RedPoint Interaction Version 5.2 - Release Note

1 About this Document

This document describes RedPoint Interaction (RPI) version 5.2. 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 v5.2.
- Other Features: this section describes other features added in RPI v5.2.
- Upgrade Considerations: this section describes considerations that should be borne in mind when upgrading to RPI v5.2.

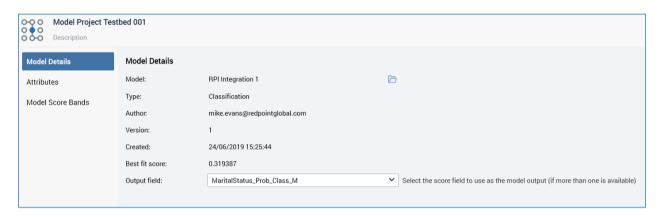
2 Major Features

The following section documents the major enhancements that have been introduced in RPI v5.2.

Al Studio Integration

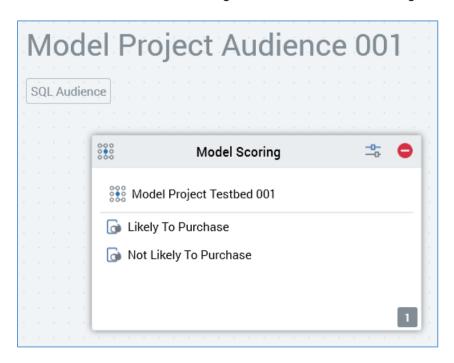
RPI v5.2 greatly improves the product's existing integration with RedPoint AI Studio (AIS). AIS allows non-data scientists to build and manage models to predict customer behavior.

A new Model Project Designer interface enables Classification, Clustering and Regression models created in AIS to be leveraged in RPI.

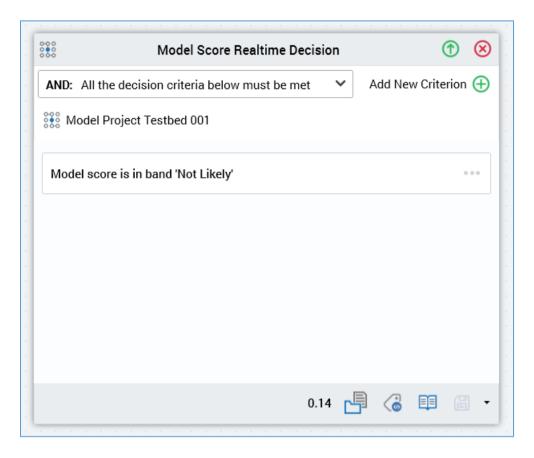


RPI attributes can be mapped to data inputs expected by a model, and the results returned by the same can be categorized into discrete or value range bands.

Model projects can be subsequently used, when targeting using model scores, through the inclusion of a new Model Scoring block in the Audience Designer.



Model projects can also be utilized in inbound contexts through a new Model Score realtime decision, which can be used to make online content applicability decisions based on a visitor's model score.



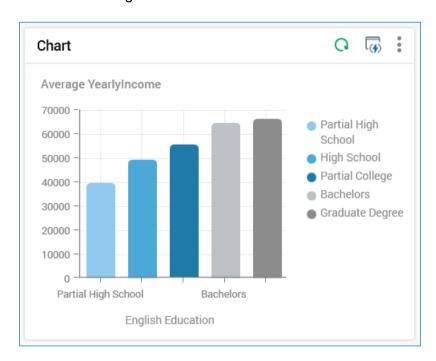
User story reference: 7828, 7860, 8223

Widget and Home Page Enhancements

The following enhancements have been made to the widgets shown within the RPI Home Page, and the page itself:

Chart Widget

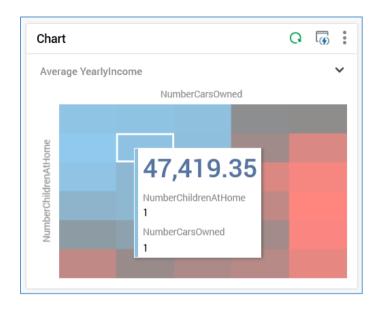
A new Chart widget has been made available.



The chart widget allows you to select an attribute and view a visual representation of the breakdown of its values. You can optionally select a function attribute, and view aggregated counts based on the same.

Chart Widget - Display as Heatmap

A chart widget can also be used to display a heatmap.

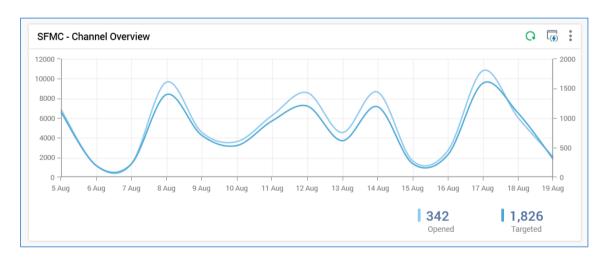


The juxtaposition of a heatmap's first and a second heatmap attribute can be visualized using a colored matrix. As per a regular chart widget, a function attribute can also be selected to facilitate the viewing of aggregated data.

User story reference: 8052

Channel Overview Widget - Second Axis

A second Y-axis can now be displayed to the right of a channel overview widget.



This can be used to display values from a second series with a differing scale to that shown at the left.

Channel Overview/Count Results Widgets - Latest Values

A new 'Display results as' option is now available at both the channel overview and count results widgets. This optionally allows for channel metric or rule count results (respectively) to be rendered as numerical values, rather than as a chart.



User story reference: 7111

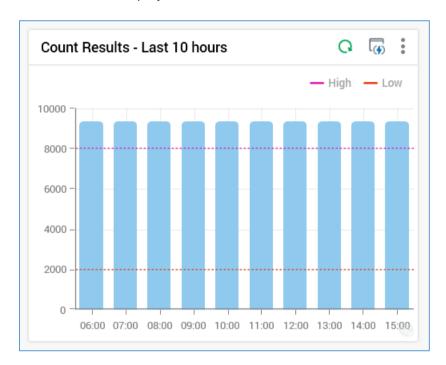
Channel Overview/Count Results Widgets - Right-Aligned Legend

If displayed within the channel overview and count results widgets, legend is now right aligned.



Count Results Widget - Indicators

A new Indicators tab has been made available in the count results widget's configuration panel. This allows for the specification of one or more indicator lines within a count results widget, which can be used to display horizontal threshold levels across the chart displayed therein.

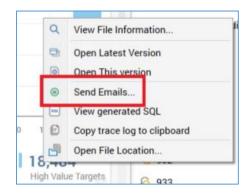


Indicators are rendered as colored horizontal lines.

User story reference: 8003

Count Results Widget – Send Emails

When legend is displayed within a count results widget, it is now possible to invoke the Send Emails training aid from the selection rules listed therein.



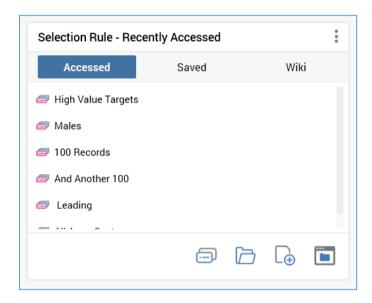
Count Results Widget - Display Counts Deprecated

The count result widget's Display Counts property, which was used to prominently display the count value of one of a widget's rules, has now been deprecated as the enhanced chart legend makes this redundant.

User story reference: 7110

File Type Widget - Extra Details Tabs

A series of extra details tabs – which display recently accessed and saved files of the selected type, and related Wiki pages – have now been made available for display within a rendered file type widget.



User story reference: 6257

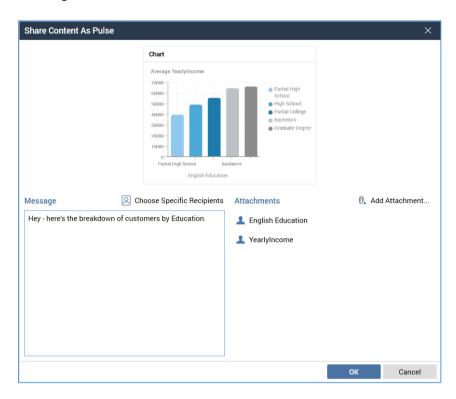
Time and Weather Widget - Digital Clock Face

It is now possible to display an optional digital representation of the time displayed within a time and weather widget.



Share Widget as Pulse

RPI now allows you to share an image of the current state of a widget, along with an accompanying message, as a Pulse.

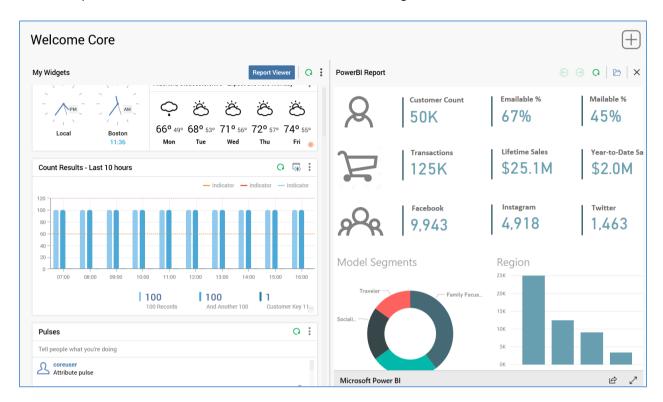


The resultant Pulse will contain an embedded representation of the widget, which can be viewed in greater detail and copied to the clipboard.



Report Viewer

A new Report Viewer has been added at the RPI Home Page.



The Viewer allows you to view an existing RPI report to the right of the existing set of widgets displayed within the Home Page and is available both when viewing Role Widgets and My Widgets.

LiveRamp Integration Enhancements

The following enhancements have been implemented in the context of RPI's integration with the LiveRamp data onboarding platform:

LiveRamp Distribution API Integration

RPI now integrates directly with LiveRamp's Distribution API, which allows RPI users to onboard and distribute audience data directly to LiveRamp's destination partners, without the need to log into the LiveRamp interface.

User story reference: 7902

Specify LiveRamp SFTP Folder Path

RPI users can now specify the folder path at the LiveRamp sFTP site to which onboarded files will be uploaded. A default is provided, depending on file type (US vs EU), but this can be overwritten.

User story reference: 5541

LiveRamp Subscription Group

A new LiveRamp subscription group has been provided to support the onboarding process, which uses only data from an anonymous database (e.g. IdentityLink ID).

User story reference: 8041

Anonymous Auxiliary Databases

Anonymous data returned from LiveRamp can now be stored in an anonymous auxiliary database, and safeguards have been added to prevent reidentification of the data therein.

User story reference: 7694

Realtime Enhancements

Additional profile data is now included in the response returned by the RPI Realtime Cache/Visit endpoint. This data can be used to determine if a visitor already exists in an anonymous auxiliary database. If the profile does not exist in the anonymous database, RPI can use a pixel redirect to retrieve the visitor's IdentityLink ID from LiveRamp. Parameters, including IdentityLink ID, can then be pushed to a visitor's realtime profile.

User story reference: 7792, 7980

Web Cache Data Importer - Parameter Exclusions

It is now possible to specify a list of parameters to be excluded from the Web Cache Data Importer process, reducing the risk of the inadvertent persistence of certain parameters, such as LiveRamp's IdentityLink ID, in the RPI data warehouse.

3 Plugins

Email Service Providers (ESPs)

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

Cheetah Digital - Regular Campaign API

The RPI Cheetah Digital email plugin has been updated to make use of the provider's Regular Campaign API.

User story reference: 7347

Instiller – Profile Reply Parameters

During email offer execution using an Instiller channel, any existing email profile parameters remain as stet, and are not updated.

User story reference: 8114

SendGrid Enhancements

Callback Service – Migrated from WCF

The SendGrid Callback service has been updated to no longer make use of Microsoft's deprecated Windows Communication Foundation (WCF) technology.

(User story reference 6724)

Callback Service – Write to Alternative Locations

The SendGrid Callback service has also been updated to be able to write data to alternative locations (such as BLOB storage).

(User story reference 6725)

SparkPost - Events API Results Retrieval

The RPI SparkPost plugin has been updated to retrieve results data using the provider's Events API.

Database Plugins

Existing Data Warehouse Providers

The following changes have been made in the context of RPI's Teradata database plugin:

- Add temporary table primary index when Single output contact unchecked (User story reference: 7626)
- Offer history index enhancements (User story reference: 7882)
- Replace TOP N with SAMPLE N (User story reference: 7875)
- Temporary table primary index (User story reference: 7883)
- Two-step offer history insert (User story reference: 7787)

New Auxiliary Database Providers

Support for the following new auxiliary database providers has been added:

- Google Datastore (User story reference: 3198)
- MapR DB (User story reference: 7506)

Existing Auxiliary Database Providers

The following change has been made to one of RPI's existing auxiliary database providers:

 Cassandra: support for multiple auxiliary databases using the same keyspace (User story reference: 3198)

New NoSQL Auxiliary Database Provider

Support for the following new NoSQL auxiliary database provider has been added:

• Amazon Document DB (NoSQL) (User story reference: 7046)

Existing NoSQL Data Warehouse Provider

The following changes has been made to one of RPI's existing NoSQL data warehouse providers:

 Couchbase: support for Aggregates and Joins has been added (User story reference: 7903, 8123)

Note that configuration interfaces to support these features are not yet available. To use either or both, please contact RedPoint Global Support.

Mobile Plugins

New Mobile Push Provider

Support for a single new mobile push provider has been added:

Cheetah Digital Push (User story reference: 5393, 7557)

Existing Mobile Providers

The following changes have been made in the context of RPI's existing mobile providers:

- RPI's Urban Airship push messaging plugin has been updated to reflect the provider's rebranding as 'Airship' (User story reference: 7838)
- RPI's Microsoft Azure Notification Hubs plugin has been updated to make use of the provider's latest available version (User story reference: 7838)

External Content Providers (ECPs)

New ECP

Support for a single new ECP has been added:

• Google Cloud Storage (User story reference: 4455)

Existing ECP

The following change has been made in the context of one of RPI's existing ECPs:

 Support for Office 365 and SharePoint Online has been added in the context of the RPI's SharePoint ECP (User story reference: 6978)

Queue Providers

Changes have been made in the context of the following queue provider:

 Azure Service Bus: the provider now makes use of the provider's High Throughput Queue (User story reference: 7818).

Web Adapters

Changes have been made in the context of the following web adapters:

- Bitly:
 - The plugin has been upgraded to make use of v4 of the provider's API (User story reference: 8157).
 - Performance improvements have been made at the same plugin (User story reference: 7419).
- Google Analytics:
 - The ability to manage meta tags has been added at RPI's Google Analytics adapter (User story reference: 2559).

Cache Providers

Support has been added for a single new cache provider:

• Cassandra (User story reference: 7924).

4 Other New Features

The following features are also introduced in RPI v5.2:

Deployment Enhancement

What's New

A new 'What's New' dialog is displayed when upgrading the RPI client to a new version. The dialog displays details of the major features available in the new release.

(User story reference: 7101).

Framework Enhancements

- File Import Enhancements
 - When importing files, it is now possible to drag files into RPI directly from Windows Explorer. The dragging in of folders and any subfolders contained therein is also supported; when you do so, any files in the folder(s) in question are added to the Import Files overlay.

(User story reference: 8489).

 Also, when importing files, if a newer version of files being imported already exists, RPI now allows you to decide on a file-by-file basis whether to retain or overwrite existing files.

(User story reference: 8489).

Database Item Chooser Recent Items

The Database Item Chooser has been augmented to allow selection of recently used tables and columns.

(User story reference 839)

File Information Dialog Approval Comments

Any recorded file approval comments are now visible in the File Information Dialog.

(User story reference 6722)

Interaction API Swagger Documentation

Swagger documentation is now available for RPI's Interaction API.

(User story reference 7945)

Configuration Enhancements

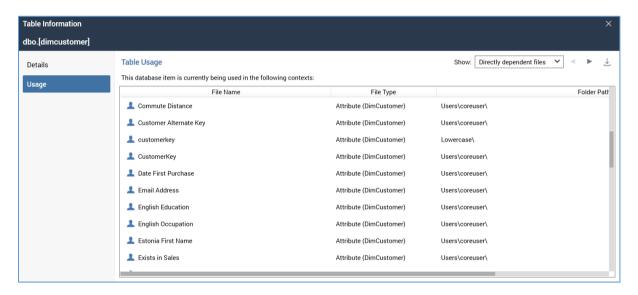
Attribute List – Create Parameter Attributes

The ability to create parameter attributes based on the attributes within a non-placeholder attribute list has been added.

(User story reference 8119)

Catalog – View Table and Column Usage

Having selected a table or column in the RPI Catalog, it is now possible to view and export usage details in respect of the selected item. Doing so displays the new Table/Column Information dialog, which displays a list of the RPI files that depend upon the selected database item.



(User story reference 6987)

Customer Views – Clone

The ability to clone an existing customer view has been added.

(User story reference 7921)

Selection Rule Enhancements

View Generated SQL

The ability to view the SQL generated by a selection rule has been added.

```
High Value Targets - Generated SQL

SELECT COUNT(*)
FROM [dbo].[DimCustomer] a1 WITH (NOLOCK)
WHERE a1.[YearlyIncome] > 80000.00
AND EXISTS (
SELECT a2.[CustomerKey]
FROM [dbo].[FactInternetSales] a2
WHERE a1.[CustomerKey] = a2.[CustomerKey]
AND a2.[TotalProductCost] > 1000.00
)

Query Query (Raw)
```

(User story reference 907)

View Trace Logs

The ability to copy SQL trace log messages associated with a selection rule to the clipboard has been added.

(User story reference 6982)

Compare to List Criterion – Limit Number of Values

A new system configuration setting allows the number of values available when building a compare to list criterion to be limited.

(User story reference 3092)

• Compare to Constant Criterion – Increase Decimal Precision

When building a compare to constant criterion using a decimal attribute, you can now specify values to 6 decimal places.

(User story reference 4581)

• Compare to Relative Date Range Criterion - Other Databases

Support for the selection rule's relative date criterion type has been introduced when running against all RPI's supported SQL databases except Amazon DynamoDB, Apache Cassandra, Apache SparkSQL, Google Big Table, Hive, Netezza, SAP HANA and SalesforceDB.

(User story reference 7886)

Audience Designer Enhancement

Copy Multiple Blocks

RPI now supports the simultaneous copying of multiple blocks in the Audience Designer.

(User story reference 2221)

Email Enhancements

• Staged Content – Preview Parameters

When staging email offer content, any currently- supplied preview parameters are rendered at the same.

(User story reference 6817)

Hide Cell Editor

When building email offer content, the ability to optionally hide the cell editor has been added.

(User story reference 2150)

Content Enhancements

External Embedded File Content Edit

Having copied RPI content that contains references to one or more embedded files, on pasting the same into a third-party application for editing purposes, the file references are translated into GUIDs. When editing is complete, and the updated content is copied and pasted back into RPI, the GUIDs are translated back into RPI embedded file references.

(User story reference 5071)

Render Images Using Tag

A new 'Render as' property has been made available when editing an image embedded within RPI content. It allows you to specify that the image be rendered either using an HTML tag or using a URL reference to an image path (the latter being of particular use when building custom HTML).

(User story reference 155, 8159)

Realtime Enhancements

Attribute List Realtime Decision

A new Attribute List realtime decision is now available. The new decision type allows you to select a non-placeholder attribute list, and then add decision criteria based on the attributes exposed by the list.

The attribute list realtime decision can be used in conjunction with the new ability to make calls to a RESTful service during decision evaluation (see below) to make realtime content personalization decisions based on data manipulated inline during the decision call.

(User story reference 8120)

Call RESTful Service at Decision

It is now possible to make a call out to a RESTful service when calling an RPI Realtime Decision endpoint. An example of such a service might be a web service exposed by RedPoint Data Management (RPDM), facilitating the manipulation of data passed in the decision endpoint's payload. The results of the service call can be leveraged when making a decision using an attribute list realtime decision (see above).

(User story reference 7809)

Interaction Designer Enhancement

Multi-Node Support at Queue Activity Emails – Other ESPs

Support for the execution of queue activities configured with email offers when running in a multi-node cluster has been added for ESPs other than Salesforce Marketing Cloud and SendGrid.

(User story reference 7888)

Interaction Tracker Enhancement

Manage Multiple Workflows Simultaneously

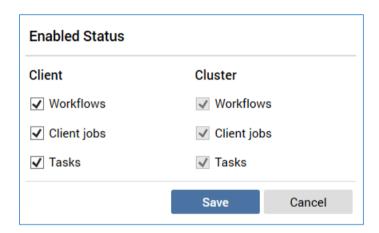
The ability to manage multiple interaction workflows simultaneously has been added to the Interaction Tracker. On selecting multiple interactions, a right mouse click displays a context menu that lists options available across the selection.

(User story reference 7476)

Operations Enhancements

Manage Execution Service Enabled Status

A new property at the Operations Execution Services interface allows you to control the enabled status of the current RPI installation's execution service(s).



Workflows, Client jobs and Tasks can be enabled and disabled as required. The cluster-wide status of each is also displayed (these settings can be managed using equivalent functionality in Server Workbench).

(User story reference 7476)

Housekeeping of Count Results

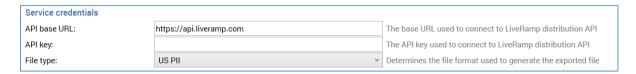
The Client housekeeper now deletes expired count results widget data at a cadence appropriate to widgets' Count frequency settings.

(User story reference 6351)

5 Upgrade Considerations

The following should be borne in mind when upgrading to RPI v5.2:

 Any existing LiveRamp Data Onboarding channels must be revisited immediately and reconfigured appropriately, as new properties have been added:



Failure to reconfigure LiveRamp channels will result in execution failure.

 Any existing Bitly web adapters must be revisited immediately and reconfigured appropriately, as new properties have been added, and the adapter now requires authorization.



Please also refer to the External Configuration Guide, in which a new Bitly section has been added. Failure to configure Bitly web adapters will result in execution failure.

 Goal Driven Assets in which the Optimization mode property is set to 'Machine Learning' will not currently work with versions of RPDM greater than v7.4.