Redpoint Interaction Version 6.3 – Release Note

1 About this Document

This document describes Redpoint Interaction (RPI) version 6.3. 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 v6.3.
- RPI Realtime Enhancements: this section describes enhancements made to RPI Realtime in RPI v6.3.
- Other New Features: this section describes other features added in RPI v6.3.
- Upgrade Considerations: this section describes considerations that should be borne in mind when upgrading to RPI v6.3.

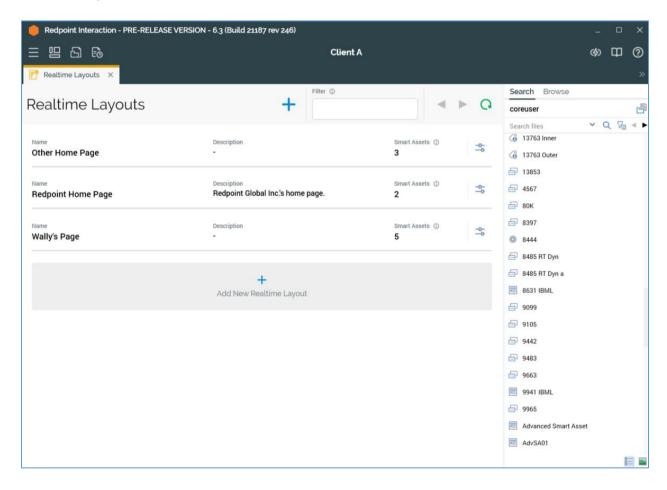
2 Major Features

The following section documents the major enhancements that have been introduced in RPI v6.3.

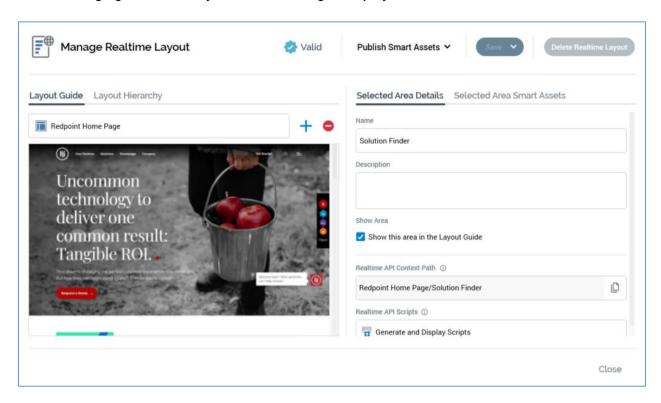
Realtime Layouts Interface

The new Realtime Layouts interface typically provides RPI users with the ability to create a visual representation of a web page (a Layout), and then define elements therein – such as 'banner', 'sidebar' and 'carousel' (known as Areas). Each of these can be associated with smart assets. Layouts and areas can then be used to access these smart assets via the RPI Realtime API, serving content appropriate to a visitor's specific requirements.

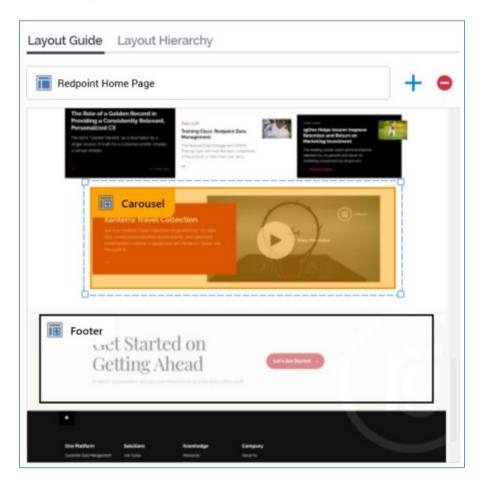
Realtime Layouts are listed in a dedicated RPI interface:



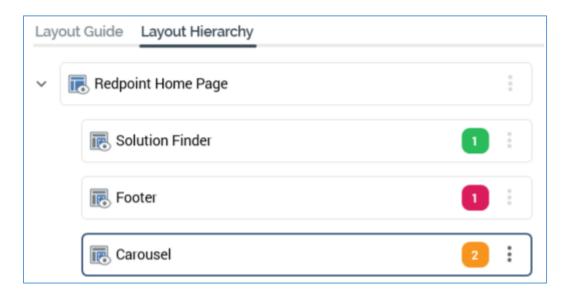
When managing a realtime layout, the following is displayed:



The Layout Guide tab allows you to visually represent a layout. A background image (typically of a web page) can be uploaded, and areas can be located within the layout.

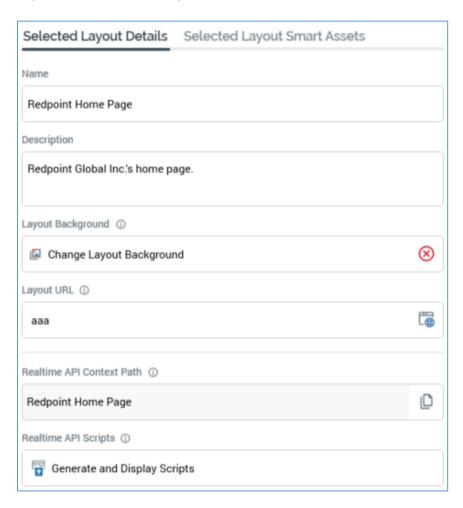


In parallel, the Layout Hierarchy tab creates a representation of the layout and areas as a treeview.

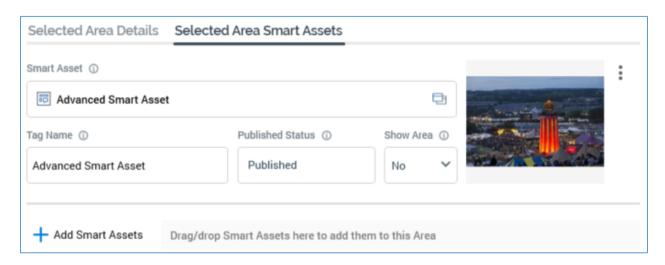


The layout hierarchy can be edited manually, and hierarchies containing nested layouts and/or areas can be created to fulfill complex use cases. Note that use of the Layout Guide is optional if a visual representation of a web page is not required.

The Selected Layout/Are Details tab allows you edit the properties of the item selected in the Layout Guide or Hierarchy.

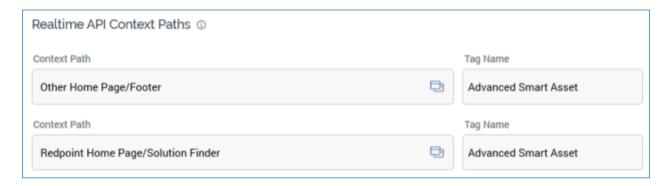


The Selected Layout/Area Smart Assets tab allows you to associated smart assets with the selected layout or area.



Smart assets can optionally be published directly from the Realtime Layouts interface. Note that, to use a layout- or area-accessible smart asset within a web page, RPI-generated JavaScript must be inserted into the page; the code required to do this is available within the Realtime Layouts interface.

When a smart asset has been associated with one or more layouts and/or areas, a read-only representation of these linkages is available in the Smart Asset Designer's Publish Options overlay:



Note that Realtime Layouts supersede the use of realtime contexts to access smart assets via the RPI Realtime API.

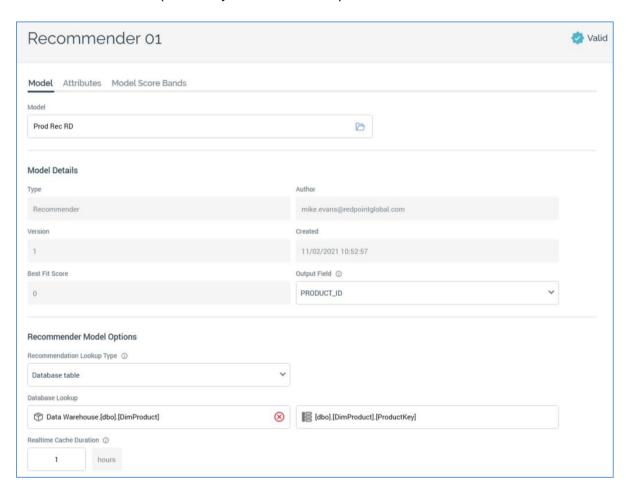
User story references: 13335, 14200

Recommender Model Support

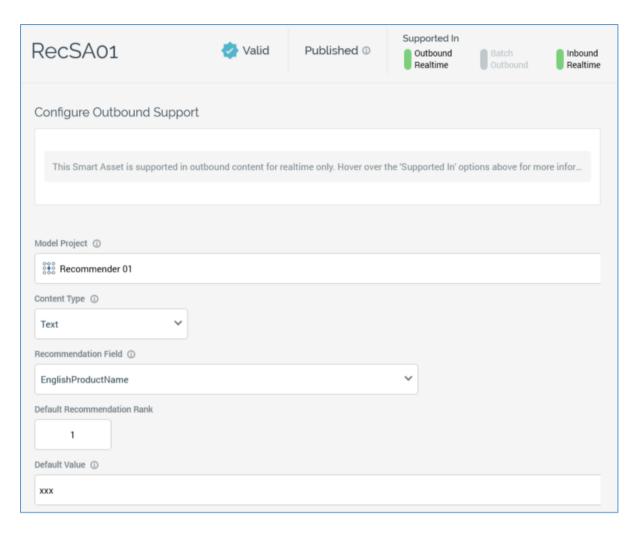
Support has been added in RPI v6.3 for Redpoint Automated Machine Learning (AML) Recommender models. Recommender models allow you to use AML to make a series of recommendations – e.g. a list of appropriate products – based on a series of customer input data.

The following functionality has been introduced in this context:

• The Model Project Designer now supports the configuration of a model project with an AML Recommender model (user story reference 13420).



 A new Recommendation Smart Asset has been introduced. The asset allows you to serve recommendation content, both in an inbound and outbound realtime context (user story reference 13336).



- A Model Smart Asset can now be configured with an AML Recommender model (user story reference 13421).
- Audience Designer Model Scoring blocks also support AML Recommender models (user story reference 13422).
- When a Recommender model project is selected at a Model Score realtime decision, it is
 possible to make decisions based on a visitor's recommendations' model band membership
 and recommendation ID (user story reference 13423).
- A new Model Project Attribute has been introduced. This can be used to provide access to the outputs generated by all RPI-supported AML models (including Recommender models). A model project attribute can be used to output a model band, score or, if a Recommender model, Recommendation field. Model project attributes can typically be included in content e.g. including a table of recommended products in an email; they are not intended for use when building rule criteria (user story references 13424, 13459).

Identity Providers

RPI v6.3 introduces support for identity providers that support Open ID Connect. OpenID Connect is a simple identity layer on top of the OAuth 2.0 protocol, which facilitates verification of the identity of a user based on authentication performed by an authorization server. The feature serves as the basis for single sign-on functionality, allowing users to access RPI and other applications without providing credentials at each sign in.

Supported identities include:

- Auth0 (user story reference 12184).
- Okta
- KeyCloak (user story reference 11999).

Note that Mercury applications (e.g. AML) can also be configured to use KeyCloak, facilitating common identity provision across products.

Data Connectors

RPI's Data Connectors functionality has been expanded to include the following:

CRM

• The display of the results of the import of records to RPI are now displayed at the Salesforce data connector (user story references 13332, 13369).



Data Onboarding

Support for the following new data onboarding data connectors has been added:

- Facebook Custom Audience (user story reference 13369).
- Twitter Tailored Audiences (user story reference 13371).

Email

Support for the following new data onboarding data connectors has been added:

- Cordial (user story reference 13364).
- MailChimp (user story reference 13367).
- Salesforce Marketing Cloud (user story reference 13365).
- SendGrid (user story reference 13366).

3 Plugins

Email Service Providers (ESPs)

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

New ESP

Support has been added for a new ESP:

Paubox (user story reference 13592).

Salesforce Marketing Cloud (SFMC) Enhancements

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

- The ability to specify that email address be excluded when passing data to an SFMC data extension (user story reference: 13327).
- Support for the import of PGP- and GPG-encrypted results data (user story reference: 13334).

SendGrid Enhancements

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

- The SendGrid event timestamp is now persisted in RPI's Offer History States table (user story reference: 13432).
- The synchronization of SendGrid channel data has been revisited, with batching used to improve execution efficiency (user story reference: 13063).

Cordial Enhancements

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

- Support for a custom subscriber key, other than email address (user story reference: 13818).
- The ability to specify FTP settings to be used by the provider at the channel level (user story reference: 14014).

Database Providers

SQL Server/Azure SQL Database

Support has been added for the following in the context of RPI's SQL Server and Azure SQL Database plugins:

• When executing inserts into RPI temporary tables, parallel inserts using the TABLOCK hint are now performed (user story references 12514, 12515).

Cassandra

Support has been added for the following in the context of RPI's Cassandra plugin:

• SSL Support (user story reference: 4351).

Social Providers

Facebook Enhancements

Support has been added for the following in the context of RPI's Facebook plugins:

- Pre-hashed data at Facebook Custom Audiences (user story reference: 13333).
- Compatibility with the Facebook REST API v11.0 (user story reference: 14230).
- Specification of a custom audience name using an editable combo box in the Facebook Custom Audience Offer Designer (user story reference: 12512).

Twitter Enhancements

Support has been added for the following in the context of RPI's Twitter plugin:

• Compatibility with the Twitter API v2 (user story reference: 12063).

Data Onboarding Provider

Google Ads Customer Match

Support for a new data onboarding provider has been added:

Google Ads Customer Match (user story reference 12717).

LiveRamp Enhancements

Support has been added for the following in the context of RPI's LiveRamp plugins:

- Reflection of the change of LiveRamp IdentityLink's name to 'LiveRamp RampID' (user story reference: 14215).
- PGP Encryption (user story reference: (10555).

CRM Provider

Salesforce Enhancements

Support has been added for the following in the context of RPI's Salesforce CRM plugin:

An optional 'Status' field parameter (user story reference: 12065).

 Having performed an initial synchronization of data from RPI to Salesforce CRM, the maintenance of data consistency in subsequent data sync tasks (user story reference: 13417).

Survey Provider

Alchemer Enhancement

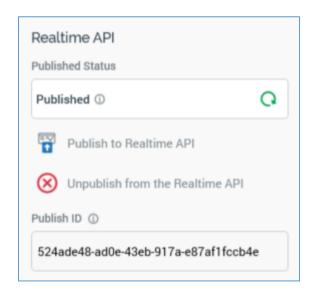
Support has been added for the following in the context of RPI's Alchemer plugin:

• Truncation of responses over 4000 characters (user story reference: 13342).

4 RPI Realtime Enhancements

The following features have been introduced in the context of RPI Realtime:

- JSONPath support at parameter attributes (user story reference 12942).
- Event decision criteria can now be refined through specification of additional Event Metadata criteria (user story reference 12943).
- A new appsettings.json config setting enables audit tracing in RPI Realtime endpoints' response headers (user story reference (13425).
- Support for the Ncache cache provider (user story reference (12364).
- A new appsettings.json config setting controls the number of seconds for which smart asset logic is to be cached in memory by the realtime service (user story reference (13685).
- Queries generated during cached attribute list data retrieval now use outer joins (user story reference 13961).
- Selection rules and realtime decisions can now be published to the RPI Realtime API directly, rather than having to be used in a smart asset. When evaluated, True or False ReturnContent values indicate whether a rule's criteria were satisfied (user story reference 13448).



- The RPI Realtime Events endpoint now supports identity and alternative keys (user story reference 13012).
- When visitor profiles are merged, details of the merge are stored in the visitor profile. In addition, a ProfileMerge event can optionally be raised (user story reference 13356).
- Changes have been made to the folder properties specified when upgrading RPI Realtime using Server Workbench (user story reference 13360).
- A new Smart Asset endpoint replaces all existing Decision endpoints (user story reference 13986, 13537).

- When evaluating a JSON array in a JSON realtime decision, JSONPath filter support has been added (user story reference 12945).
- Support for the configuration of cached attribute lists with NoSQL database collection definitions (user story references 14253, 14346).

5 Other New Features

The following features are also introduced in RPI v6.3:

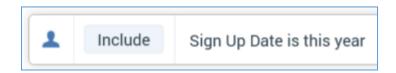
Rule Designer Enhancements

The following enhancements to Attribute functionality have been added in v6.3:

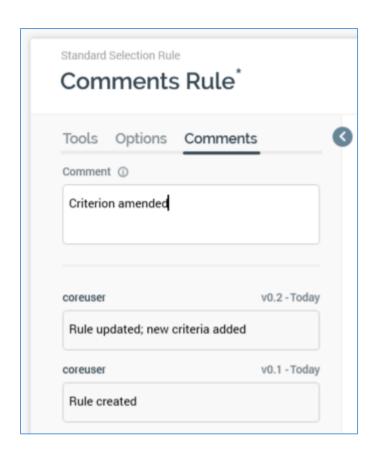
 A resolution level icon is now displayed at a basic selection rule criterion (user story reference: 13272).



 A new 'Is' operator at the standard selection rule's Compare to Relative Date criterion, and date criteria in general at other rule and decision types. It supports the specification of criteria such as 'date is this year' (user story reference: 13352, 13884).



A new Comments tab at all selection rule types' slide-out toolboxes.

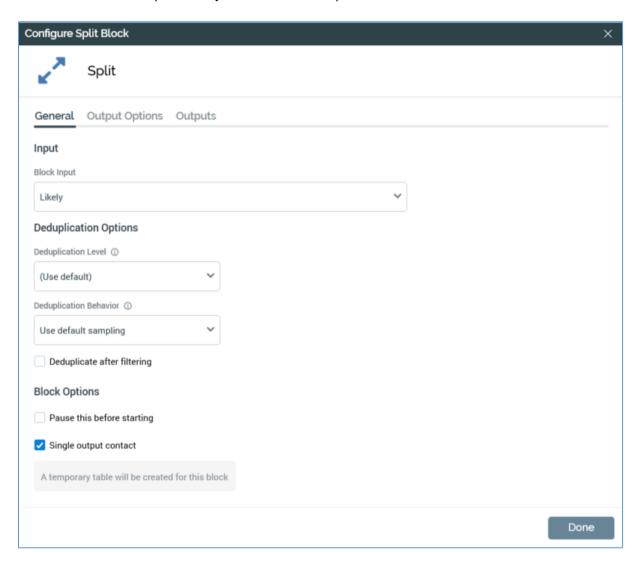


The tab supports the recording of a comment history library for a selection rule (user story reference: 6943).

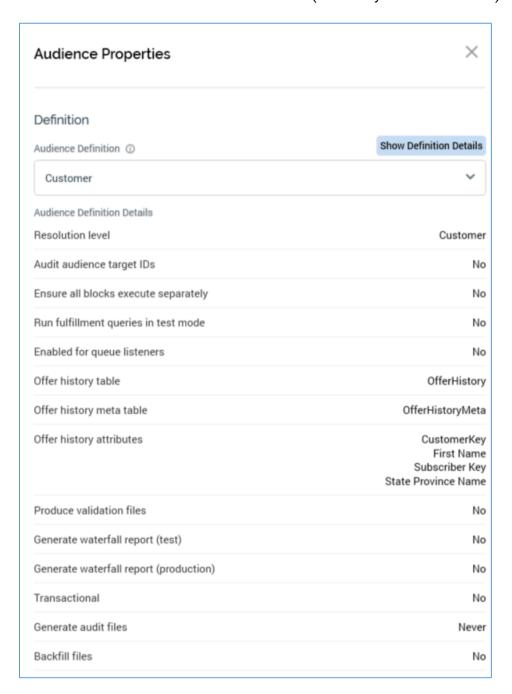
Audience Designer Enhancements

The following enhancements to Audience Designer functionality have been added in v6.3:

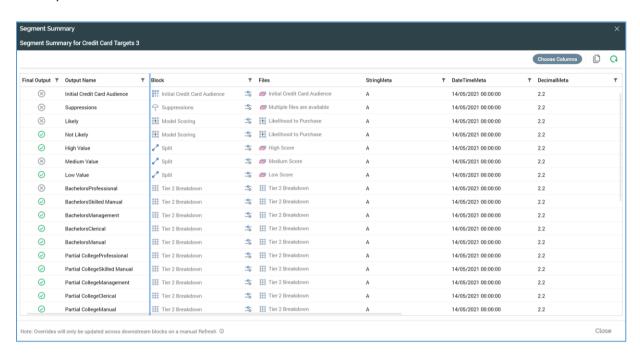
- The ability to configure an audience definition's offer history attributes with attributes sourced from a non-resolution table, as well as the ability to use same at audience deduplication properties (user story reference: 190).
- An upgrade to the look and feel of the Audience Block Builder, bringing it into line with the latest RPI standards (user story reference: 13491).



 A new Show Definition Details toggle button at Audience Properties overlay provides visibility of the audience's Audience Definition Details (user story reference: 12718).

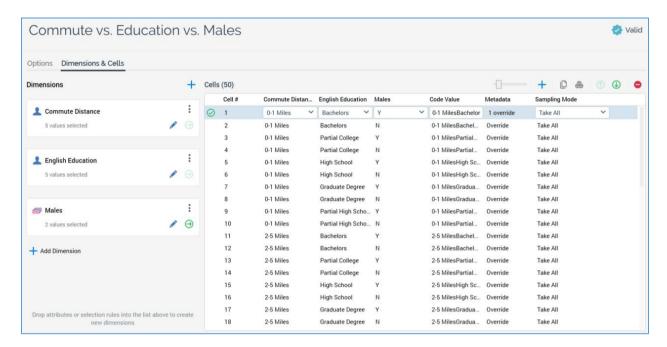


 Enhancements have been made to the Audience Designer Segment Summary. These include support for inline editing and filtering of the data shown in the grid. (user story reference: 13072).



Cell List Designer Enhancement

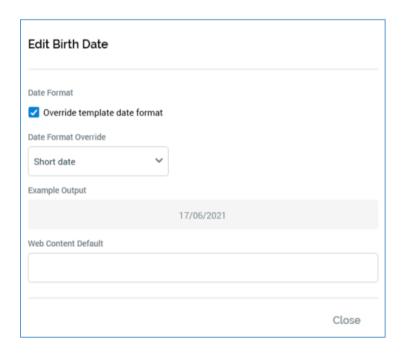
The Cell List Designer user interface has been refreshed to the latest RPI standards.



User story reference: 13675.

Content Editor Enhancement

The Edit... dialogs displayed within the content editor have been refreshed to the latest RPI standards.

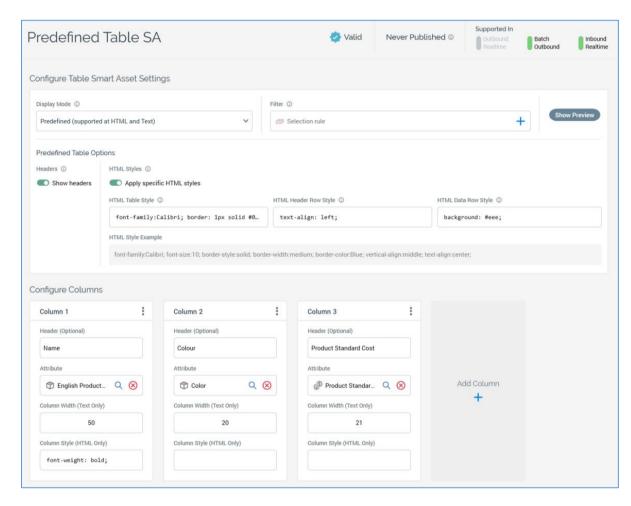


User story reference: 13499.

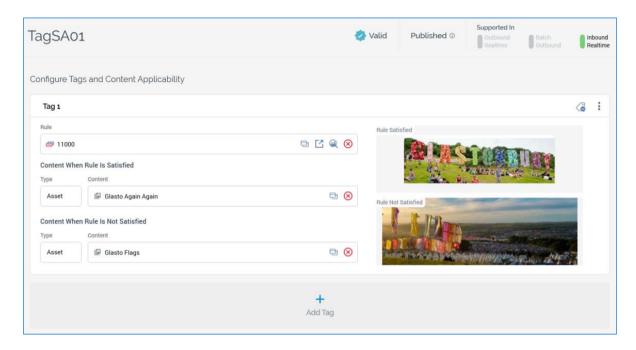
Smart Asset Designer Enhancements

The following enhancements to Smart Asset Designer functionality have been added in v6.3:

 The Table asset has now become the Table Smart Asset (reflecting its new ability to be published independently for use in RPI Realtime). In addition, its designer has been refreshed to bring it in line with the latest RPI standards (user story references: 13461, 13567).



 A new Tag Smart Asset has been introduced. This facilitates provision of separate content to be served for a series of 'tags', both when the rules with which the same are, and are not, met (user story reference: 13447).



Asset Designer Enhancements

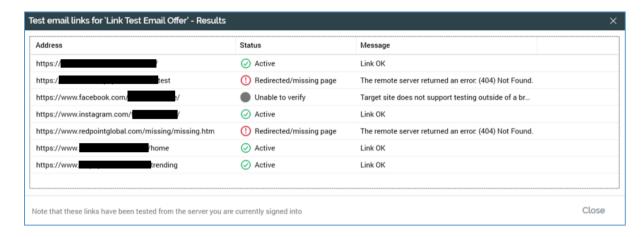
The following enhancements to Asset Designer functionality have been added in v6.3:

- When importing assets from the Windows file system into RPI via the Asset Designer, optional replication of the Windows file system structure within the RPI file system (user story reference 13408).
- When importing HTML files containing images into RPI, the appropriate setting of image properties at the same (user story reference 13409).

Offer Designer Enhancements

The following enhancements to Offer Designer functionality have been added in v6.3:

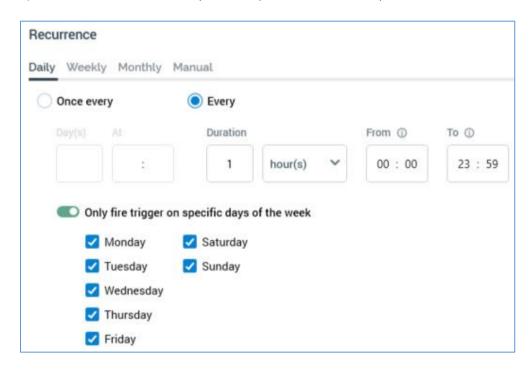
- Conversion of anchor (<a>) tags into RPI links in email offers (user story reference: 13216).
- Improvements to the testing of email links (user story reference: 13344).



Interaction Designer Enhancements

The following enhancements to Interaction Designer functionality have been added in v6.3:

 Recurring trigger execution on specific days of the week, multiple times per day, between a specific start and end time (user story reference: 13000).



 Display of a runtime validation warning when executing an interaction workflow when the audience's resolution has no configured primary key (user story reference: 10022).

Data Project Designer Enhancement

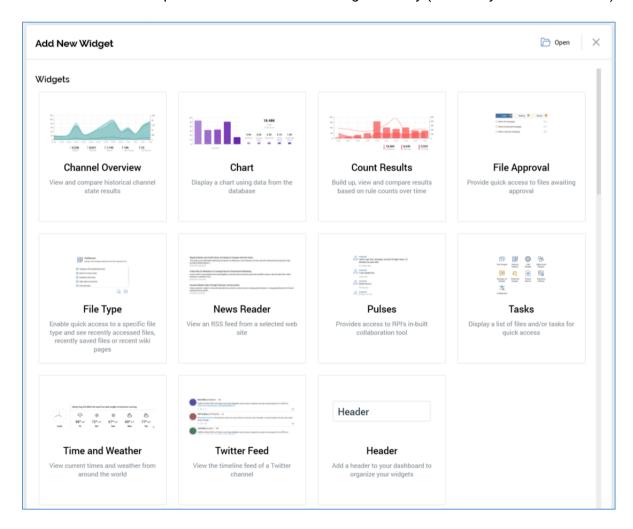
The ability for the Data Project Designer to treat single column files as delimited files.

User story reference: 12214

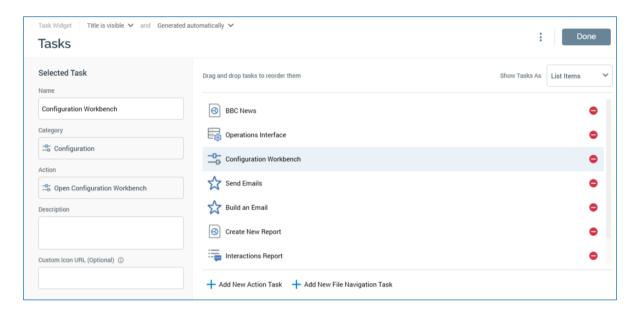
Dashboard Enhancements

The following enhancements to Dashboard functionality have been added in v6.3:

Refresh of the user experience at the Add New Widget overlay (user story reference: 11922).



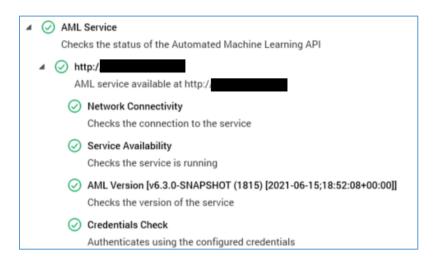
• Inline widget configuration (user story reference: 12321).



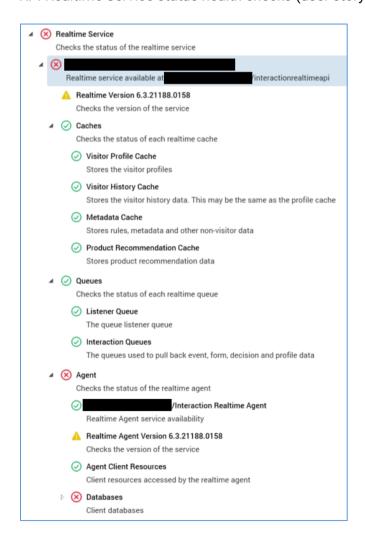
Operations Enhancements

The following enhancements to Operations functionality have been added in v6.3:

AML health checks (user story reference: 13699).



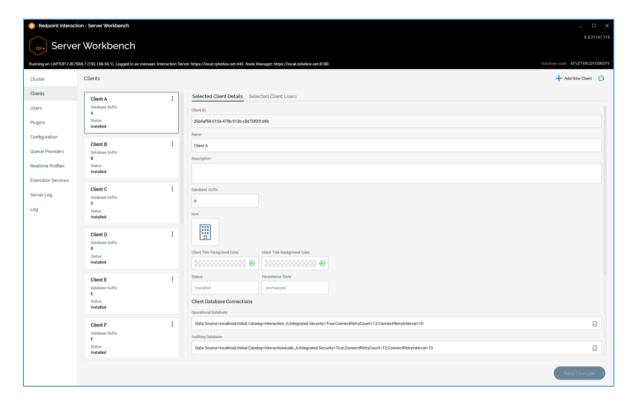
• RPI Realtime Service status health checks (user story reference: 13107).



Deployment Enhancements

The following deployment enhancements have been added in v6.3:

- Deployment-Client-WebView2 (user story reference 13867).
- Refactoring of database inserts performed when installing RPI (user story reference 13081).
- Refresh of the Server Workbench user experience, to bring in line with the latest RPI standards (user story reference 13696).



Miscellaneous Enhancements

The following miscellaneous enhancements have been added in v6.3:

• Display of the RPI Realtime version in the Help About dialog (user story reference 13106).

Realtime Service

Version 6.3 (Build 21167 rev 716)

Realtime Agent Service

Version 6.3 (Build 21167 rev 716)

- Forwarding of RPI logs to NewRelic (user story reference: 11859).
- Addition of an index to the op_DataWorkflows operational database table (user story reference: 13247).
- Automatic sign out after a period of inactivity (user story reference: 13273).
- Display of the user's sign in date and time (user story reference: 13415).

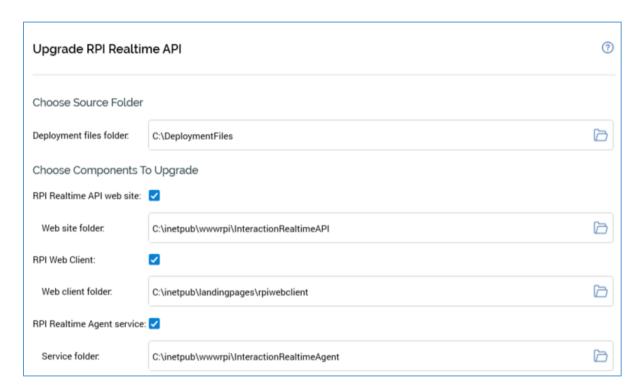


- Replace of the legacy WebBrowser control with the latest Microsoft WebView2 Control (user story reference: 10361, 13867).
- Update of the crypto service provider used by RPI to ensure FIPS compliance (user story reference: 9273).
- The ability for a new user to set their own password via an email, and the ability to reset a forgotten password through the same medium, has been deprecated. A user's password can now be set manually at creation by a system configurer. Thereafter, passwords must be managed in the Users tab within Server Workbench (work item references: 13970, 15050, 15051).

6 Upgrade Considerations

The following should be borne in mind when upgrading to RPI v6.3:

- If use is being made of Realtime Contexts in v6.2 or below, a Realtime Layout will be created automatically at v6.3 upgrade to replace this functionality. This must be published before smart assets leveraging the contexts can be invoked using the Realtime API.
- Changes have been made a property specified when upgrading RPI Realtime using Server Workbench.



The previous 'Landing page scripts' section has been renamed 'RPI Web Client'. Within the same, the 'Scripts folder' property has been renamed 'Web client folder'. This property previously referenced the 'rpiformvalidation' folder, and now references the 'rpiwebclient' folder.

Prior to upgrade, please undertake one of the following:

- Make a copy of the RPI Realtime rpiwebclient folder and copy it to the site's root folder (alongside the old rpiformvalidation folder). This is the recommended course of action.
- Change the configuration setting 'LandingPageJavascriptLibraryURL' to point directly to the existing rpiwebclient folder.

User story reference 13360.

 If any existing smart assets have been published to contexts or subcontexts, post-upgrade, each existing:

- o Realtime context is represented as a separate realtime layout.
- o Leaf subcontext is represented as a tag.
- o Non-leaf subcontext is represented as a nested layout.

In addition, the Layout Hierarchy is populated for each such realtime layout thus created.

- The Facebook offer's 'Offer for Business' option has been deprecated as part of RPI's support for v11 of the Facebook API.
- The Constant Contact ESP connector has been deprecated.
- The CheetahDigital ESP, SMS and Push connectors have been deprecated.
- The Pinterest social connector has been deprecated.