilised under any of the product configurations above, are:

5.1 Some RAD Features

5.1.1 Rapid Application Delivery

- > Create complete applications quickly through configurations and building blocks
- > Generates readable SQL, code and workflow definitions you can edit
- > Easily create user defined data sets, actions, reports, dashboards...
- > Powerful Workflow and Case (CMMN) modelling allows rapid development
- > Powerful semantic data-dictionary allows apps defined in users language
- > Intelligent data discovery for quick and easy setup and operation
- > Granular role based permissioning on all fields, actions and objects
- > Authentication easily integrated with your organisations authentication methods
- > Open APIs for easy integration to other systems
- > Using open standards like Java/Scala/JVM, SQL, Hadoop, Spark etc

5.1.2 Data management

- > Load data – structured, semi-structured, unstructured documents and data
- > Automatically identify file and data types
- > Apply automated rule-based quality assurance
- > Unify all data sources into a single, queryable, data repository
- > Apply automated or manual data transformations
- > Automatically or manually distribute cleaned and transformed data to other systems
- > Query data with massive performance improvements over SQL querying
- > Create dashboards and reports
- > Scale elastically as your data processing requirements grow

5.1.3 Data Discovery & Transformation

- > Smart, automated (highly efficient) discovery and transformation processes
- > Automated ingest of data from files, databases, message streams and APIs
- > Information combined from many systems and sources

- > Ingest on demand or orchestrated via work schedules and event triggers
- > Automated analysis of new data sources/feeds
- > Discovery engine learns to interpret your data from prior practice
- > Smart automated quality assurance, compliance, de-duplication and cleaning
- > Automatic creation of compound records for customers, products, etc
- > Easy creation of insertion, extraction, transformation, validation and compounding workflows
- > Automatic verification of compliance with data dictionary or data ontology

5.1.4 Data Sources & Connectors

- > Can handle “Big Data” if needed (i.e. multiple terabytes to petabytes)
- > Built-in interfaces to many types and formats of data source
- > Database connectors include: MySQL, SQL Server, Oracle, Sybase, ASE/ASA, JDBC
- > Big Data connectors include Cassandra/Datastax, Hadoop, Spark, Hive, MongoDB, graph databases
- > Message stream connectors include: Kafka/Spout frameworks, webhook endpoints, Twitter, Facebook
- > Web API connectors include: Web Services (SOAP), WebAPI (RESTful), Webhooks, WebSocket

5.1.5 Querying & Performance

- > Massive query speed improvement over traditional SQL databases
- > Runs MySQL and SQL92 compliant queries on any data source
- > Can run existing SQL queries with no/minimal change
- > Powered by Spark and Hadoop for performance
- > SQL querying is executed as SQL on Hadoop
- > N.B. You will not need specialist Spark/Hadoop/Big Data skills to use the platform
- > Cassandra, MongoDB and Neo4J are available as alternatives to Spark/Hadoop
- > We can also support you with query optimisation expertise either as part of our onboarding and support services via G-Cloud or under the Digital Outcomes and Specialists framework (DOS)

5.1.6 Interoperation with Other Systems

- > Open architecture with open APIs
- > Easy integration to other systems including legacy data silos
- > Quality assured and transformed data can be distributed securely to other systems
- > Easy interfacing to industry standard analytics and business intelligence tools

- > Integration services can be provided either under G-Cloud or the Digital Outcomes and Specialists Framework (DOS)

5.1.7 Management Information, Reporting, Audit Logging & Permissioning

- > User defined dashboards and reporting
- > Workflow trigger capabilities – execute specific actions on the basis of data processing results, e.g. trigger e-mails, generate reports/dashboards, write to databases
- > Comprehensive audit logging
- > Granular role and individual data field security permissions

5.2 Interfacing & Integrations

Axellera' Data Platform has an open architecture with extensive APIs. Integration with modern software systems is usually straightforward. We can also integrate to older legacy systems. For integration services, please see our G-Cloud onboarding and support listing, or our Digital Outcomes and Specialists framework offering.

You can find examples (not exhaustive) of already inbuilt connectors to third party systems in section 3.1 above (key features).

The Data Platform also interfaces to Axellera' CBPm workflow and case management platform, creating a combined platform that is uniquely capable of powering workflows that require interaction with complex and/or large scale data sources.

5.3 Hosting and Technical Requirements

5.3.1 Standard vs. Custom Hosting Options

The Axellera' Data Platform is available with "Standard Hosting" or "Custom Hosting":

- > **Standard Hosting:** The customer has their own secure instance of the application hosted in a shared hosting environment on Microsoft's Azure public cloud platform. A Standard Support package can be taken or a custom support arrangement agreed depending on required support hours, service levels, etc.
- > **Custom Hosting:** The customer has their own instance of the service in a dedicated hosting environment, which can be in Azure or in any other reasonably specified public or private cloud or on premise hosting environment, either provided by or paid for by the customer. A custom support arrangement is agreed depending on the hosting environment and support hours, service levels, etc.

5.3.2 Hosting Approach

Axellera' Data Platform can be deployed into any reasonable specification data centre as a SaaS virtual appliance; this can be public, private or hybrid cloud, or on premise, with hosting contracted either directly by the buyer or by Axellera. Our Standard Hosting option provides a securely segregated instance of our software in a Axellera hosting environment on Microsoft's

Azure cloud hosting platform. Axellera is experienced in hosting government data at “Official – Sensitive” level, and higher levels of classification could be handled on request.

Restricted VPN access, IP address whitelisting, two factor authentication or secure provision of the service on a public network (e.g. PSN, N3) can be implemented for increased security, along with other personalised security measures. Additional charges may apply for these add-ons.

5.3.3 Customer Technical Requirements

Customers are responsible for providing sufficient bandwidth to connect to the service (bearing in mind the scale and frequency of data being transferred to the service), modern PCs/mobile devices, and browsers in line with the specifications in our G-Cloud listing.

To aid performance, some customers may want to run our Data Platform in the data centre(s) that hold their existing data stores (IaaS, existing public or private cloud, or on premise). In this case, we can advise on the server/processing capacity that will be necessary. Our service is delivered as a virtual appliance, so is easy to set up and run in any data centre.

5.4 Onboarding

On-boarding is an easy process and depending on your requirements and can be achieved very quickly – in many cases, you can be up and operating in as little as 2 weeks.

We can help with all aspects of deployment, configuration, interfacing and integration to other systems, query optimisation and general database and service optimisation. If needed, we can also help you migrate from other systems and services.

For further information, please see our G-Cloud listing for onboarding services or our Digital Outcomes and Specialists framework offering.

5.5 Offboarding

When you decide you no longer need our service, we can export your data in a documented file format (e.g. XML, CSV, SQL, ODF) for archiving purposes or to facilitate your migration to an alternative service provider.

A basic export can usually be achieved in less than 5 working days. If you have more complex export requirements then additional time may be required.

Data exports will be charged on a time and materials basis in line with our SFIA ratecard.

5.6 Exit Plan

Offboarding is usually straightforward. However, a standard exit plan/approach is included as part of our Standard Service:

- To provide continuity of service, we will your extend service if requested for up to 12 months beyond any normal contractual termination point, on a 3 months rolling notice basis

- > During this period, the terms and conditions, and fees due, under the contract that has been terminated will continue to apply
- > On reasonable notice, we will undertake any reasonable actions required to transfer the service to a new provider, which may include:
 - Providing a project manager and any other resources necessary for the exit
 - Providing data extracts
 - Advising third parties on data structures and migration approaches
 - Documenting customer workflows, data structures and any intellectual property owned by the customer, or to be licensed on an ongoing basis to the customer, e.g. documenting interfaces to the customer's other systems
 - Maintaining the service and customer data for up to 3 months after final transfer of service (as a contingency)
 - Secure final deletion of the data

All work under the exit plan will be charged on a time and materials basis in accordance with our SFIA ratecard.

5.7 Support & Helpdesk

Our support helpdesk provides access to workflow, case management and business process experts to support you as needed in getting the best from our platform.

We offer both Standard Support and Custom Support packages.

Support is charged separately from our SaaS subscription fees – please see our G-Cloud Pricing document for details of our support fees.

5.7.1 Standard support

Standard Support is provided 9am-5pm, Monday to Friday excluding public holidays on a 2 days per month “Capped Effort” basis.

Capped Effort support provides a predefined maximum monthly support effort with the option to request additional effort at SFIA ratecard prices if Axellera has the resources available at the time of the request. Unutilised effort cannot carry over to subsequent months.

Capped Effort support may include any of the types of work in the Custom Support section below (Section 4.7.2). All support work will count against the agreed amount of Capped Effort, i.e. for Standard Support, the 2 days of effort, other than:

- > Application and hosting maintenance that is undertaken simultaneously for the benefit of all customers;
- > Standard service monitoring; and
- > Capacity management.

The target maximum response time for critical service issues, during support hours, is 30 minutes.

5.7.2 Custom support

We can provide Custom Support on a 9 to 5, 7 to 7, 24/7 or custom basis, applying either an SLA or Capped Effort approach.

The scope of Custom Support arrangements is extremely flexibly, and support fees will typically be structured to encompass the following types of support and maintenance work:

- > Helpdesk service and associated issue resolution – usually 3rd and 4th line but can be expanded to include 1st and 2nd line
- > Major incident (e.g. disaster recovery) and security incident management
- > Incident escalation
- > Maintenance (application and hosting)
- > Service monitoring
- > Capacity management
- > Release management, which will typically include:
 - Implementation and rollback plans
 - Release notes and other release documentation
 - Complying with our customers' standard release processes
 - Internal release testing
 - Support to customer UAT testing and live proving for upgrade and issue resolution releases
- > Backup and disaster recovery management
- > KPI reporting (frequency as agreed with the customer)
- > Service reviews (frequency as agreed with the customer)
- > Support for the customer's ongoing internal documentation of Service Delivery Packages and other necessary customer internal documentation
- > Day-to-day security management, including:
 - General provision and maintenance of secure services
 - Key and certificate management
 - Patching
 - Anti-virus management
 - Log analysis and review
 - Annual updates to the security documentation
 - Attendance at customer security reviews
 - Maintenance of risk and issue logs
- > Other operational management and assurance activities as may reasonably be required. For example:
 - Attendance at governance groups

- Attendance at general meetings and workshops in respect of the operation, management and further development of the service
- Participation in architecture and design reviews
- Support of test witnessing in respect of upgrade and issue resolution releases
- Other assurance activities that the customer may reasonably require

Please see our G-Cloud onboarding and support listing for further details, or contact us directly:

- > gcloud@Axellera.com; or
- > 020 7397 0620 and ask for Marcelle von Wendland

5.8 Service Maintenance & Upgrades

5.8.1 Service upgrades

You will benefit from major service upgrades up to twice a year. These upgrades must be adopted within 3 months of release. We will provide you with a test environment configured as per your live environment so that you can preview the changes.

5.8.2 Service maintenance

As we provide systems that are often expected to run 24/7 we aim to agree maintenance windows that fit in with your mode and hours of operation.

Typically, we would like to have the option of a monthly 8 hour service window (N.B. unlikely to be used more than 4 times per year), which we prefer to be in the early evening or during daytime at the weekend. However, we appreciate this may not always be practical and will do our best to agree a window that works for you.

At an additional charge, we can also provide a mirrored system for customers who require zero downtime for maintenance.

5.9 Backup, Disaster Recovery & Business Continuity

5.9.1 Backup

Daily offsite backup is included in Standard Hosting. Storage charges may also apply above thresholds. Enhanced backup services can also be provided on a time and materials basis charged in line with Axellera' SFIA ratecard.

5.9.2 Disaster recovery

Disaster recovery is included in Standard Hosting, building from the last offsite backup. If the disaster recovery plan is activated then a new hosting environment for the service will be built in an alternative public cloud data centre, and the last backup will then be restored to the new environment to recreate the service. Target recovery time is 4 working days, with a target maximum data loss of 24 hours.

We can also provide a custom disaster recovery plan, or a high availability mirrored service, to further reduce disaster recovery timescales, including extending support for disaster recovery to weekends and public holidays. Additional fees will apply.

5.9.3 Business continuity

Axellera maintains a general business continuity plan in line with the ISO27001 information security management system, which anticipates how we would continue to operate our business under a broad range of disaster scenarios. As our software can be flexibly deployed into any reasonable quality data centre and remotely managed, providing continuity of service in a disaster scenario is reasonably straightforward.

5.10 Agile Software Development

Axellera' software is highly configurable and we hope that it will rarely, if ever, be necessary to build additional software components for individual customers.

While provision of bespoke software development services is not permitted under G-Cloud, we can provide agile development – solely in relation to Axellera' own products – under the DOS (Digital Outcomes and Specialists) framework.

6 Ordering, Invoicing & Termination

The Data Platform is provided on a monthly SaaS (Software as a Service) subscription. Support is charged separately, also on a monthly basis, as is any Custom Hosting (Standard Service hosting is covered by the SaaS fees). Please see our G-Cloud pricing document for full details.

Invoicing is monthly in arrears from the date the service is activated.

The service can be ordered via the contacts listed in Section 8 below.

Other than for proof of concepts, pilots and during staged implementations, termination is on 6 months' rolling notice.

Buyers can send notification of termination by e-mail to gcloud@Axellera.com or by post to the address in Section 8 below.

7 Further Information

If you would like further information on our services or specific advice on how we can configure them to your needs, then please contact us as follows:

Contact

e: gcloud@axellera.com

t: +44 (0)20 3239 1305 and ask for Marcelle von Wendland or Pekka Luoma

Website

www.axellera.com

Address

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8 About Axellera and Bancstreet Capital Partners

Axellera is a trading name of Bancstreet Capital Partners Ltd. We provide a low-code SaaS solution platform for applications with a heavy data management, data integration, workflow and case management aspect. Through the Axellera low code platform we

are making complexity manageable and can deliver challenging enterprise grade solutions with customer defined data and workflows in as little as three to six months from idea to go live.

Bancstreet Capital Partners Ltd are an OEM Enterprise Solution Partner of Fincore Ltd since 2007. The Axellera platform offering builds on the proven low-code technology platform from Fincore Ltd used by global financial institutions and other blue-chip organisations in government and other industries. Fincore Ltd can provide a full range of support services for the Axellera platform and can deliver turnkey solutions based on the Axellera platform together with Bancstreet Capital Partners. The proven low-code technology platform from Fincore is also available on the GE Predix the platform of choice for industrial automation and IIOT for utilities, leading manufacturers, oil, gas, power generation and GE's own world class businesses.

