

RedPoint Interaction Version 5.0 – Release Note

1 About this Document

This document describes RedPoint Interaction (RPI) version 5.0. It contains the following sections:

- Major Features: this section describes the most significant enhancements to RPI introduced in the new release.
- Plugins: this section details new, and changes to existing, plugins included in RPI v5.0.
- Other Features: this section describes other major features added in RPI v5.0.
- Upgrade Notes: this section describes considerations that should be borne in mind when upgrading to RPI v5.0.

Please note that the following plugins are scheduled to be delivered in a follow-on v5.0 release, prior to v5.1:

- CheetahDigital
- Listrak

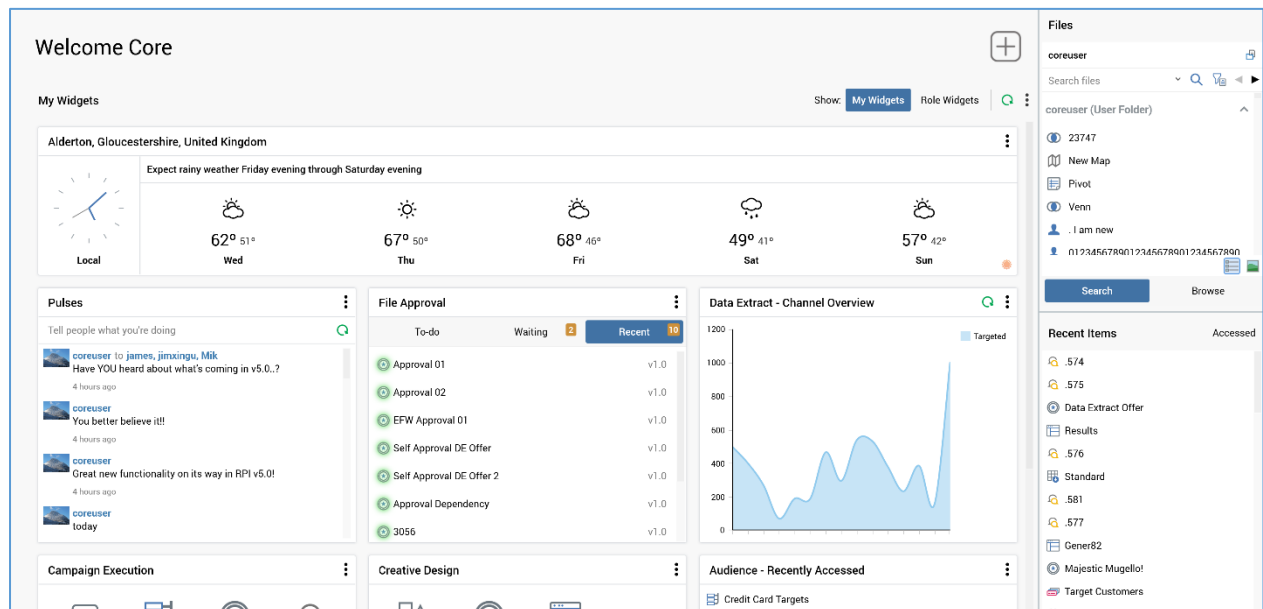
2 Major Features

The following section documents the major enhancements that have been introduced in RPI v5.0.

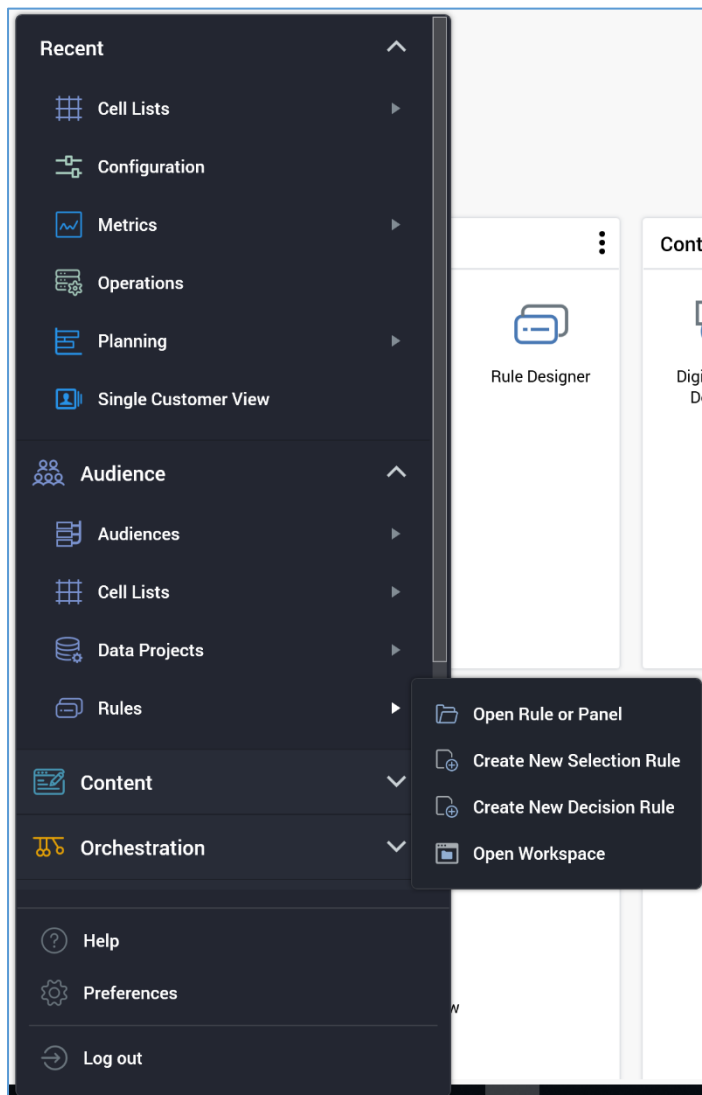
Refreshed User Experience

The RPI client user interface has been comprehensively overhauled, bringing an up-to-date aesthetic to the product:

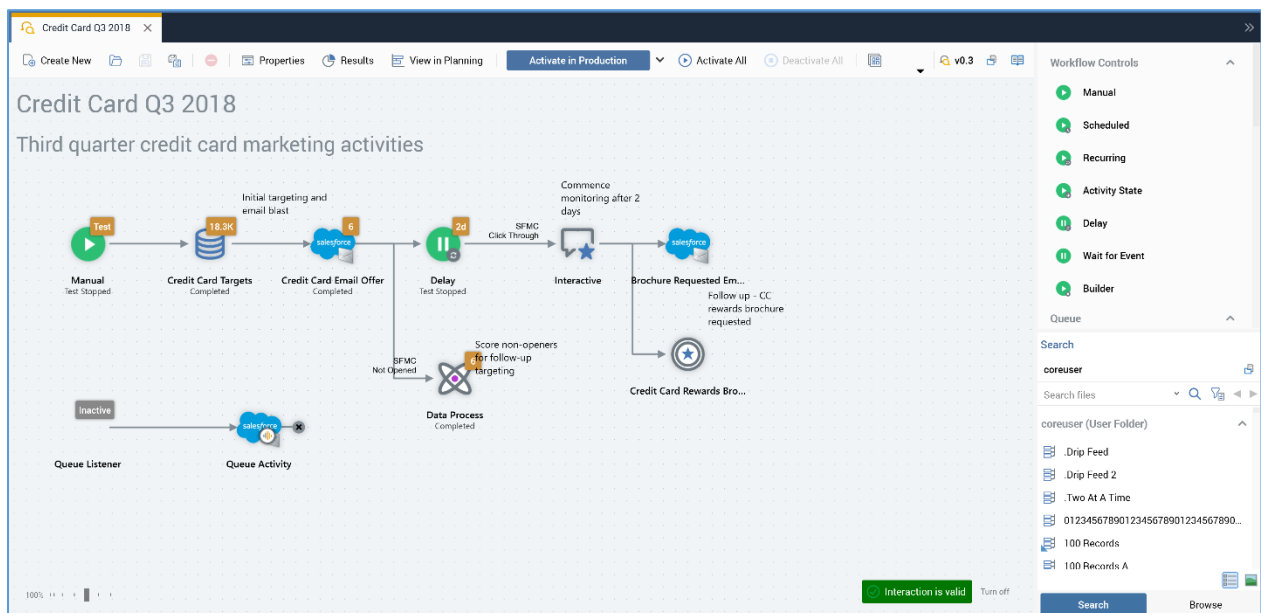
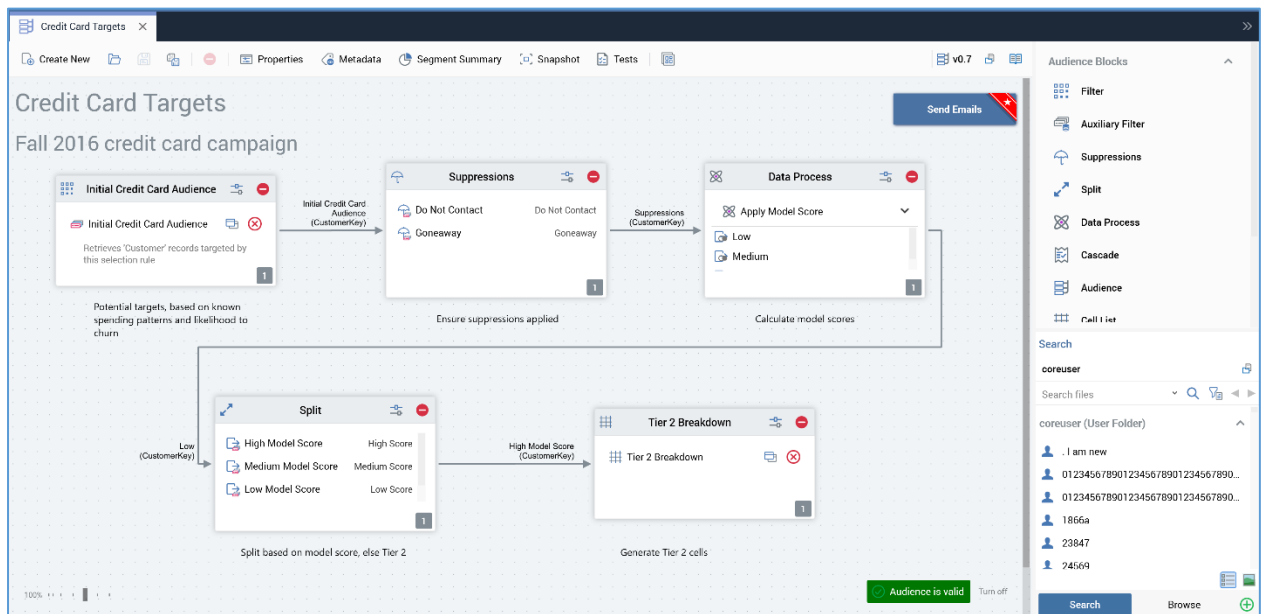
The Home Page has been revisited:

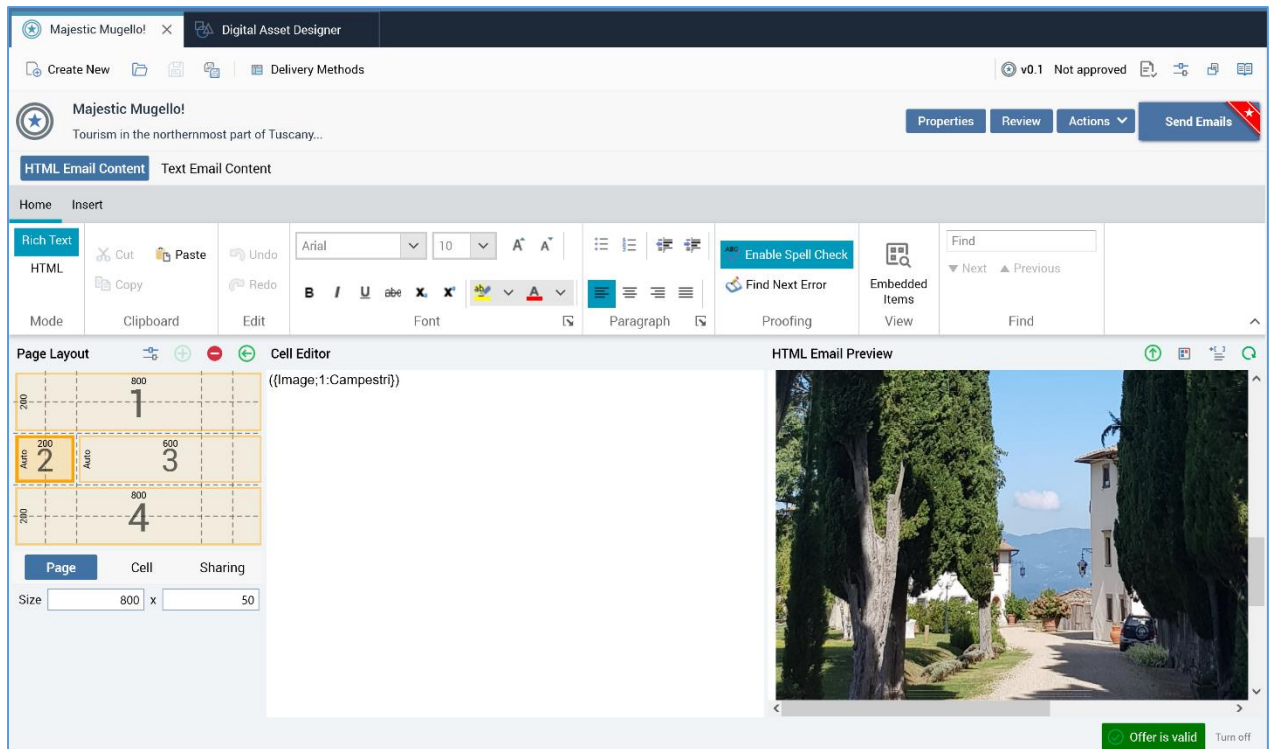


...as has the Quick Access menu:

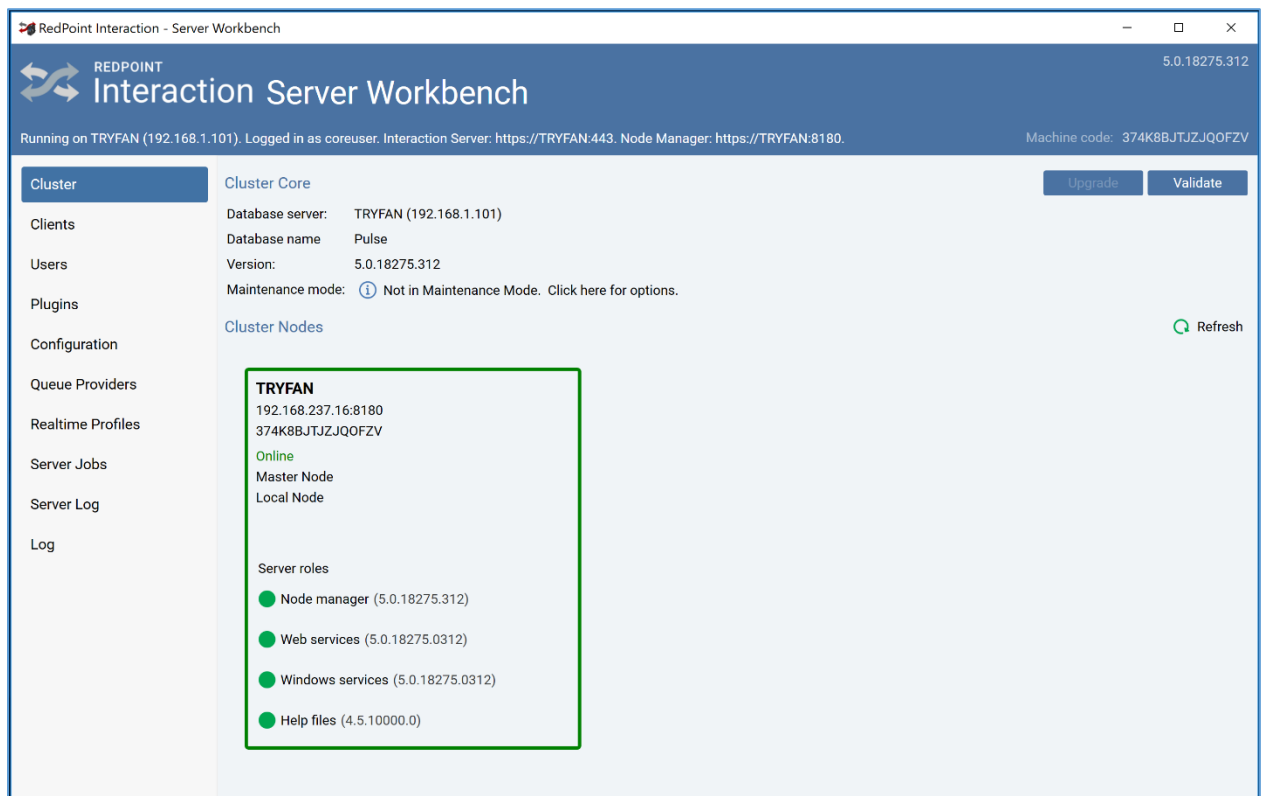


...all of the RPI Designers:





...and the RPI Server Workbench:



User story reference: 4325. 4326

NoSQL Data Warehouse Support

RPI now offers native support for its first NoSQL data warehouse – MongoDB. MongoDB is a Document database, which persists (potentially unstructured) data in a Collection of Documents, rather than in a series of related tables, as per a traditional SQL database. NoSQL databases can offer significant cost and performance advantages over SQL databases.

RPI v5.0 supports a client running in one of the following modes:

- SQL data warehouse with any auxiliary databases: in this mode, a SQL data warehouse can be accompanied by any combination of SQL and/or NoSQL auxiliary databases.
- NoSQL databases only: a NoSQL data warehouse can be optionally accompanied by one or more NoSQL auxiliary databases.
- NoSQL data warehouse with SQL auxiliary databases: a NoSQL data warehouse can be optionally accompanied by one or more SQL or NoSQL auxiliary databases.

The following general limitations apply when running against a NoSQL database:

- Aggregate, function, banding, flag and SQL expression attributes are not supported. Any attributes of these types will need to be pre-built within the database's documents.
- Joins between collections are not supported; every data element to be queried must be present in the same collection. Note that joins between customer and offer history collections are supported during audience execution.
- RPI needs to maintain interaction tracking data as part of the customer document. Any rebuild of customer data needs to maintain this information.
- De-duplication based on resolution keys during audience execution is not supported.

Certain RPI functionality is not supported when running against a NoSQL database:

- The Audience Designer does not currently support the following block types:
 - Auxiliary filter
 - Cascade
 - Cell List
 - Audience
 - Data Process

Also, audiences do not support validation exports or waterfall reports.

- Selection rules are not supported. Equivalent functionality is realized using a new file type – the Decision Rule (see below).
- Audience snapshots are not supported.
- The Single Customer View is also not supported.

- Ditto cell lists, engagement groups and outbound message lists.

If using a NoSQL data warehouse or auxiliary database, one or more NoSQL Database Collection Definitions must be set up, using a new Configuration interface. A Collection Definition describes the structure of the NoSQL database collection to be used by RPI, including the attributes that will be available when making decisions based on the data therein.

NoSQL Database Collection Definitions

Name	Collection Name	Default	State
ColDef	customer	✓	Unchanged
ColDef 2	customer	✗	Unchanged

Details

Definition

Selected NoSQL Database Collection Definition - D... View: Definition Raw JSON Refresh

- Sales Sales
- Channel Suppressions ChannelSuppressions
- xxx _id
- AddressLine1 AddressLine1
- ADDRESS TWO AddressLine2
- ArrayField ArrayField
- BigDec BigDec
- BirthDate BirthDate
- BirthDate_Date BirthDate_Date

If using a NoSQL data warehouse, one or more NoSQL Offer History Definitions must be set up, using a new Configuration interface. These represent the equivalence of Audience Definitions when using a SQL data warehouse, and provide for definition of the NoSQL database collection within which RPI offer history is to be stored, the attributes to be persisted therein, and any metadata to be captured in the collection at interaction workflow execution.

A new file type – the Decision Rule – offers equivalent functionality to a selection rule when running queries against a NoSQL database. More details are provided below.

When running against a NoSQL data warehouse, functionality available in a number of interfaces will be more limited than if running against a SQL database. In addition, the range of available channels and offer delivery methods will similarly be restricted.

User story reference: 1870, 4329, 4332, 4364, 4366, 4368, 4369, 4379, 4380, 4497, 4505, 4552, 4702, 4704, 4826, 4918, 4929, 4932, 4998, 5022, 5023, 5112, 5148, 5149, 5150, 5151, 5152, 5153, 5154, 5155, 5156, 5157, 5158, 5159, 5160, 5162, 5163, 5270, 5316, 5317, 5348, 5394, 6336

Decision Rule

A new type of file – the Decision Rule – has been made available in RPI v5.0.

The screenshot displays the 'Decision Rule Designer' interface. The main window is titled 'This is a Decision Rule!*'. It features a dropdown menu set to 'AND: All the decision criteria below must be met' with an 'Add New Criterion' button. Below this is a 'ColDef' dropdown. The rule criteria are listed as follows: 'CommuteDistance contains 0-1 Miles or 2 other values', 'EnglishEducation does not contains Bachelors or Graduate Degree', and an 'AND Criteria met SALES' group. Inside this group, there is a criterion 'Product.ListPrice is greater than 100.00' and a field 'Product.ProductLine' with a 'Contains' dropdown and the value 'M, R, S'. A 'Done' button is located at the bottom right of the criteria section. At the bottom of the window, there are buttons for 'Add New Criteria Group' and 'No count'. On the right side, a sidebar titled '< Sales' lists various attributes: CarrierTrackingNumber, DiscountAmount, ExtendedAmount, Freight, OrderQuantity, Product.CategoryName, Product.Class, Product.Color, Product.DaysToManufacture, Product.DealerPrice, Product.Description, Product.EndDate, Product.FinishedGoodsFlag, and Product.ListPrice.

Created and managed in the new consolidated Rule Designer (see below), the decision rule provides equivalent functionality to a selection rule when running in a NoSQL environment.

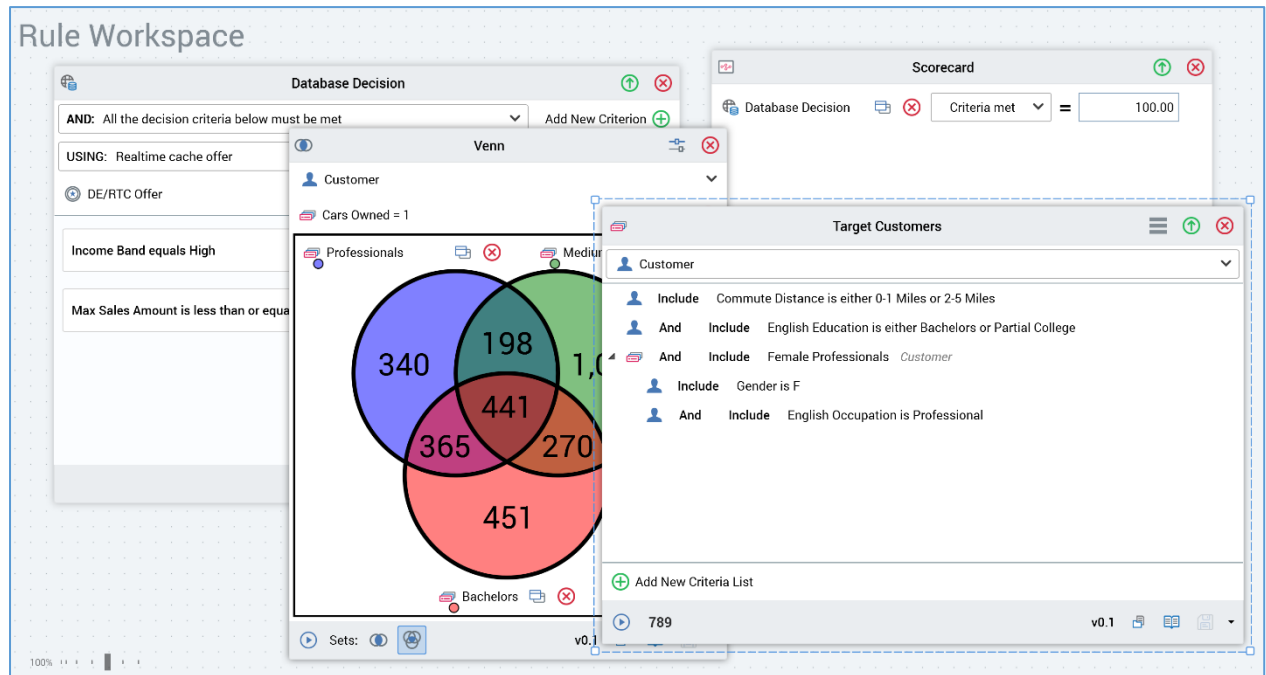
A decision rule's count can be determined, and it can be used in lieu of a selection rule when configuring blocks within a NoSQL audience. It can also be used in a number of contexts where filtering functionality would be made available using a selection rule in a SQL environment (for example, when specifying a channel filter).

In addition, a decision rule can be used in a realtime capacity, for example, replacing usage of a realtime decision at a realtime dynamic asset. When used in this way, it behaves similarly to a selection rule realtime decision.

User story reference: 3961

Consolidated Rule Designer

The existing Selection and Realtime Decision Designers have been consolidated into a single Rule Designer.



The Rule Designer is now used to manage the selection rule, analysis panel, realtime decision, decision scorecard and the new decision rule file types.

Note that, depending on the database mode in which operating (SQL vs. NoSQL), not all file types might be available in the Rule Designer.

User story reference: 4381

Realtime Decision Enhancements

The realtime decision user experience has been enhanced to bring it in line with the new decision rule file type.

The screenshot displays the 'New Database Realtime Decision*' configuration window. The interface includes a title bar with a globe icon, a green up arrow, and a red close button. Below the title bar, there are three main sections: a logical operator dropdown set to 'AND: All the decision criteria below must be met' with an 'Add New Criterion' button; a data source dropdown set to 'USING: Cached attribute list'; and a connector dropdown set to 'CAL01'. The main area contains a criterion 'Income Band contains High' with a three-dot menu. Below this is a 'Max Sales Amount' criterion with a greater-than operator and a value of '100.00'. A 'Done' button is at the bottom right. A dark sidebar on the right, titled 'Decision Criteria', lists available attributes: CustomerKey, Date First Purchase, Email Address, First Name, Income Band, Is Male, Max Sales Amount, Number Children At Home, Yearly Income, Scorecard, and User defined Boolean.

In addition, new 'Exists' and 'Does not exist' decision criterion operators have been made available. This allow decisions to be based on the presence, or otherwise, of a parameter in the visitor cache.

User story reference: 5517, 4547

3 Plugins

Email Service Providers (ESPs)

New ESPs

Support has been added for the following ESPs:

- Bronto (*User story reference: 3611*)
- DotMailer (*User story reference: 4420*)

Existing ESP Changes

The following changes have been made in the context of RPI's existing ESP connectors:

- Instiller:
 - A setting now allows for the optional saving of raw events to a temporary folder (*User story reference: 5414*).
- Salesforce Marketing Cloud (SFMC):
 - A setting now allows for the optional enabling of send logging (*User story reference: 246*).
- SFMC Data Transfer:
 - A series of encryption options have been exposed at the SFMC channel configuration interface (*User story reference: 5303*).
- SendGrid:
 - Optional support for the provision of a campaign category has been added at the SendGrid channel configuration interface (*User story reference: 3912*).
 - A new Event import batch size setting has been exposed at the channel configuration interface (*User story reference: 4343*)

Database Plugins

New Auxiliary Database Provider

Support for a single new auxiliary database provider has been added:

- Apache Drill (*User story reference: 416*)

Existing Database Provider Changes

Changes have been made in the context of the following existing database/auxiliary database plugins:

- Amazon AWS Redshift:
 - Support for late-bound views (applies also to Spectrum) (*User story reference: 3942*).
- DB2:
 - Alias support (*User story reference: 517*).

Mobile Plugins

Support for a single new Push messaging service has been added:

- Urban Airship Push Direct (*User story reference: 4790*).

The following enhancements have been introduced in the context of RPI's existing mobile plugins:

- Twilio SMS:
 - Short codes are now supported (*User story reference: 4139*).
 - The sending of messages using a pool of numbers using Twilio's Co-pilot service is also supported (*User story reference: 4140*).
 - Support for custom survey responses has been added (*User story reference: 2896*).
- Twilio Notify:
 - Support for the sending of messages using Facebook Messenger has been introduced (*User story reference: 4139*).

External Content Providers (ECPs)

The following existing ECP has been updated:

- Amazon AWS S3:
 - KMS encryption has been enabled (*User story reference: 4394*).

Queue Providers

Support for a single new queue provider has been added:

- Google Cloud Pub/Sub (*User story reference: 3747*)

Cache Providers

Support for a single new cache provider has been added:

- Amazon DynamoDB Accelerator (DAX) (*User story reference: 4233*)

Other External Integrations

Changes has been made in the context of RPI's integration with the following external providers:

Facebook

- The latest version (v3.1) of the Facebook Graph API is now supported.
User story reference: 5889
- Support has been added for the Facebook Custom Audiences data onboarding channel.
User story reference: 241

Twitter

- The Twitter Offer Designer now supports messages up to 280 characters in length.
User story reference: 6315

Pinterest

- A new Pinterest channel supports the posting of content to that platform.
User story reference: 4357

- Enhancements have been made to RPI's Pinterest Pin It button.

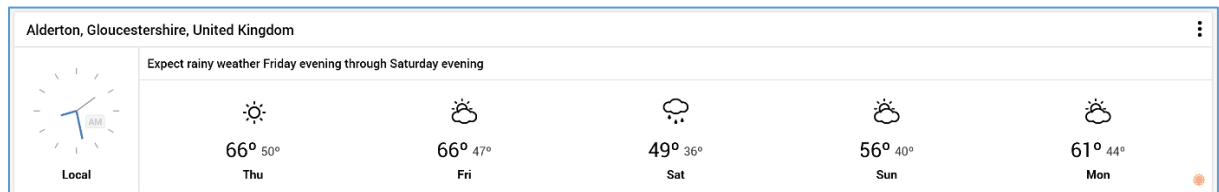
User story reference: 4833

4 Other New Features

The following features are also introduced in RPI v5.0:

Dashboard Widgets

- The existing Weather widget has been enhanced to optionally display weather data, and/or world time clocks (*User story reference: 5292*).

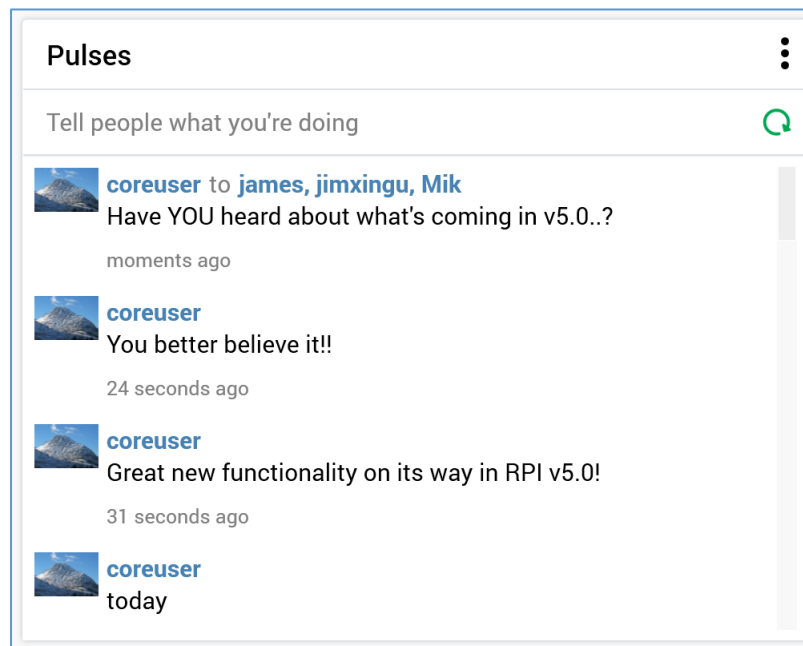


- A new Approval widget has been added. This exposes the existing Approval dashboard part's functionality as a Widget. (*User story reference: 4726*).

The screenshot shows a 'File Approval' widget with a tabbed interface. The 'Recent' tab is selected, showing a list of approvals with status icons, names, and versions.

To-do	Waiting	Recent
	2	10
Approval 01		v1.0
Approval 02		v1.0
EFW Approval 01		v1.0
Self Approval DE Offer		v1.0
Self Approval DE Offer 2		v1.0
Approval Dependency		v1.0
3056		v1.0

- A new Pulses widget has been added. This exposes the existing Pulses dashboard part's functionality as a Widget (*User story reference: 4725*).



Realtime Enhancements

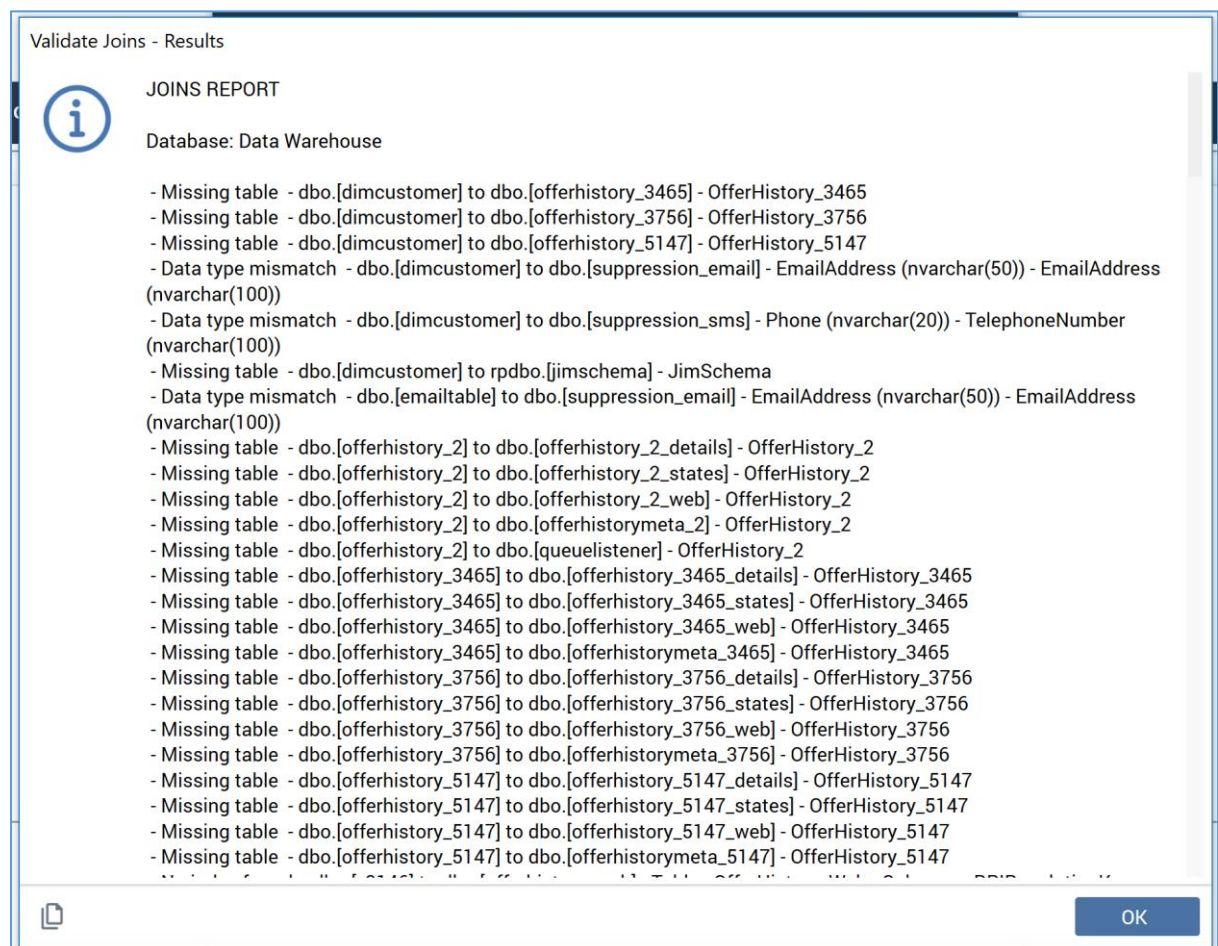
- Role-based Authentication has been introduced at the RPI Realtime API. Both static token and OAuth authentication are supported at the API's .NET Framework and Core versions (*User story reference: 2042*).
- A new Status endpoint has been made available at the RPI Realtime API. This returns details of the current status of the Realtime Agent, caches and queues (*User story reference: 5220*).
- A new Visitor Views endpoint has been made available at the RPI Realtime API. Invocation of this endpoint returns a predefined set of cache parameters for a given visitor (*User story reference: 345*).
- Support has been added for the returning of a non-200 response code in the event of an error occurring at invocation of an RPI Realtime API's Decision endpoint (*User story reference: 4546*).
- Version metadata is now available at the RPI Realtime API's appsettings.json file (*User story reference: 4760*).
- A static .NET HTTP client class is now being used to connect to Realtime Agent (*User story reference: 4686*).

Email Channels

- When importing email results using RedPoint Data Management (RPDM), an FTP location can now be specified as the RPDM upload directory (*User story reference: 3574*).

Joins Configuration

- A new Audit Joins button has been made available at the Joins configuration interface. Invocation of the same results in the execution of an audit of the current client's joins. Results are available on completion of the audit, and include details of missing tables, columns and indexes and data type mismatches (SQL Server only) (*User story reference: 468*).



Web Adapters

- The ability to supply a default value for an attribute has been added in the context of the PURL adapter (*User story reference: 4241*).

Data Projects

- Data project data can now be uploaded directly from an Amazon S3 bucket (*User story reference: 4349*).

Functional Permissions

- Additional granularity has been introduced in the context of Digital Asset Designer functional permissions. Users can now be afforded or denied permission to work with specific asset types (*User story reference: 4583*).
- Additional granularity has also been introduced in the context of Operations interface functional permissions. Users can now be afforded or denied permission to work with specific tabs therein (*User story reference: 5294*).

Operations

- The Audience Snapshots interface has been revisited, with a view to its handling large volumes of snapshots more efficiently (*User story reference: 6041*).
- Enhancements have been made in the context of refreshing within the Operations interface
 - Auto-refresh is no longer supported.
 - Separate Refresh buttons have been made available in the following contexts:
 - System Health
 - System Tasks
 - Audience Snapshots

(*User story reference: 6054*)

Email Offer

- When creating a new email offer, having set its initial properties, the Choose Page Layout dialog is displayed to facilitate specification of its structure (*User story reference: 6033*).

End User License Agreement (EULA)

- Access to an EULA has been made available in the following contexts:
 - Core and client install. Note that the EULA must be accepted to proceed with either install (*User story reference: 4494*).
 - Login (*User story reference: 4495*).
 - Help About (*User story reference: 4496*).

Login

- When a user logs into RPI between 60 and 15 days before their license is due to expire, a message is shown in the RPI client, advising of the number of days remaining before license expiry. In addition, a license expiration warning dialog is also shown when logging in 14 days or fewer before expiry (*User story reference: 3281*).

Design Format Dialog

- The dialog used to define format strings in RPI (used when e.g. defining a data extract channel's custom filename, or an export activity's custom export path format), has been enhanced to support a Millisecond date part (*User story reference: 5540*).

Server Workbench – Realtime Profiles

- A number of enhancements have been made in the context of the RPI Server Workbench's Realtime Profiles tab:
 - The ability to import a realtime profile has been added (*User story reference: 4058*).
 - A new tab has been added to facilitate management of Product Recommendations (*User story reference: 4056*).
 - A second new tab has been added to facilitate management of Realtime Plugins (*User story reference: 4055*).
 - Support for multiple caches has been added in the Queue and Cache Settings tab (*User story reference: 4057*).

5 Upgrade Notes

Stock Market Prices Widget Deprecated

The RPI Stock Market Prices widget has been deprecated.

Web Offer Deprecated

The RPI Web Offer, which was superseded by the introduction of RPI Realtime, has now been deprecated (*User story reference: 6008*).

Server Workbench – Realtime Profiles Issue

Note that, when first viewing Realtime Profiles in Server Workbench in v5.0, they will appear in an Edited state. Please click Save to change to make them appear as Unchanged.

Designer Toolbox Moved to Right by Default

Please note that the RPI designer toolbox has been moved to the right of designer interfaces by default. A new setting in Preferences (formerly My Profile) allows the toolbox to be reinstated to its original left orientation.