RedPoint Interaction Version 6.0 – Release Note

1 About this Document

This document describes RedPoint Interaction (RPI) version 6.0. 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 v6.0.
- Other Features: this section describes other features added in RPI v6.0.
- Upgrade Considerations: this section describes considerations that should be borne in mind when upgrading to RPI v6.0.

2 Major Features

The following section documents the major enhancements that have been introduced in RPI v6.0.

Deprecated Functionality

The following features have been deprecated in RPI v6.0:

- Engagement Group Designer (user story reference: 8910)
- Engagement Whiteboard Designer (user story reference: 8911)
- User Roles (user story reference: 8915)
- Metrics (user story reference: 8927)
- Plan Results (user story reference: 8928, 8933)
- Plan Schedule Interface (user story reference: 8928)
- File Asset (user story reference: 8916)
- Tags (user story reference: 8913)
- Workflow Foundation Operations interface (user story reference: 8918)
- Cascade Rules (user story reference: 8914, 8919)

Feature Consolidation

The following functional areas have been revisited, to consolidate the features exposed therein:

Dashboard Designer

All dashboard parts have now been deprecated, and dashboards only support the inclusion of widgets, which can be added directly to the same (user story reference: 8926).

Realtime Decisions

The range of realtime decisions has been rationalized as follows (others remain as stet):

- JSON realtime decision: exposes two sets of decision criteria:
  - Custom: replaces the existing Generic realtime decision.
  - Custom JSON: replaces the existing JSON realtime decision.
- Orchestration: exposes three sets of decision criteria:
  - Content: replaces the existing Dynamic Content realtime decision.
  - Offer: replaces the existing Offer realtime decision.
  - Selection Rule: replaces the existing Selection Rule realtime decision.
- Web: exposes four sets of decision criteria:
  - Date and Time: replaces the existing Date & Time realtime decision
  - Events: replaces the existing Web Events realtime decision
  - Geolocation: replaces the existing Geolocation realtime decision
  - Tracking: replaces the existing Web Tracking realtime decision

User story reference: 8923

In addition, two other features have been added at realtime decisions:

- Bing Maps API logging: all calls to the Bing Maps API made from Geolocation decision criteria are now logged at the RPI Realtime logs (user story reference: 7848).
- The following new web tracking criterion types are now available:
  - Is Known (has a master or any alternative key)
  - Has master key (is identified with the master key)
  - Alternative key (has a specific alternative key)

  User story reference: 7936

Workflow Builder

Invocation of the Workflow Builder in the Interaction Designer now facilitates creation of an email workflow using the Send Emails training aid. The original Workflow Builder has now been deprecated.

User story reference: 8924

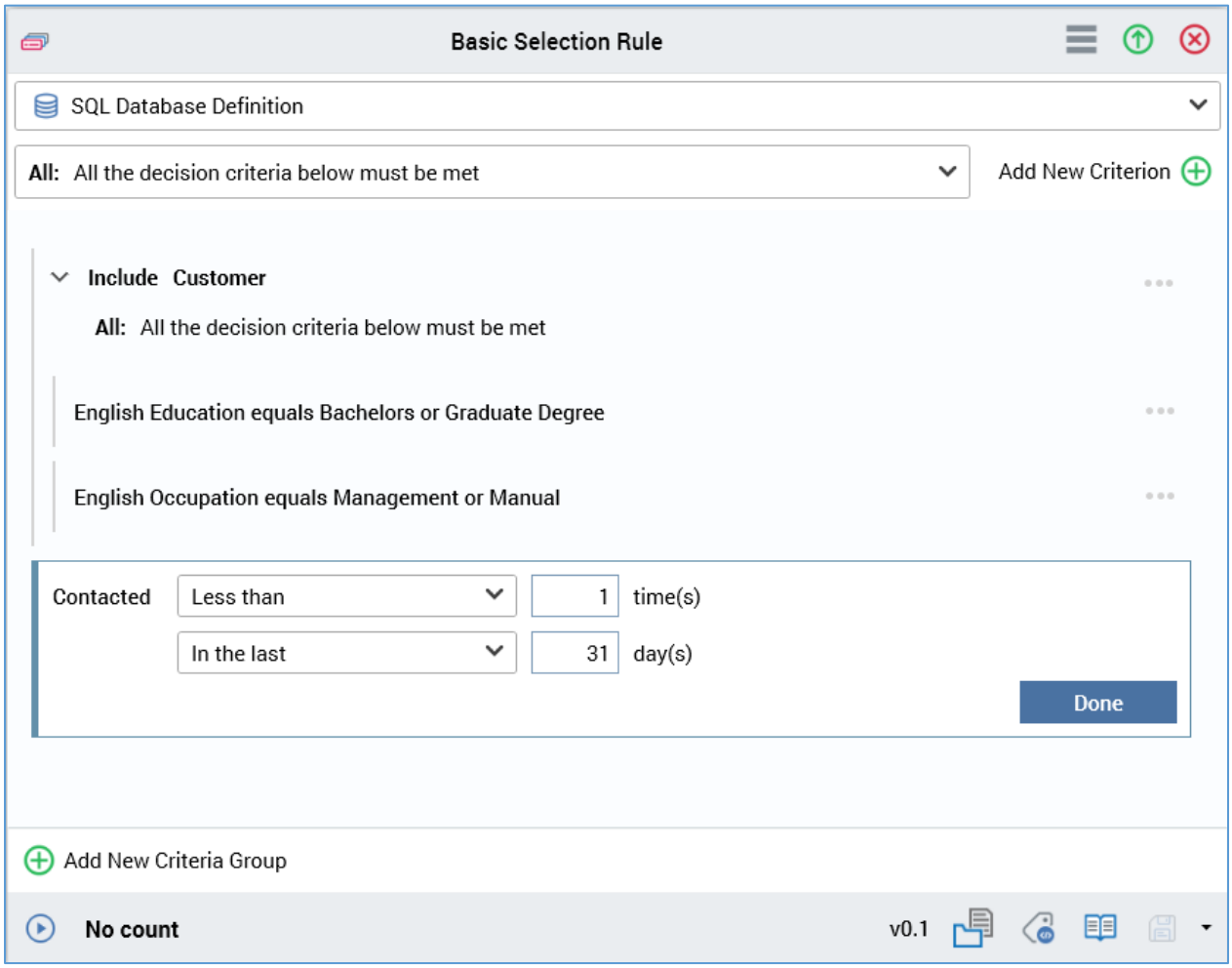
Organization

Configuration of the RPI organization has been considerably simplified. Multiple hierarchies, and the nodes that they contain, are still supported, but are retained for access to the user groups created on defining the same (and thereby facilitating file system access control in accordance with organization node membership). However, all other features, such as metric lists, fulfillment definitions, etc., have been removed.

User story reference: 8912

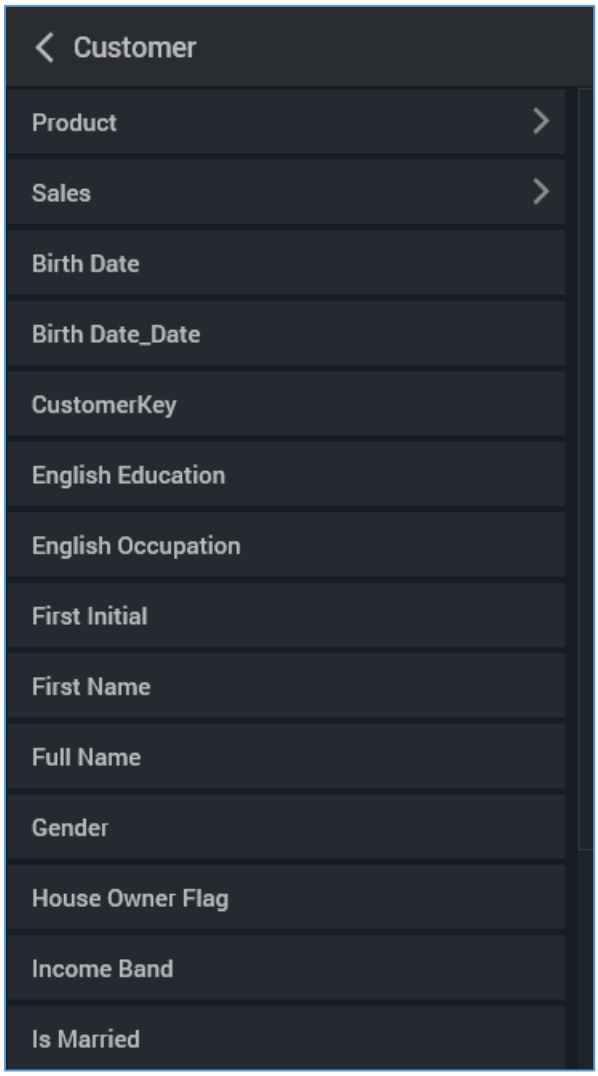
Basic Selection Rules

RPI v6.0 introduces Basic Selection Rules, which complement the existing Selection Rule (now Standard Selection Rule) and Decision Rule (now NoSQL Selection Rule) file types.

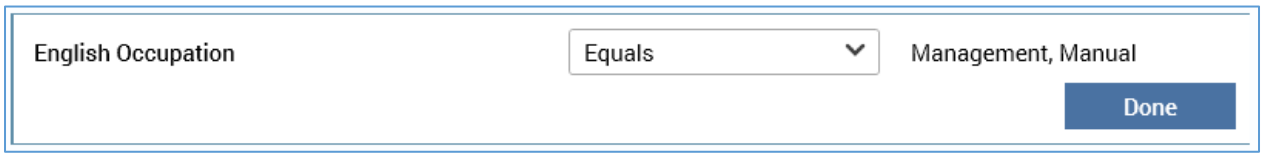


Basic selection rules offer a simpler approach to the identification of records of interest (primarily for the purpose of selecting an audience to which messages are to be communicated). They can be used in a SQL environment alongside, or as an alternative to, standard selection rules.

Basic selection rules are built in a similar manner to NoSQL selection rules, by selecting decision criteria from a slide-out panel:

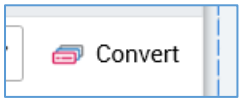


…and then configuring the criteria as required:



Basic selection rules are generally less feature-rich than standard selection rules, but they do support contact rules, which facilitate the selection of records that have previously been contacted via RedPoint Interaction.

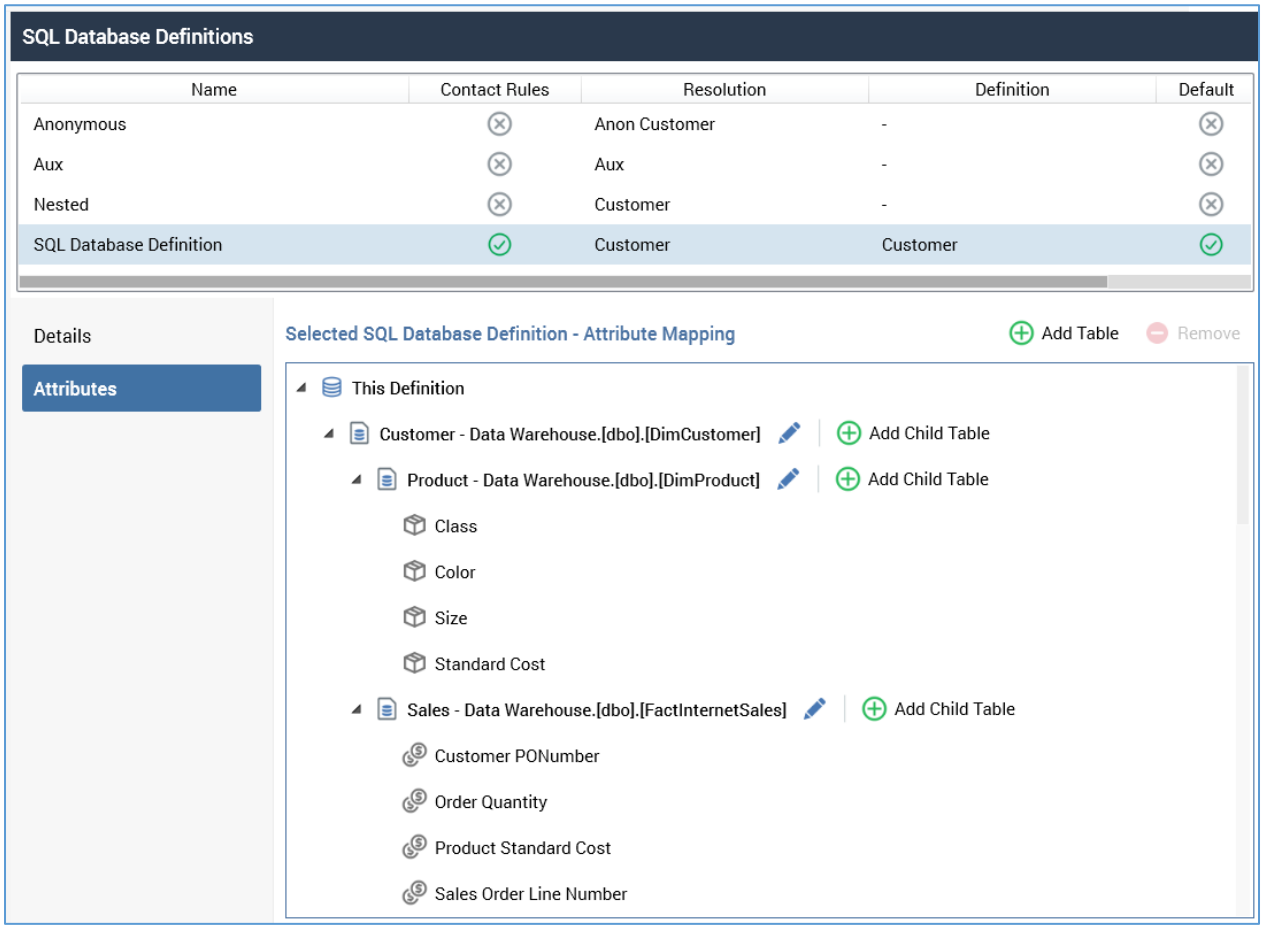
To take advantage of the functionality available at standard selection rule within a basic selection rule, it will need to be converted to the former using the button provided:



Note that, having converted a basic to a standard selection rule, it is not possible to convert it back.

Note also that basic selection rules containing contact rules cannot be converted to standard selection rules. To take advantage of contact rules in a standard selection rule, you can include a basic selection rule containing contact rules within a standard selection rule.

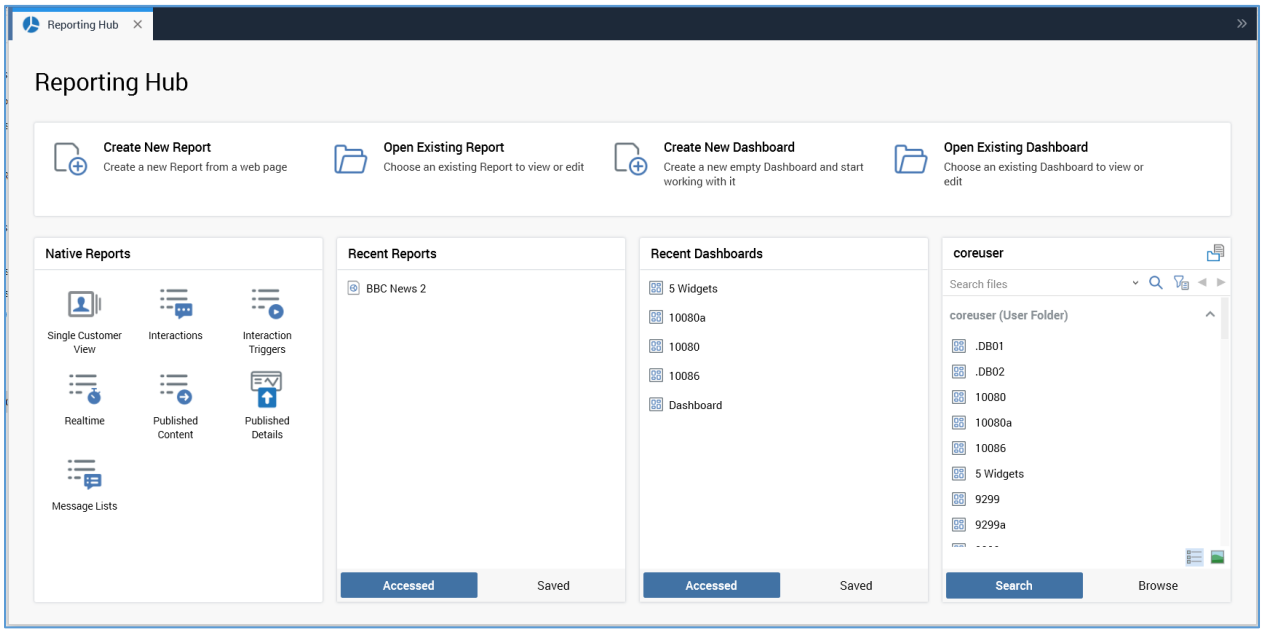
The decision criteria available at a basic selection rule are specified at a SQL Database Definition. SQL database definitions are managed in a dedicated configuration interface:



User story reference: 8832, 8833, 8839, 9571

Reporting Hub

The existing RPI Reporting interface has been replaced with a new Reporting Hub.



The Reporting Hub provides a single, consolidated context from which to undertake the following actions:

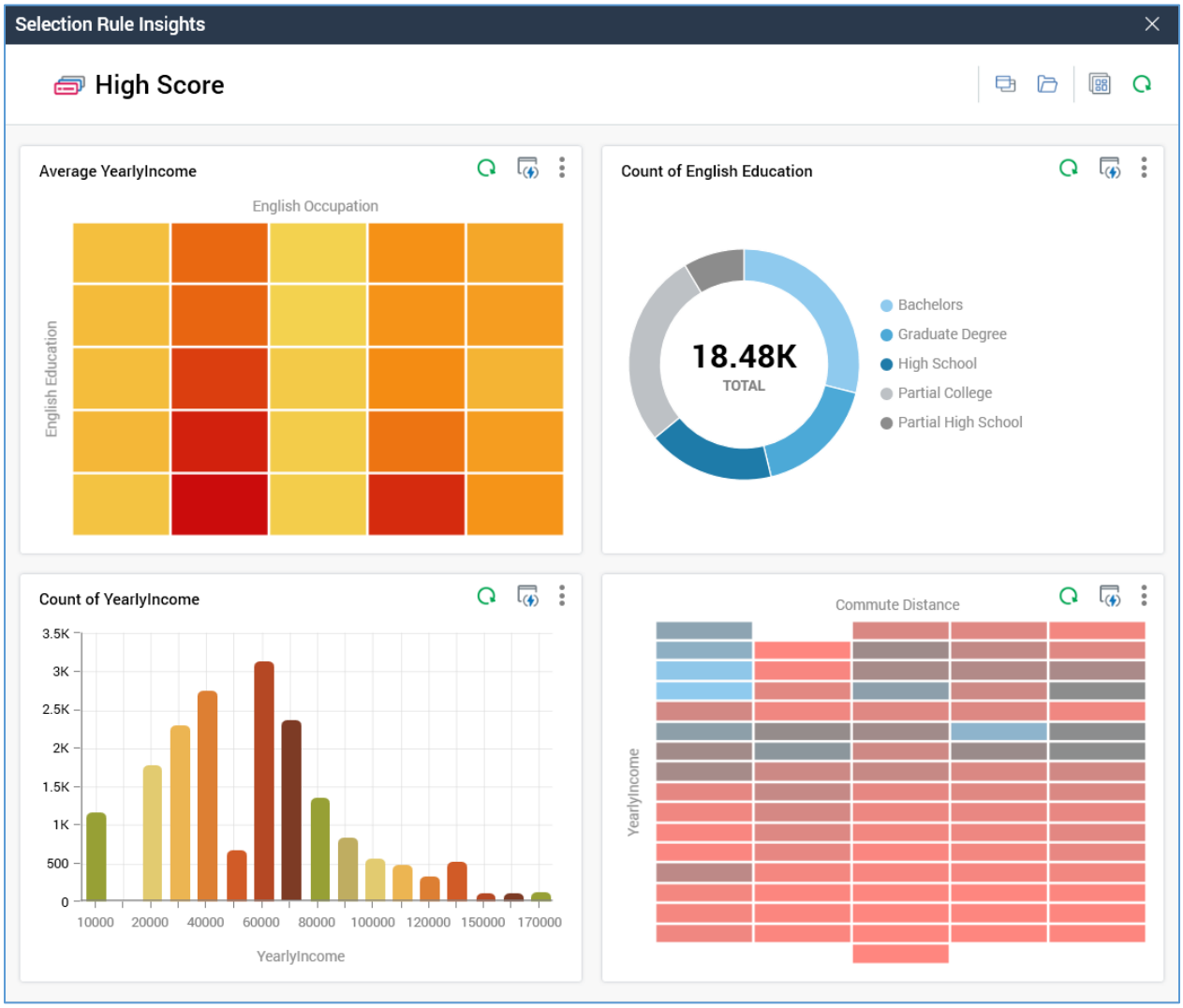
- Create new and open existing reports. Note that only a single Report file type is now supported by RPI.
- Create new and open existing dashboards.
- Access RPI's built-in reports (formerly trackers):
    - Interactions Report
    - Interaction Triggers Report
    - Realtime Report
    - Published Content Report
    - Published Details Report
    - Message Lists Report
- Access the RPI Single Customer View
- View a list of recently-accessed or saved report files and open the same.
- View a list of recently-accessed or saved dashboard files and open the same.
- Access a folder search component, in which are listed only files of type Report or Dashboard.

User story reference: 8929

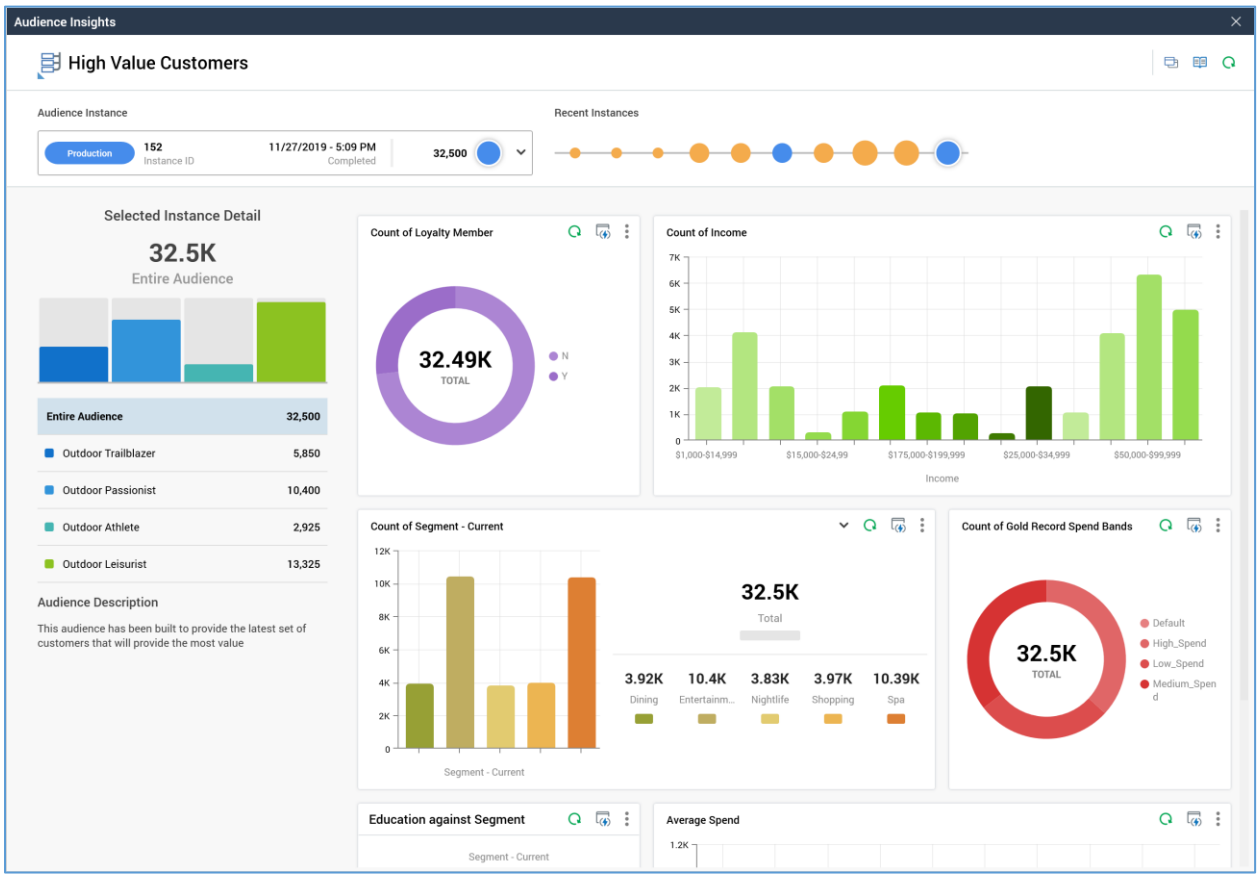
Insights Window

The new Insights Window is used to view insights related to a Standard or Basic selection rule, or an audience.

When selection rule insights are viewed, the Insights Window displays a configurable dashboard containing chart and/or count results widgets, against which the selection rule is applied as a filter.



When audience insights are viewed, the Insights Window displays results associated with any existing audience instances, as well as a configurable dashboard containing chart and/or count results widgets, against which audience instance results are applied as a filter.



User story reference: 8047, 8048, 8053, 9559

PostgreSQL Operational Databases

RPI v6.0 allows the product's operational databases to be hosted in a PostgreSQL database.

User story reference: 8836

3 Plugins

Email Service Providers (ESPs)

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

Salesforce Marketing Cloud (SFMC) – Save Data Extensions to Subfolder

Data extensions generated by RPI are now persisted in a specified subfolder at SFMC.

User story reference: 9451

SendGrid – Handle API Rate Limit

A new SendGrid channel setting facilitates specification of the number of retries to be attempted in the event of an API rate limit being hit.

User story reference: 8731

SparkPost Enhancements

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

- Device Data: a new Device Opened state is available at SparkPost email offer results. The state is broken into a series of sub-states, which provide visibility as to the devices on which an email was viewed (user story reference 4709).
- SMTP X-Headers: these are now added to SparkPost email offer content (user story reference 6573)

Cheetah Digital – BCC Support

Blind carbon copy (BCC) functionality has been added at the RPI Cheetah Digital email plugin.

User story reference: 8934

Database Providers

Yellowbrick

Support has been added for the Yellowbrick data warehouse.

User story reference: 7728

Oracle

A new system configuration setting has been made available to control an Oracle database's optimizer_dynamic_sampling setting, when RPI executes queries at the same.

User story reference 6218

Google BigQuery

Support has been added for the following in the context of RPI's Google BigQuery data warehouse plugin:

- Nested complex data types (user story reference: 8662)
- Views (user story reference: 8440)

SMS Providers

Cheetah Digital SMS

The number of retries made in the context of Cheetah Digital SMS channel execution is now limited in accordance with a channel configuration setting.

User story reference: 7913

Social Providers

Facebook Enhancements

The following changes have been made and new features introduced in the context of RPI's Facebook plugins:

- The existing Facebook channels have been consolidated into a Facebook social channel and a Facebook Audience data onboarding channel. The same has been carried out at the Offer Designer (user story reference: 8728, 8756).
- Support for Facebook Lookalike Audiences has been added (user story reference: 8528).
- The RPI Facebook plugins are now compatible with v5.0 of the Facebook Graph (user story reference: 9205).
- Facebook Marketing:
    - Enhancements have been made to the placement of Facebook Marketing ads (user story reference: 8663).
    - The ability to specify whether a Facebook Marketing add falls within a special category has been added (user story reference: 8717).
- Facebook Custom Audience:
    - The ability to delete records from an existing custom audience has been added (user story reference: 8527).

Twitter – Expose OAuth Credentials

Both Twitter and Twitter Direct channels now support the provision of custom app OAuth credentials.

User story reference: 8768, 8769

Push Notification Providers

Consolidation

Existing push and push direct Offer Designer interfaces have been revisited, with a view to genericizing the same. Provider-specific properties have instead been exposed at the channel level.

User story reference: 9227, 9228, 9417

Google Firebase

Support has been added for Google Firebase broadcast and direct push notifications.

User story reference: 6752, 9126

External Content Providers (ECPs)

Cloudinary

Support for the Cloudinary ECP has been added.

User story reference: 8860

Cache Providers

Support has been added for the following cache providers:

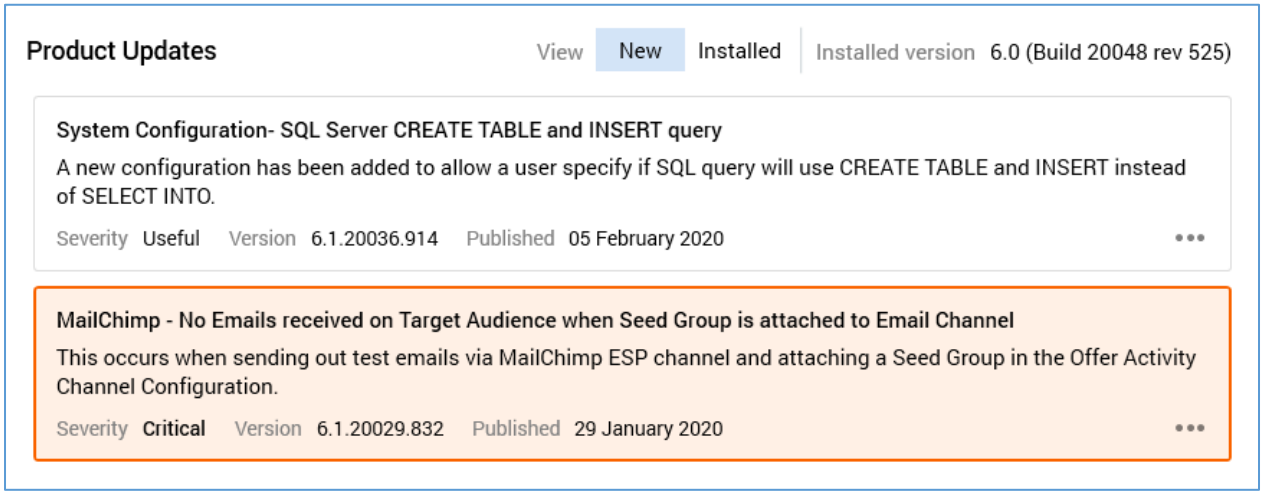
- Couchbase (user story reference: 7926)
- MongoDB (user story reference: 7925)

4 Other New Features

The following features are also introduced in RPI v6.0:

Product Updates

A new Product Updates dialog has been made available:

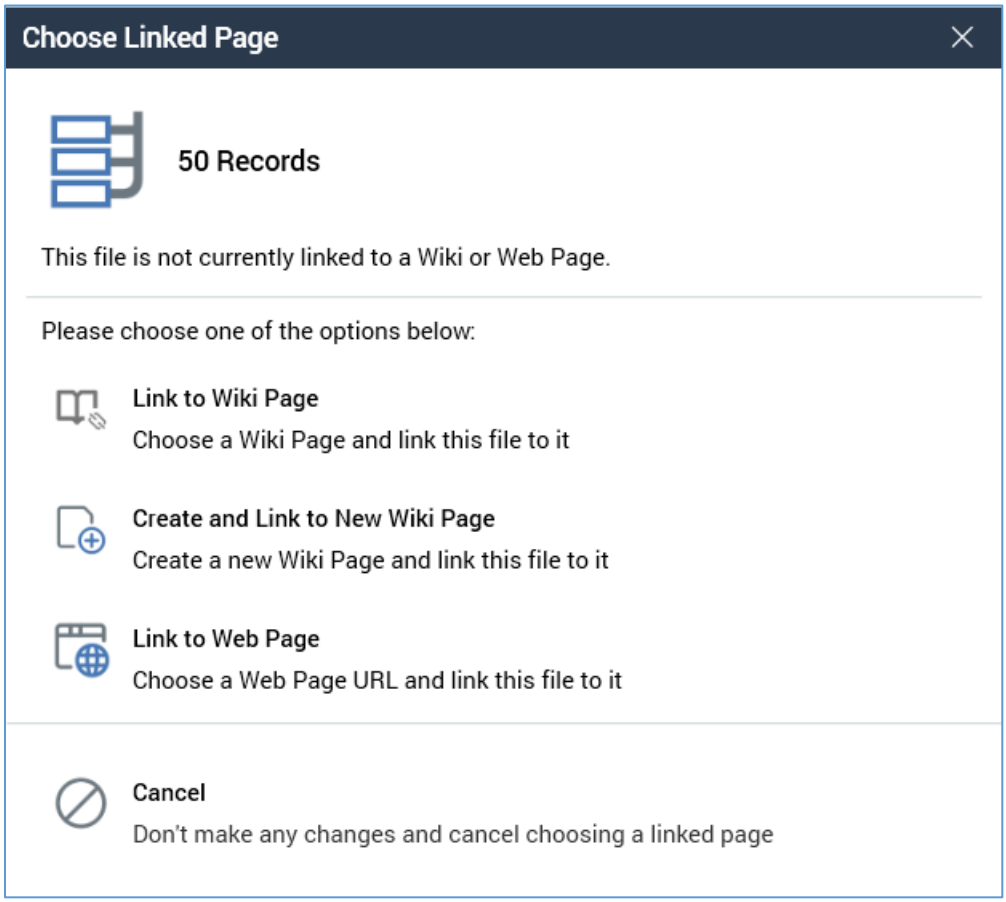


The dialog provides visibility of RPI updates available in versions of the product newer than the currently-installed version. Attention is drawn to the availability of critical or important updates through display of a button on the main toolbar:

User story reference: 8971

File External URL Linkage

The ability to link an RPI file to an external URL has been added. This complements the existing ability to link a file to an RPI Wiki page.



When a file has been linked to an external page in this way, the page in question can be opened in the Mini Wiki Browser.

User story reference: 2283

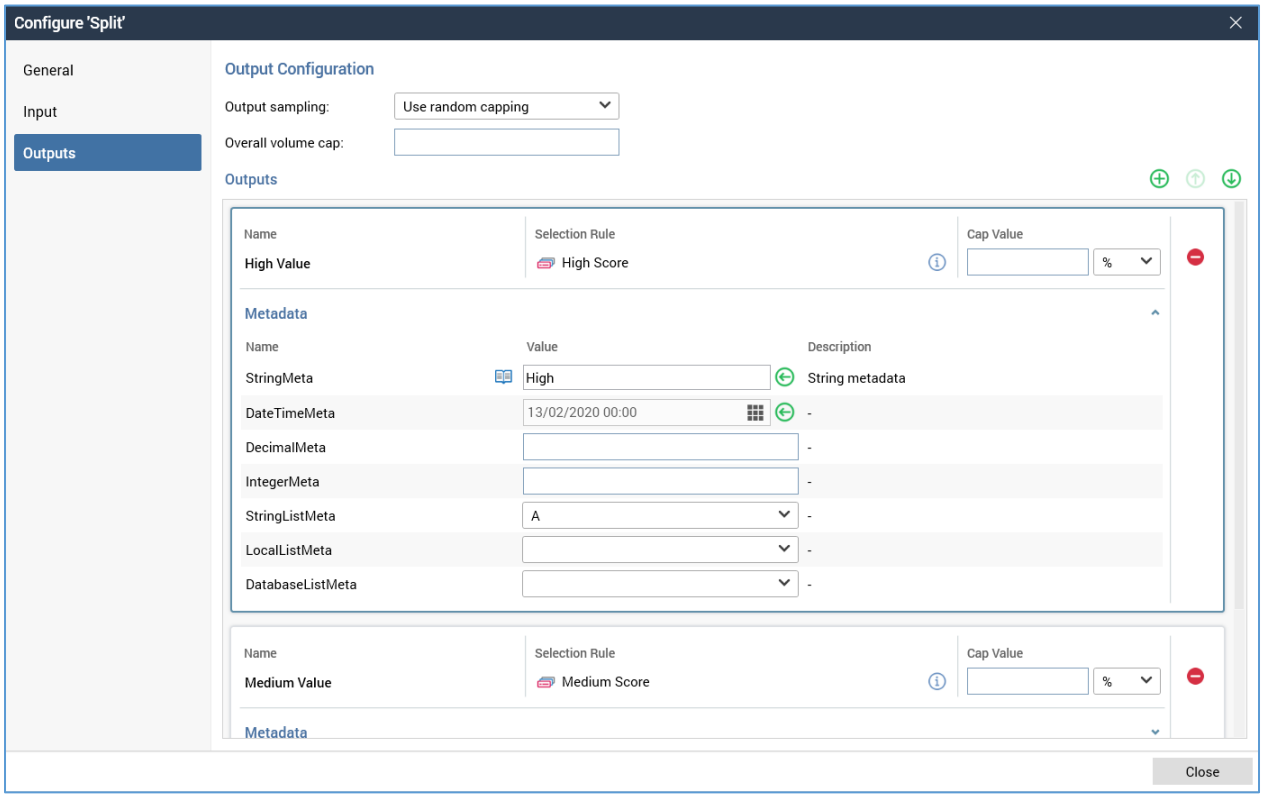
RedPoint Data Management (RPDM) OAPI v2.0 Support

RPI now integrates with version 2.0 of the RPDM Operational API (OAPI).

User story reference: 9148

Audience Block Configuration Improvements

The configuration dialog used to manage Audience Designer blocks has been overhauled, improving in particular the user experience when managing splits within a split block.



User story reference: 9570

Offer Execution Thresholds

A new property, exposed at non-broadcast or subscription group channels, allows the specification of a numerical threshold which, when breached during offer execution, results in the pausing of offer execution, and the triggering of an alert.

User story reference: 9045

Dynamic Asset Enhancements

The following enhancements have been introduced in the context of RPI dynamic assets:

- The ability to determine list asset applicability using a model project (user story reference: 8588).
- The ability to publish a dynamic asset to multiple contexts simultaneously (user story reference: 4314).

Run Fulfillment Logic at Interaction Test Execution

A new audience definition setting facilitates specification of that, on execution of an offer in Test mode, all database queries retrieving attribute values required for fulfillment content will be executed. This will give a more accurate impression of how long execution of the same activity in Production mode might be expected to take.

User story reference: 676

Attribute Reference Code Generation

The ability to generate a reference code from an RPI attribute has been added. This will allow content to be authored externally and personalized using the code thus provided.

User story reference: 4322

Stop and Pause at Outbound Offer Execution

The ability to stop or pause execution at an outbound offer (e.g. an email), without waiting for the whole activity to complete, has been extended to cover all such channels. In addition, when restarting such a paused activity, any individuals contacted previously by the offer will not be targeted again.

User story reference: 7186

Apply Pre-Decision Plugin at Cache and Event Endpoints

The ability to apply logic from a pre-decision plugin has been added at RPI Realtime's Cache and Event endpoints.

User story reference: 8856

Outbound Delivery Channel Negative States

The ability to specify a delivery state at an outbound delivery channel as a 'negative state' (i.e. the 'opposite' of another state – e.g. Not Opened vs. Opened) has been added.

User story reference: 8829

File Information Dialog Offer Preview

The ability to invoke from a context menu at an offer a Preview option, which displays a preview of the offer's content in the File Information Dialog, been added.

User story reference: 9561

Additional NoSQL Supported Contexts

Support for execution in a NoSQL context has been added at the following:

- Analysis panels (user story reference: 7704)
- Chart widget (user story reference: 8938)
- Model projects (user story reference: 8842)

SQL Server CREATE TABLE AND INSERT Query

A new configuration settings allows specification that SQL Server queries are to use the CREATE TABLE AND INSERT syntax, rather than SELECT INTO.

User story reference: 10021

Email Channels – Enable Trace Support

The ability to write HTTP request and reply trace details to the Server Log has been added at all RPI-supported ESPs.

User story reference: 8735

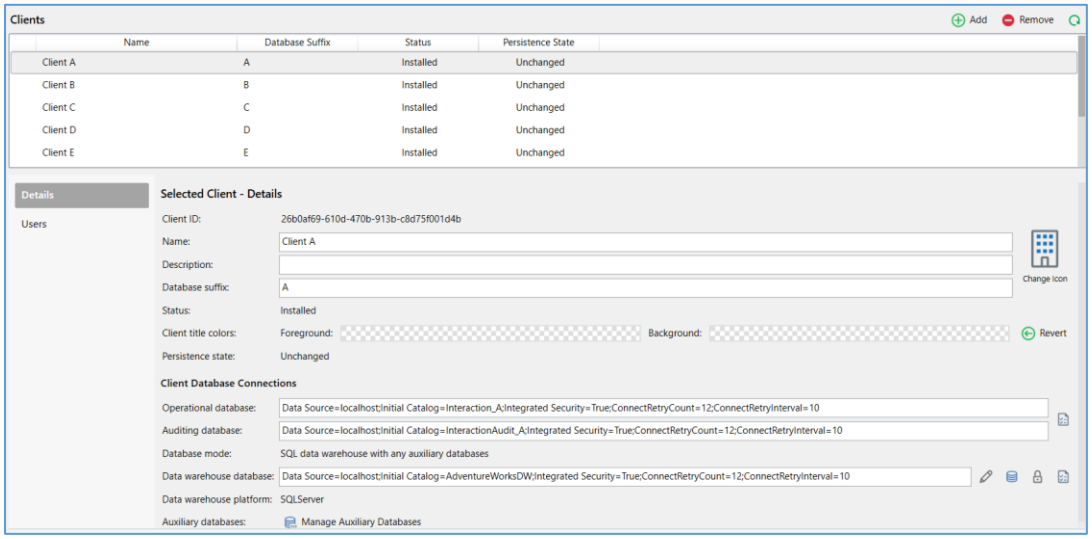
Netezza Data Project Distribution Key Support

Support for Netezza distribution keys has been added at the Data Project Designer.

User story reference: 8463

Server Workbench Clients UI Refresh

The Server Workbench Clients UI has been refreshed to improve the user experience.



User story reference: 9991

Plugin Web Application Configuration Settings

Configuration of RPI Plugin web applications (e.g. the SendGrid Callback Service), which used to be effected by updating individual configuration files, is now managed using a series of cluster-level system configuration settings.

User story reference: 10026

Amazon RDS SQL Operational Databases – Integrated Security Support

Integrated security is now supported when installing RPI operational databases in Amazon RDS SQL.

User story reference: 6617

Install Operational Databases on Google Cloud SQL

RPI operational databases can now be installed in Google Cloud SQL.

User story reference: 8696

SSMO Retirement

The use of Microsoft SQL Server Management Objects during RPI installation has been deprecated.

User story reference: 8954

5 Upgrade Considerations

The following should be borne in mind when upgrading to RPI v6.0:

- **IMPORTANT**

  Prior to upgrading to RPI v6.0 from a previous version, please follow these steps:

  - Open a Command Prompt (cmd.exe) with Admin privileges.
  - Navigate to ..\DeploymentFiles\NodeManager v6 Upgrade
  - Run the utility, using the correct file path for the deployment files:

    ```
    ServerWorkbenchConsole.exe -sourcerootfolder "<Deployment Files Path>" -
    nodemanagerserver <RPI Server>
    ```

    Please do not append a trailing backslash character to the deployment files path.

  - The utility defaults to using Node Manager port 8180. If you are using a different port, please specify using the -nodemanagerport command line argument.
  - The utility will confirm the settings and ask you to type 'ok'.
  - The utility then performs a pre-upgrade on all installed Node Managers.
  - Manually restart the Node Manager service.
  - Run the upgrade as usual.

- When upgrading to RPI v6.0 from a previous version, a warning will be raised when any of the deprecated functionality listed above is found to be in use, advising that the functionality will no longer be available after upgrade (user story reference: 8932)
- RPI now requires that v4.8 of the Microsoft .NET framework be installed. Please ensure that all environments in which RPI is installed are at this version before upgrading to v6.0.
- Existing Facebook channels will be migrated to their consolidated equivalents, with no action required from users.

  No user action is needed at upgrade when an offer supports a single Facebook delivery method. For an offer that supports multiple Facebook delivery methods, to ensure correct migration to consolidated Facebook offers, please save copies of the offer and re-configure to include only one Facebook delivery method per file prior to upgrade.

- Existing push notification channels will need to be reconfigured manually to incorporate the changes described in the Push Notification Providers - Consolidation section above.

  Please see Appendix A for further detail.

- Invocation of deprecated or renamed functionality at a Tasks widget will result in a warning that the task no longer exists. Please remove or reconfigure any such tasks accordingly.

- Instructions as to the upgrade of RPI plugin web applications (e.g. the SendGrid Callback Service) can be found in Appendix B.

6 Appendix A - Push Notification Changes

1. The following fields have been removed from existing Offer Designers and moved to channel configuration. Existing values will **not** be transferred and the equivalent new properties in existing channels will assume default values:

    - Send message as entire JSON payload
    - Notification lifetime
    - Tags (applicable to broadcast channels only)

2. The following fields will be moved from specific existing Offer Designers and moved to their respective channel configuration interfaces. Existing values will **not** be transferred and the equivalent new properties in existing channel configurations will assume default values:

    - Airship Push Direct channel
        - Targeted devices
            - All
            - iOS
            - Android
            - Web
            - Windows
            - Amazon
    - Azure Notification channel
        - Also use registered tags
        - Registered tags
    - Twilio Notify channel
        - High priority
    - Twilio Notify Direct channel
        - High priority

3. Multiple former push notification delivery methods in a single offer in existing execution workflows will be merged into one push notification offer. The values of the first push notification delivery method will be preserved and the rest will be discarded.

    It is recommended that any offers supporting multiple push notification delivery methods be split into separate offers, each containing a single delivery method, prior to upgrade.

7 Appendix B – Plugin Web Apps Upgrade

The following sections describe the steps to be undertaken when upgrading the RPI plugin web applications.

dotDigital EDC Service

To upgrade the dotdigital EDC service at an existing RPI installation, please follow these steps:

1. Back up the dotdigital EDC service web.config file.

2. Stop the dotdigital EDC service in IIS Manager.

3. Copy the contents of DeploymentFiles\Plugin Services\DotMailerEdcService into the dotdigital EDC service website's root folder.

4. In the App_Config folder, copy the ConnectionStrings.Example.config and paste it into the same location. Rename the file to ConnectionStrings.config.

5. In the ConnectionStrings.config file, modify the two entries within the '<connectionString>' tags to point to the database server where the core RPI operations database is housed, by replacing the 'localhost' string in the entries below with the name of the operations database server. If the RPI operational database is on the same machine as the RPI application server, then this does not need to be changed.

```
<add name="LoggingDatabase" connectionString="Data Source=.;Initial
Catalog=Pulse_Logging;Integrated Security=True;Connect
Timeout=90;ConnectRetryCount=12;ConnectRetryInterval=10"
providerName="System.Data.SqlClient" />

  <add name="OperationalDatabase" connectionString="Data Source=.;Initial
Catalog=Pulse;Integrated Security=True;Connect
Timeout=90;ConnectRetryCount=12;ConnectRetryInterval=10"
providerName="System.Data.SqlClient" />
```

6. If the dotdigital EDC service was previously configured with a custom folder location at the ExternalDynamicContentSharedFolder web.config setting, copy its value and paste it into the DotMailerExternalDynamicContentSharedFolderPath configuration setting in Server Workbench, and save the changes.

7. Start the DotMailerEdcService application in IIS manager.

Dyn Unsubscribe Service

To upgrade the Dyn Unsubscribe service at an existing RPI installation, please follow these steps:

1. Backup the Dyn Unsubscribe service web.config file.

2. Stop the Dyn Unsubscribe service in IIS Manager.

3. Copy the contents of DeploymentFiles\Plugin Services\ DynUnsubscribe into the Dyn Unsubscribe service website's root folder.

4. In the App_Config folder, copy the ConnectionStrings.Example.config and paste it into the same location. Rename the file to ConnectionStrings.config.

5. In the ConnectionStrings.config file, modify the two entries within the '<connectionString>' tags to point to the database server where the core RPI operations database is housed, by replacing the 'localhost' string in the entries below with the name of the operations database server. If the RPI operational database is on the same machine as the RPI application server, then this does not need to be changed:

```
<add name="LoggingDatabase" connectionString="Data Source=.;Initial
Catalog=Pulse_Logging;Integrated Security=True;Connect
Timeout=90;ConnectRetryCount=12;ConnectRetryInterval=10"
providerName="System.Data.SqlClient" />

<add name="OperationalDatabase" connectionString="Data Source=.;Initial
Catalog=Pulse;Integrated Security=True;Connect
Timeout=90;ConnectRetryCount=12;ConnectRetryInterval=10"
providerName="System.Data.SqlClient" />
```

6. If the Dyn Unsubscribe service was previously configured with a custom folder location at the unsubscribeTempFolder web.config setting, copy its value and paste it into the DynUnsubscribeTempFolderPath configuration setting in Server Workbench, and save the changes.

7. Start the DynUnsubscribe application from IIS manager.

Outbound Delivery Callback Service

To upgrade the Outbound Delivery Callback Service at an existing RPI installation, please follow these steps:

1. Backup the Outbound Delivery Callback service web.config file.

2. Stop the Outbound Delivery Callback service in IIS Manager.

3. Copy the contents of DeploymentFiles\Plugin Services\ OutboundDeliveryCallbackService into the Outbound Delivery Callback service website's root folder.

4. In the App_Config folder, copy the ConnectionStrings.Example.config and paste it in the same location. Rename the file to ConnectionStrings.config.

5. In the ConnectionStrings.config file, modify the two entries within the '<connectionString>' tags to point to the database server where the core RPI operations database is housed, by replacing the 'localhost' string in the entries below with the name of the operations database server. If the RPI operational database is on the same machine as the RPI application server, then this does not need to be changed:

```
<add name="LoggingDatabase" connectionString="Data Source=.;Initial
Catalog=Pulse_Logging;Integrated Security=True;Connect
Timeout=90;ConnectRetryCount=12;ConnectRetryInterval=10"
providerName="System.Data.SqlClient" />

<add name="OperationalDatabase" connectionString="Data Source=.;Initial
Catalog=Pulse;Integrated Security=True;Connect
Timeout=90;ConnectRetryCount=12;ConnectRetryInterval=10"
providerName="System.Data.SqlClient" />
```

6. If the Outbound Delivery Callback service was previously configured with a custom folder location at the eventFolderLocation web.config setting, copy its value and paste it into the OutboundDeliveryEventFolderPath configuration setting in Server Workbench, and save the changes.

7. Start the OutboundDeliveryCallbackService application from IIS manager.

SendGrid Callback Service

To upgrade the SendGrid Callback Service at an existing RPI installation, please follow these steps:

1. Backup the SendGrid Callback service web.config file.

2. Stop the SendGrid Callback service in IIS Manager.

3. Copy the contents of DeploymentFiles\Plugin Services\ SendGridCallbackService into the SendGrid Callback service website's root folder.

4. In the App_Config folder, copy the ConnectionStrings.Example.config and paste it in the same location. Rename the file to ConnectionStrings.config.

5. In the ConnectionStrings.config file, modify the two entries within the '<connectionString>' tags to point to the database server where the core RPI operations database is housed, by replacing the 'localhost' string in the entries below with the name of the operations database server. If the RPI operational database is on the same machine as the RPI application server, then this does not need to be changed:

```
<add name="LoggingDatabase" connectionString="Data Source=.;Initial
Catalog=Pulse_Logging;Integrated Security=True;Connect
Timeout=90;ConnectRetryCount=12;ConnectRetryInterval=10"
providerName="System.Data.SqlClient" />

<add name="OperationalDatabase" connectionString="Data Source=.;Initial
Catalog=Pulse;Integrated Security=True;Connect
Timeout=90;ConnectRetryCount=12;ConnectRetryInterval=10"
providerName="System.Data.SqlClient" />
```

6. If the SendGrid Callback service was previously configured with a custom folder location at the emailMetricsFolderLocation web.config setting, copy its value and paste it into the SendGridEmailMetricsFolderPath configuration setting in Server Workbench, and save the changes.

7. Start the SendGridCallbackService application from IIS manager.

SendGrid Web API Callback Service

To upgrade the SendGrid Web API Callback Service at an existing RPI installation, please follow these steps:

1. Backup the SendGrid Web API Callback service web.config and appsettings.json file.

2. Stop the SendGrid Web API Callback service in IIS Manager.

3. Copy the contents of DeploymentFiles\Plugin Services\SendGridCallbackServiceWebAPI into the SendGrid callback service website's root folder.

4. In the App_Config folder, copy the ConnectionStrings.Example.config and paste it in the same location. Rename the file to ConnectionStrings.config.

5. In the ConnectionStrings.config file, modify the two entries within the '<connectionString>' tags to point to the database server where the core RPI operations database is housed, by replacing the 'localhost' string in the entries below with the name of the operations database server. If the RPI operational database is on the same machine as the RPI application server, then this does not need to be changed:

```
<add name="LoggingDatabase" connectionString="Data Source=.;Initial
Catalog=Pulse_Logging;Integrated Security=True;Connect
Timeout=90;ConnectRetryCount=12;ConnectRetryInterval=10"
providerName="System.Data.SqlClient" />

<add name="OperationalDatabase" connectionString="Data Source=.;Initial
Catalog=Pulse;Integrated Security=True;Connect
Timeout=90;ConnectRetryCount=12;ConnectRetryInterval=10"
providerName="System.Data.SqlClient" />
```

6. If SendGrid Web API callback service was previously configured with a custom folder location at the emailMetricsFolderLocation web.config setting, copy the value of the setting and paste it into the SendGridEmailMetricsFolderPath configuration within the Server Workbench.

7. Save the changes.

8. Start the SendGridCallbackServiceWebAPI application from IIS manager.