

Altcom's Rosetta EIP

Making customer data work



altcom

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From Customer Data Platform to Single Customer View

Altcom's Rosetta EIP is a highly secure cloud Enterprise Integration Platform that captures and ingests data from multiple sources then formats and aggregates it into an SQL database for interrogation, segmentation and export into third party business and marketing systems.

Altcom supports all aspects of the process including the integration of data into back office solutions.

The Rosetta EIP cloud solution is designed to help you achieve a Single Customer View optimised for performance and cost.



Key Product Features

- Seamless integration of unrelated data sources in multiple formats
- Integration with external sFTP, REST & SOAP APIs and other systems for data input/output
- Optimised for use with Email Service Providers (ESPs)
- Pre-built marketing segmentation for ESPs
- Pre-built support for Rail industry data sources



Feature Set



Full File Transfer Capabilities

We offer both client and server functionality on SFTP which delivers both push and pull services



Multiple Data Sources

We can ingest any number of different data sources, each data source contains multiple tables



Relational and Non-Relational Database

We can cope with tables that relate to each other and data sources that are stand alone



Integration across unrelated data sources

Using a shared marker, such as an email address, as a common index we are able to match customers across multiple unrelated sources



Named Segmentation Containers

Named marketing containers are a way of grouping and dividing varied data sources into intuitive marketing query schema, reducing data storage requirements in ESPs



Power BI integration

Unrestricted access to your marketing data through the PowerBI Interface. Feature rich user administration and monitoring interface



Daily Statistics and Analytics

Rosetta EIP logs every activity and performs daily analysis and auditing of its own performance to comply with ISO27001



Data Warehouse Processing of Historical Formats

Data Formats Change over time, these are captured in data warehouses, Rosetta EIP adapts the schema ingestion to cope with these changes



Microsoft Azure Cloud Platform

Full support of Azure including Infrastructure as Code Deployment



Multiple Schema Validation Approaches

The schema of ingested data is validated using multiple approaches, automatic by; Date, Size, Field Value. Easy to expand validation means we can reduce dirty data issues.



Multiple Processing Schedules

Data is made available at different times, Rosetta EIP has multiple schedules for both SFTP processes, data ingestion and Segmentation Container Exporting for Dotmailer or other Campaign Management Tools



Redundancy and Disaster Tolerance

Rosetta EIP was designed to be disaster tolerant from the start, all processes are protected against failure, meaning data is never lost, processing always works, and you know what is happening with your data



Integration with ESPs

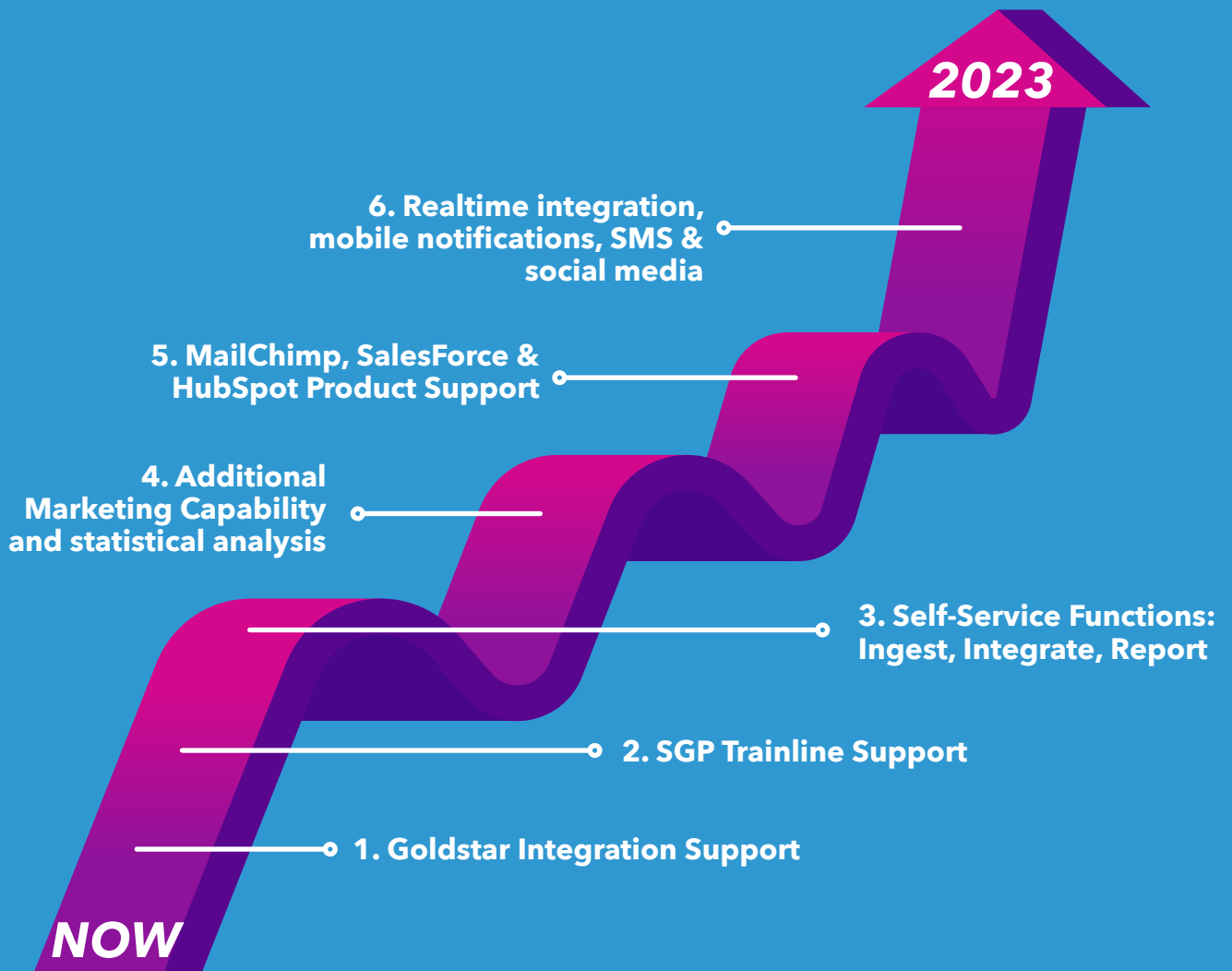
Rosetta EIP outputs and integrates seamlessly with ESP customer schemas, programs and segments. Rosetta EIPs integrated data stores can enhance customer data by deriving LTV, CPA and customer profiling



Support for Rail Industry Data Sources

Trainline TOC extract/data warehouse/seasons/smartcard plus Goldstar, marketing websites and others

Roadmap



Segment Container Schema

Altcom’s customers use the segment container schemas to push changes into their incumbent Email Service Providers (ESPs). The schemas use a concise and feature rich set of contact list fields that allows the ESP to implement new segments based upon the Rosetta EIP data set. For example, creating data segments on Yesterday or Tomorrow Travel can be created based upon the Next and Last travel fields. Campaigns can also be implemented based on the frequency of travel indicated by the ModRate field.

Field name	Field description
IngestionStatus	The status of the ingested data
Consent	Marketing Consent
ProfileID	Profile ID which is used for statistical analysis
CustomerID	Customer ID, usually from the primary system
ModRate	Frequency of account changes
NextTravel_Date	Next Travel Date Known (if any)
NextTravel_StartStation	Next Travel Start Station
NextTravel_DestStation	Next Travel Destination Station
NextTravel_Cost	The cost of the Next Travel
NextTravel_BookDate	When was the Next Travel Booked
NextTravel_TicketType	What kind of ticket was used
LastTravel_Date	Last Travel Date Known (if any)
LastTravel_StartStation	Last Travel Start Station
LastTravel_DestStation	Last Travel Destination Station
LastTravel_Cost	The cost of the Last Travel
LastTravel_BookDate	When was the Last Travel Booked
LastTravel_TicketType	What kind of ticket was used
Season_StartDate	Season Start Date

Rosetta EIP Interactions

Rosetta EIP integrates external systems as well as data - it is a one stop shop for integrating across the whole enterprise and handles input and output to external systems. Current focus is on marketing activities and integrations with ESPs but Rosetta EIP can do much more due how it is structured:



Rosetta EIP uses many different keys and chains of keys to create relationships between its data.



The data is stored in a relational database, even when stored as non-relational object structures, to create a superset of data relations.



Rosetta EIP implements dynamic iterative relationships, which means the data relationships can be expanded and even used as sources for further iterations.



These iterations use a structured data approach that can be likened to a VENN diagram in the way the intersections of datasets can be combined through relationships



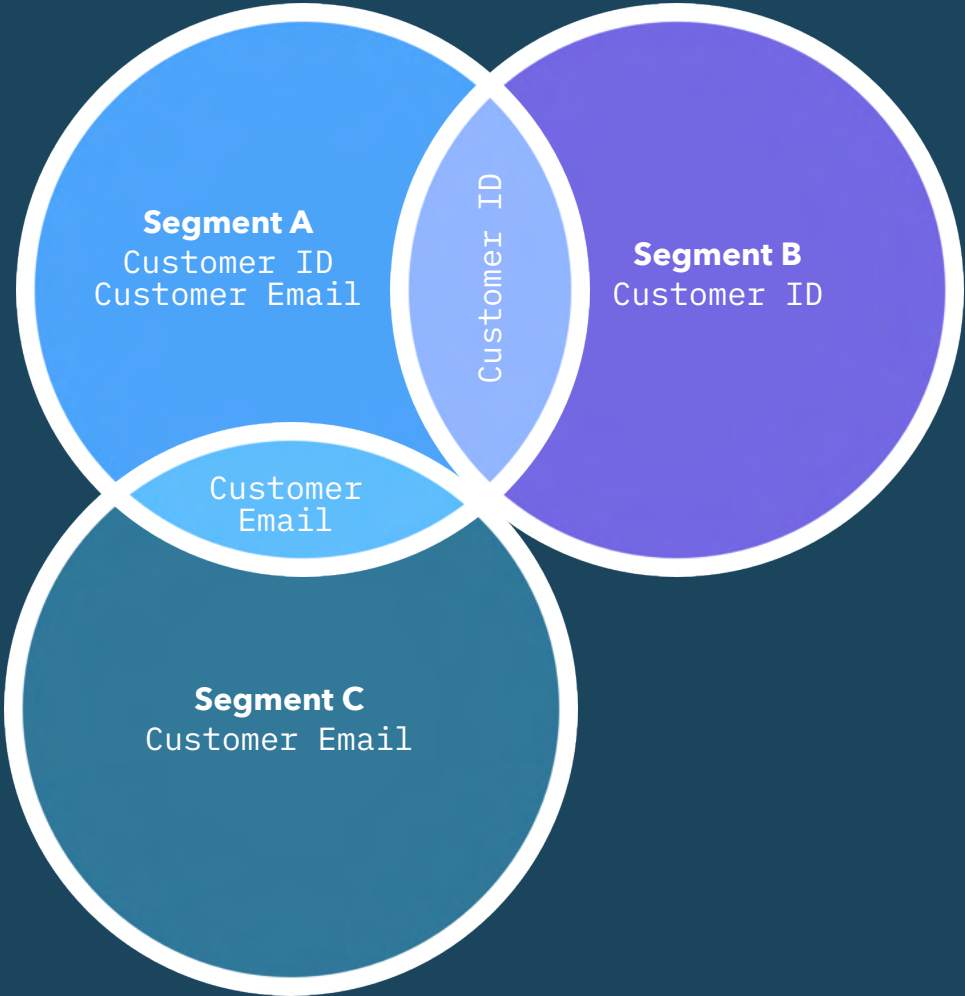
The dynamic approach to structured data means that data relationships are not fixed and can evolve over time to meet the needs of the business



Segmentation Identity Chaining

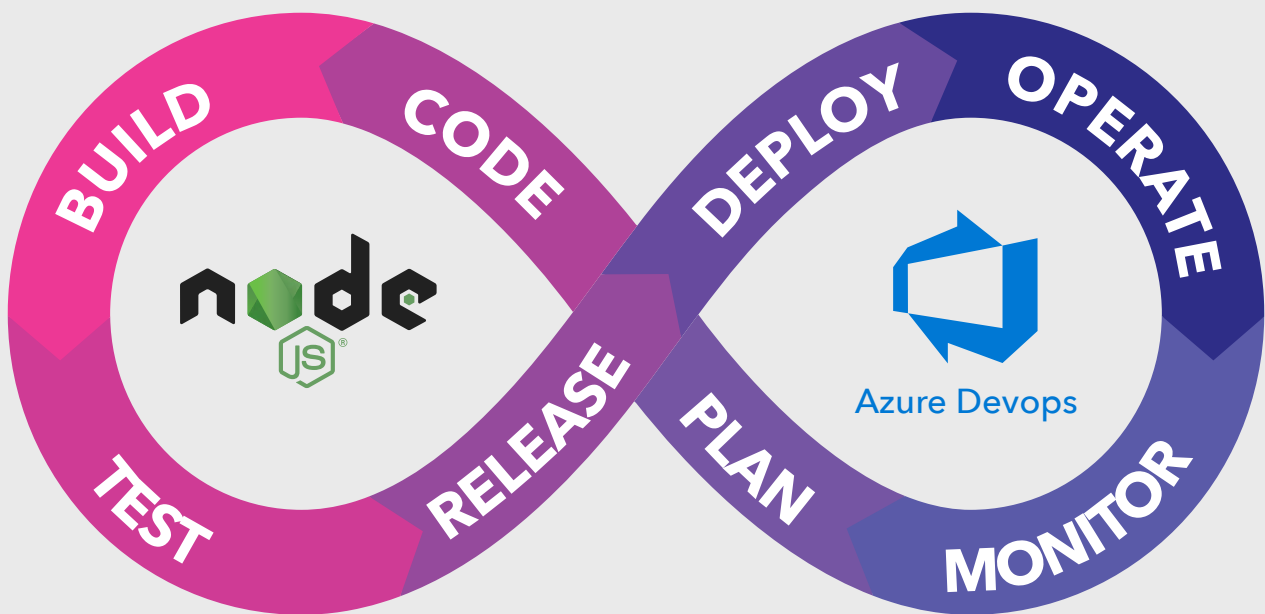
Rosetta EIP uses identity chaining across disparate datasets to create relationships between otherwise unrelated segments. This means Rosetta EIP generates an enterprise scale relational data set that delivers customer insights and drives customer lifetime value.

Once you have the Rosetta EIP it opens up opportunities to derive maximum value from all the data assets in the organisation .



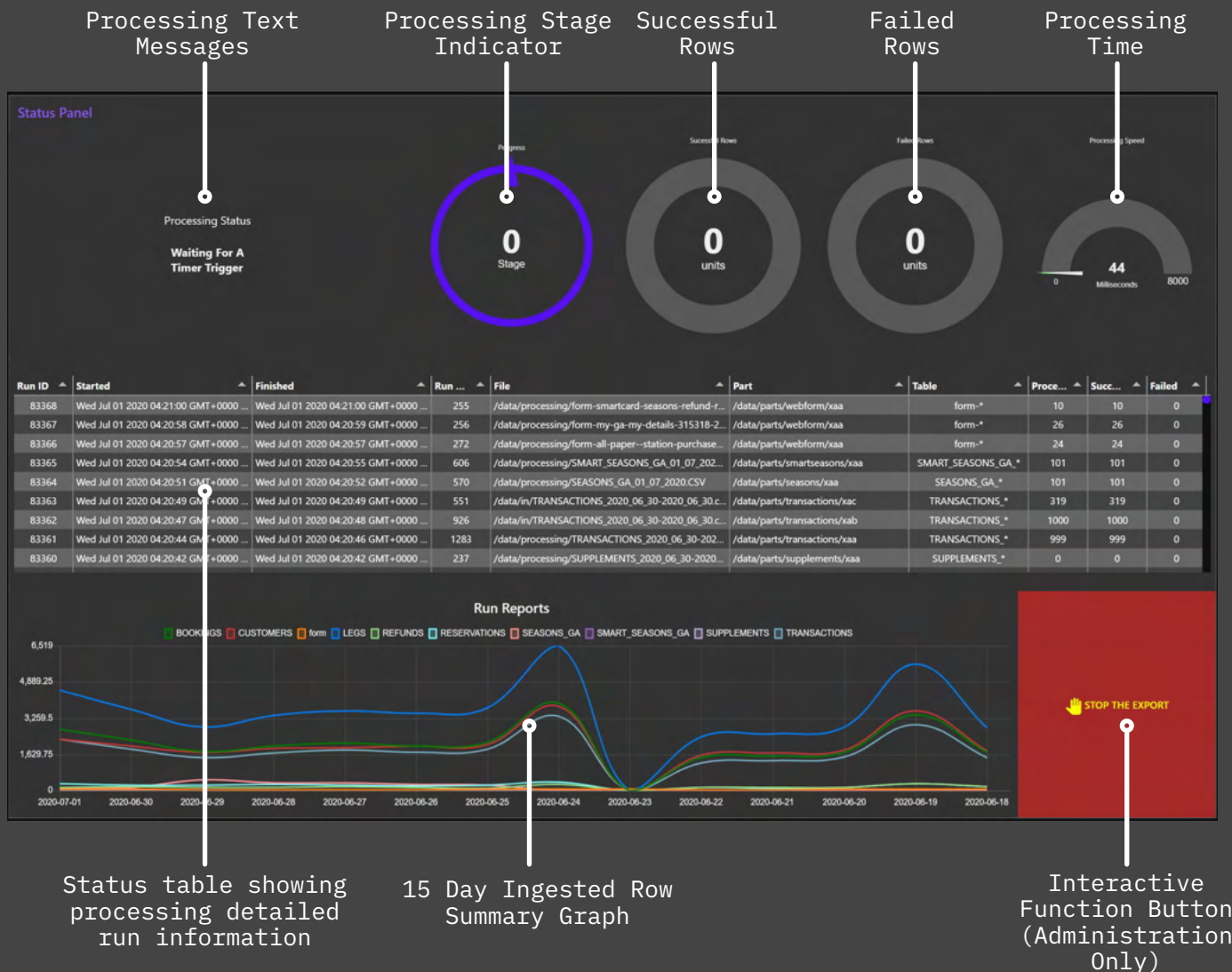
Rosetta EIP Development Lifecycle

Altcom uses a Continuous Integration/Continuous Delivery process to maintain and develop the Rosetta EIP product. Leveraging the power of Node.js and AzureDevops we can bring new features to market quickly and safely. This technology stack allows us to deploy into Azure and Amazon Web Services cloud hosting platforms.

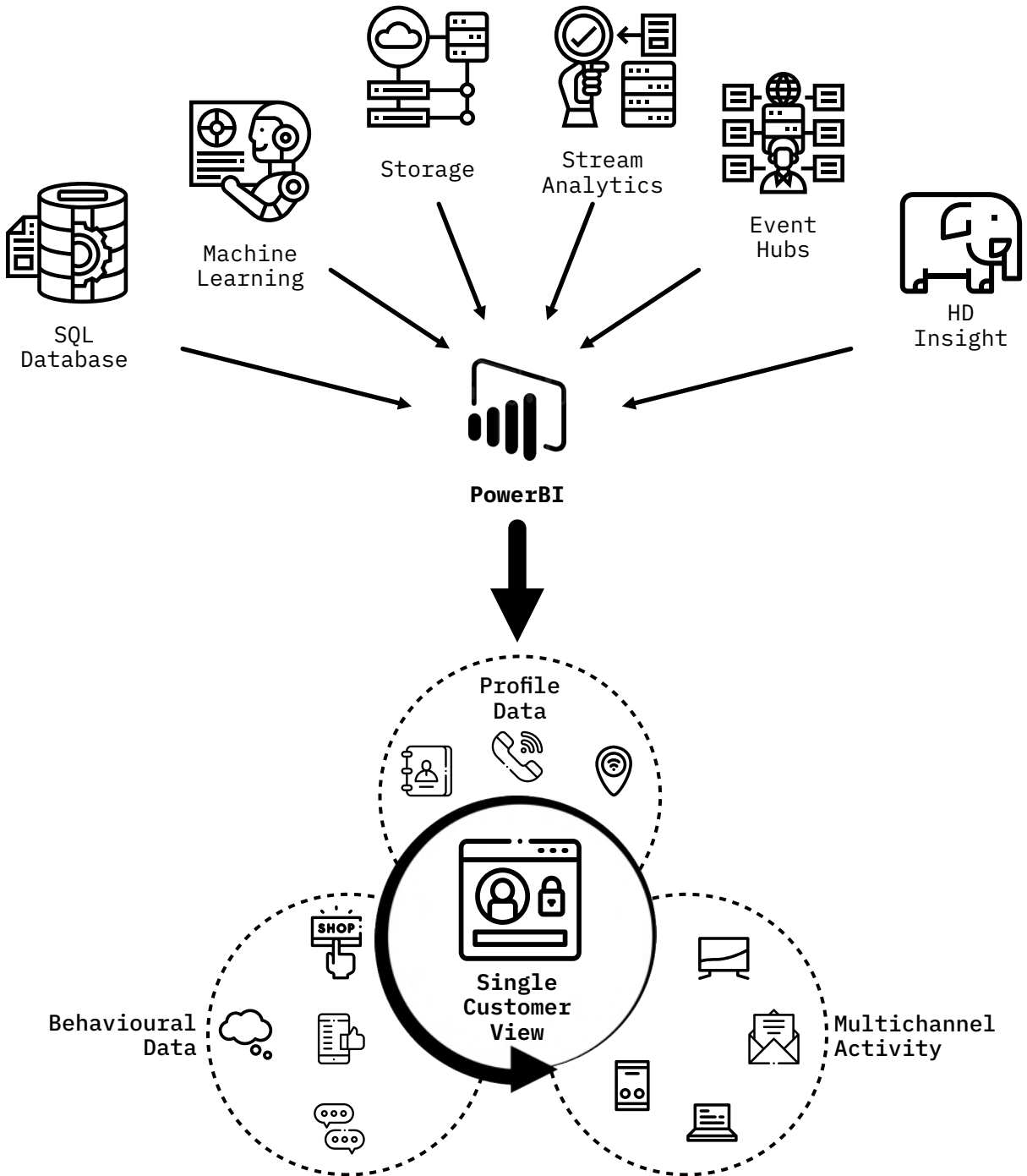


Dashboard Control Panel

To give users full visibility of the Rosetta EIP integration processes we provide a real-time graphical user interface giving detailed operational status and historical information for every process, down to the level of monitoring and auditing every transaction within the product.

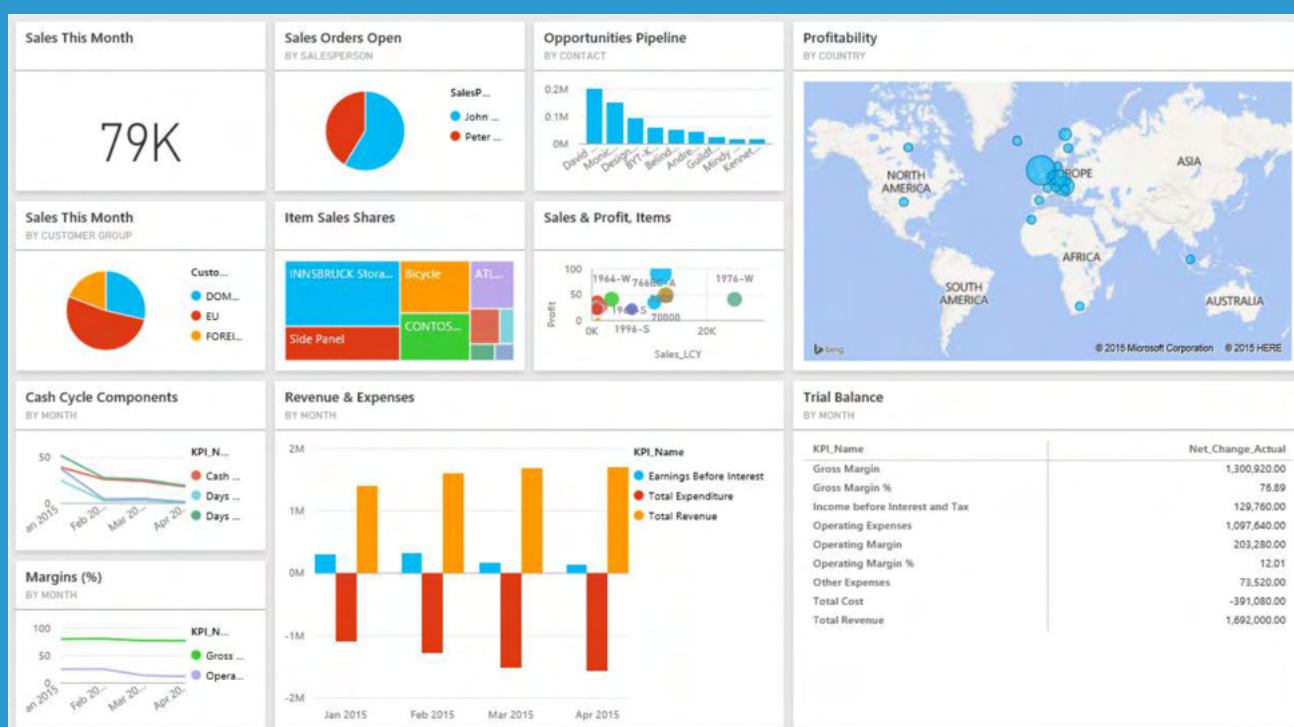


Power BI



Custom Reporting Using PowerBI

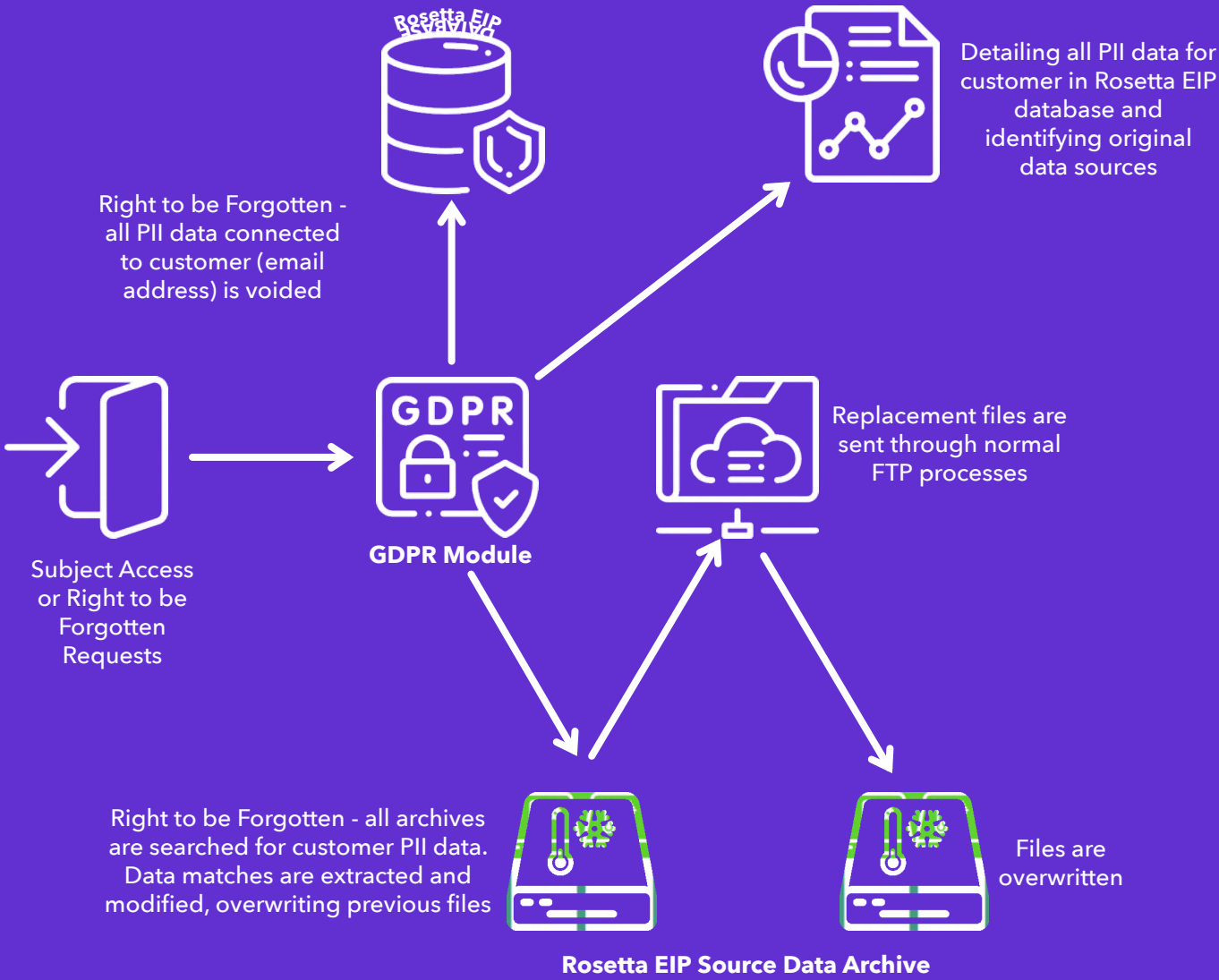
You can create your own business intelligence reports and data segment outputs using PowerBI Desktop which is free and built into the solution via a virtual machine. It offers all of the power and flexibility of PowerBI whilst operating within a secure perimeter around your personally identifiable information and other secure/sensitive data. Rosetta EIP also seamlessly integrates with the online version of PowerBI for automated report generation.



Supporting GDPR Processes

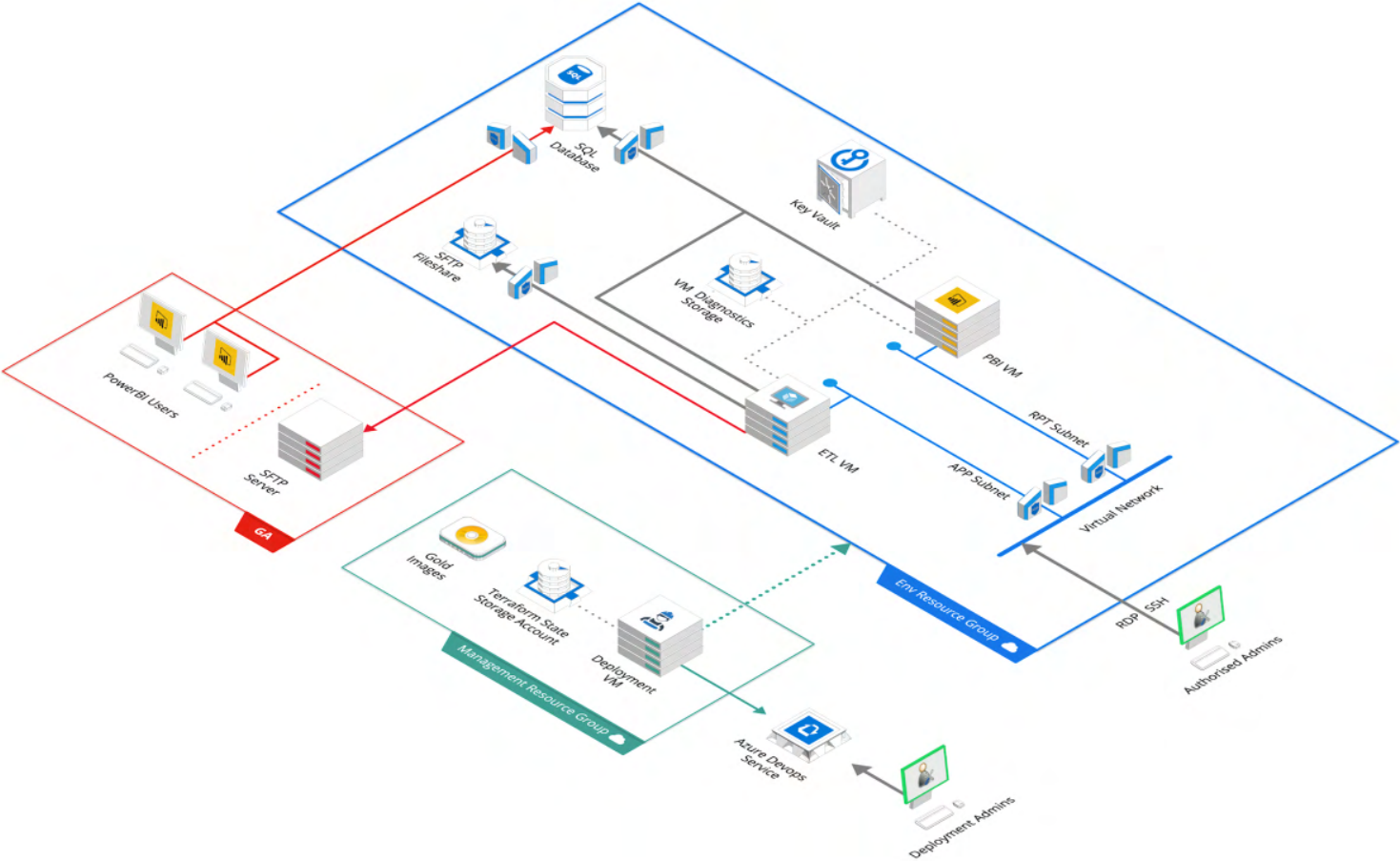
Rosetta EIP supports:

- Reporting on PII stored for Subject Access Requests
- Voiding of PII data stored in the Database and in Archives for Right to be Forgotten requests. Altcom can also deploy tools across client systems to locate and log files that may contain PII data and support semi-manual processes



Secure Cloud Solution

- Azure platform base: CLI, Virtual Machines, MS-SQL, Virtual Networking, Keyvault, Git repository, SFTP Server/ Client
- Azure DevOps Deployment into Azure or AWS
- Infrastructure as Code using Terraform
- Adaptive environment to minimise costs
- Full logging, monitoring, auditing and security protocols



Frequently asked questions

- 1. Can Altcom's Rosetta EIP handle data in any format, such as database tables, indexed sequential files, JSON etc?**

Altcom's Rosetta EIP can ingest any text-based data files and supports encrypted zip files or Microsoft Excel XLSX password protected files as well as many text-based formats like TXT, CSV, XML and JSON as either stand alone, relational, object based and/or sequential files. We do not currently support binary file formats.
- 2. If there are server and service failures is data lost?**

No, all data is kept secure at each stage of the Rosetta EIP processes. Whether the file is being ingested, exported, or transformed, each stage the data is staged in a way to ensure we never lose data. All processes can be re-wound, re-run and re-started.
- 3. Is all data backed up and if so at what frequency?**

Data archiving happens at every stage of the Rosetta EIP processes, but data backups are determined by the clients' requirements. We back up multiple copies of the data locally, and we can back up all data in additional copies and to geographically redundant data centres.
- 4. Do the services have to be in an Azure account?**

We currently support both Azure and AWS platforms. You will have to have an account on one of these two hosting providers which Altcom can assist with. This is to ensure that you the client, remains the data owner of all your organisations PPI data.
- 5. Can the Altcom Rosetta EIP ingest data from AWS environments?**

Altcom's Rosetta EIP does not care where the data is held. The data can be hosted anywhere, and multiple protocols can be used to retrieve the data. These include, FTP, SFTP, HTML (ReST API) and the AWS S3 protocol.
- 6. Can the Altcom Rosetta EIP support outputs other than emails, i.e., reports, SMS, and web page updates?**

The service does support direct emailing and its support and reporting framework already does that. Primarily though Rosetta EIP acts as a central data platform for other Email Service Providers. Rosetta EIP can have multiple output feeds in multiple formats to packages like DotDigital, 3rd party databases or other data destinations.
- 7. Is Altcom's Rosetta EIP only suitable for Train operators?**

No Rosetta EIP can support any industry sector, it is simply that the product began life with Train Operating Companies. Any industry that requires the management of customer data, and marketing campaigns or analysis are suitable for Altcom's Rosetta EIP.

8. Can Altcom’s Rosetta EIP handle frequent data format changes, such as additional database fields?

Yes, but it must be understood that this is not a normal process. We have many data feeds that have evolved over time which adds feeds, and even changes data formats completely (e.g., CSV to JSON). These are all handled within the Rosetta EIP ingestion system. The same data feed can and do have multiple methods of ingesting, depending on which format, or date period the file came from.

9. Is the user restricted to PowerBI for data analysis?

No, Altcom’s Rosetta EIP supports any data destination you wish, but we do support PowerBI directly as this Rosetta EIP stores its data in an industry leading in Microsoft Azure SQL Server. However, any external databases could be supported if they support relational SQL or an object-based database format.

10. Is Altcom’s Rosetta EIP compliant with UK/EU GDPR & data protection regulations?

Yes, all aspects of the right to be forgotten process is supported. Not only is data removed from any of our databases using a simple, and secure interface, but we also ensure that all archived data is also purged of any PII data that it should not be retaining.

Notes

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Altcom was established in 1995. It is ISO9001:2015 and ISO27001 certified and provides specialist digital platform services to the UK rail industry.

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