



Release Notes

Version 6.1



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- The circumstances in which the problem arose
- What error messages you saw (if any);
- The version of the software that you were using.

Pitney Bowes Software Inc.

February 04, 2015

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Introduction

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Purpose

This document describes what has changed in Portrait Dialogue 6.1 compared to its previous *major* release 6.0, including:

- An overview of new features
- A list of known issues
- A list of fixed issues since the last release

Note: This document includes a brief list of release-specific installation considerations, such as supported platforms, languages, and application integration. For a complete step-by-step guide on installing or upgrading Portrait Dialogue, see the following guides:

- Portrait Dialogue Server Installation Guide
- Portrait Dialogue Client Installation Guide
- Portrait Dialogue Upgrade Guide
- Portrait Suite Installation Guide (if installing more than one Portrait product).

Intended audience

The intended audience for this document is:

- System administrators
- Marketing analysts

Related documentation

Document	Location
Portrait Dialogue Installation Guide	Portrait Dialogue media in: \Documentation\ <i><language_code></i> \
Portrait Dialogue Upgrade Guide	Portrait Dialogue media in: \Documentation\ <i><language_code></i> \
Portrait Dialogue Client Installation Guide	Portrait Dialogue media in: \Documentation\ <i><language_code></i> \
Portrait Suite Installation Guide (for multi-product installs)	Portrait Dialogue media in: \Documentation\en-us\

Note: These documents and others can be downloaded from the Pitney Bowes Software website: <http://www.pbinsight.com/support/product-documentation/p/>

Release overview

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Portrait Dialogue

Portrait Dialogue helps you convert customer interactions into a connected two-way dialogue for greater customer engagement. Portrait Dialogue is designed to support business and marketing processes across multiple communication and delivery channels.

Portrait Dialogue can be integrated with existing applications and technologies linking real-time communication information with your front and back office applications. This enables you to build strong relationships with your customers based on information from all sources in your company.

Portrait Dialogue is one of the modules within the Portrait Customer Interaction Suite. Portrait Dialogue is Portrait Software's solution for managing and automating sophisticated multi-channel direct marketing dialogues. It enables you to engage each of your customers with the most relevant communication, via a suite of modular, insight-driven marketing automation modules. As a result you have the opportunity to maximize the value of each and every customer, while improving the efficiency, effectiveness and transparency of your marketing function. Other modules in the suite include: *Portrait Interaction Optimizer*, *Portrait Customer Analytics*, *Portrait Uplift*, *Portrait Optimizer*, and *Portrait Foundation*.

Release highlights

- **Improved throughput and scalability:** a wide set of the most impactful performance enhancements have been introduced, including: splitting operation processing into chunks and running these in parallel, optimizing specific operations for large participant groups and a number of database specific operations. The sum total of these is increased throughput for the overall Dialogue environment with improved use of available system resources.
- **Optimization of specific dialog operations :** A series of the standard PD operation types have been optimized with respect to speed.
- **Oracle specific improvements:** Performance improvements specific to Oracle based installation has been done.
- **SQL Server specific Improvements :** Performance improvements specific to SQL Server based installation has been done.
- **Enhanced support for mobile devices :** End customer web pages and the email designer have been enhanced to better support mobile devices.
- **Enhanced Portrait Suite Integeration :** PD has been enhanced to support selections created in the latest version of Portrait Explorer.
- **Updated platforms :** continued support for the latest third-party platforms including Windows 2012 R2, SQL Server 2014 and Oracle 12 database servers.

Release details

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Chunking and multi-threading

With the success of Portrait Dialogue in attracting larger organizations into its customer journey approach and as established Dialogue customers increase the complexity of their dialog flows with a wide mix of large and small tasks all happening at the same time the underlying Dialogue engine has at times come under extreme stress. Portrait Dialogue 6.1 makes a major change in the Dialogue architecture and introduces two new concepts with regards to operation execution; chunking and multi-threading and the ability to tune them for your particular environment

These concepts address the main limitations to Dialogue's performance and scalability in the following areas:

- **Poor concurrency** Long-running transactions on key tables, especially on dialog participant and message related tables, causes locking and long delays for other activities.
- **Parallelism** Operations can only execute on a single thread – CPU-intensive operations take longer than necessary because they can't be parallelized.

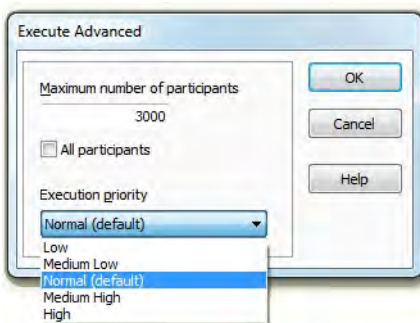
In short, this lets the system divide the execution of an operation into smaller chunks, and to execute several of these chunks in parallel, thereby increasing performance and concurrency and increasing the use of the available system resources.

When a single chunks completes all its work is committed as one database transactions. This means when an operations produces messages, e.g. emails and sms messages, the next step in the process, which is sending the messages can start immediately. Effectively, this means that producing and sending the messages of single operation execution now will go on in parallell. This results in the quicker starting and completion of the email delivery.

Execution priority

As part of adding support for chunking and multi-threading, the option to prioritize operation execution has also been added. All chunks from operations with higher priority will be executed before chunks from operations with lower priority. This happens across all dialogs.

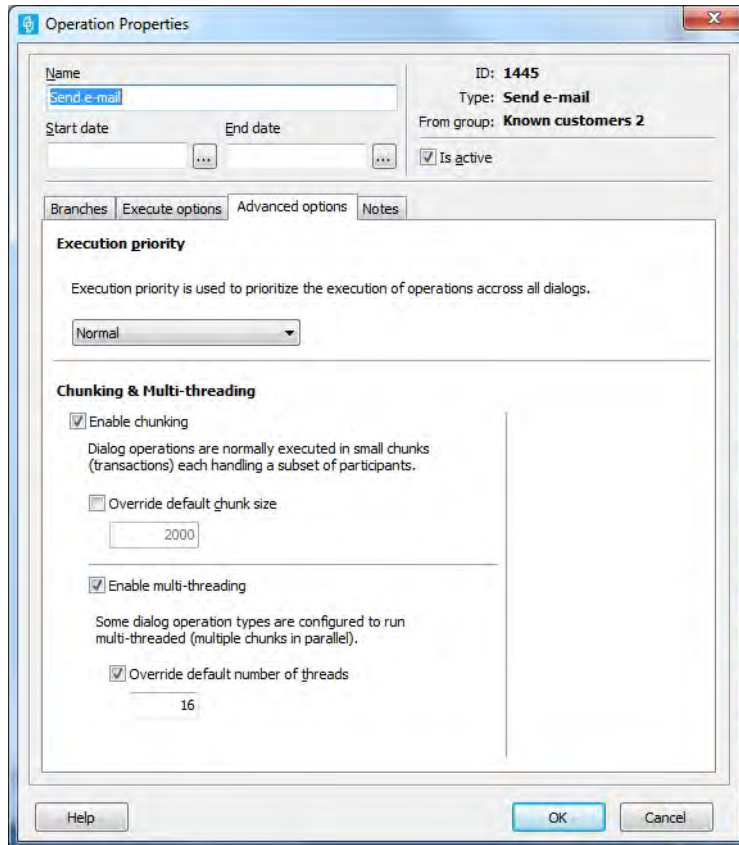
The execution priority is configurable for each dialog operation, and can also be set when executing an operation manually using the Advanced Execute option



An example, priority can be used when one wants to assure that specific communication operations gets high priority. This may be operations that sends "confirmation emails" or "forgotten password SMS messages".

Configuring chunking and multi-threading

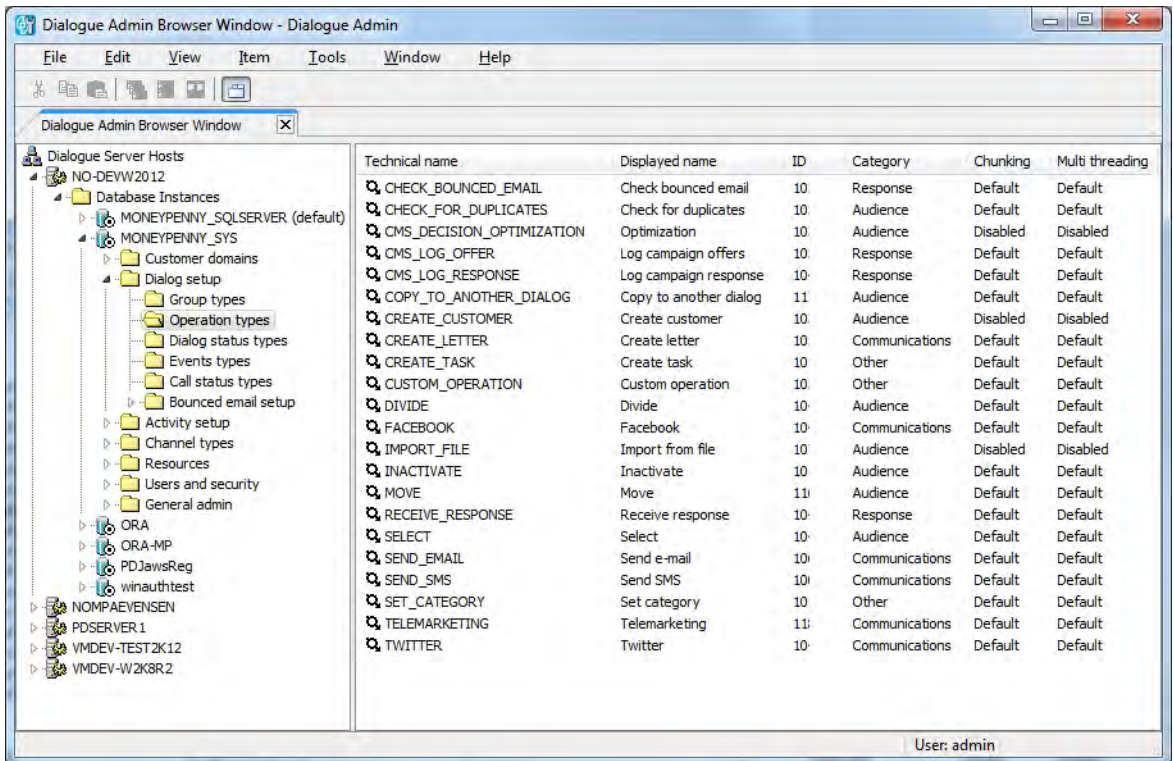
Chunking and multi-threading can be configured on several levels. There are system wide parameters, operation type level settings in Dialogue Admin, and finally settings can be overridden on a specific operation in a dialog (see image below).



The most important configuration settings are the

- **Enable chunking**, and if enabled the **chunk size**
- **Enable multi-threading** (requires chunking), and if enabled the **number of threads**
- **Execution priority**

Chunking and multi-threading cannot be used with all operation and branch types. All standard (pre-installed) operation and branch types is configured accordingly in Dialogue Admin.



Some branch plug-ins also takes the decision to run without chunking and multi-threading based on the configuration of the specific operation in a dialog. This let's the branch force disabling of chunking and / or multi-threading at the time of execution. The disablement then applies to the whole operations (all branches). An example of this, is the **Create Letter** operarion which disabled chunking and multi-treading based on what type of message it produces.

Preparing plug-ins for chunking and multi-threading

When writing custom branch plug-ins, there are two questions that need to be answered before chunking and / or multi-threading can be enabled:

- Can the plug-in execution be chunked, that is, can the execution of the operation be divided into smaller parts, or does it need to run in one go?
- If the operation can be chunked, can it support multi-threading, that is, can the different execution chunks run in parallel?

Some operation plug-ins needs to do some initialization to share information between chunks. To support this, the plug-in framework has been extended with new methods which plug-ins can optionally implement. To see an example, look at the standard **MH Create SMS** branch plug-in.

When upgrading to PD 6.1, existing customnized operation will continue working. However chunking and multi-threading will be disabled for an existing customized operation type. One will manually have to enabled chunking and multi-threading for customized operation type in Dialogue Admin. The exception to this is, if some of standard operations in PD has been changed and customized, e.g. adding a branch type to the **Select** or **Divide** operations. In such cases, one need to give such custominzations special

attention as part of upgrading to decide if chunking and multi-threading can be supported by the custom plug-ins.

Note: The default configuration of chunking and multi-threading were decided on based on the performance testing. As a result, the configuration for SQL Server and Oracle installations are slightly different.

Performance testing results

A wide range performance testing results has been carried out at Pitney Bowes Test Lab in Henley. The main of the tests were to analyze the effects of chunking and multi-threading. A separate **Performance Testing Report for PD 6.1** is available. Below we are showing some of the testing scenarios and their result.

Scenario 1: Send email operation on SQL Server

Below results from running the Send Email operation in a single dialog on SQL Server. The tests were run with various chunk size and number of threads, and also tests were run with chunking and multi-threading swithced off. In addition tests were run on version 6.0 SP1 as a comparison.

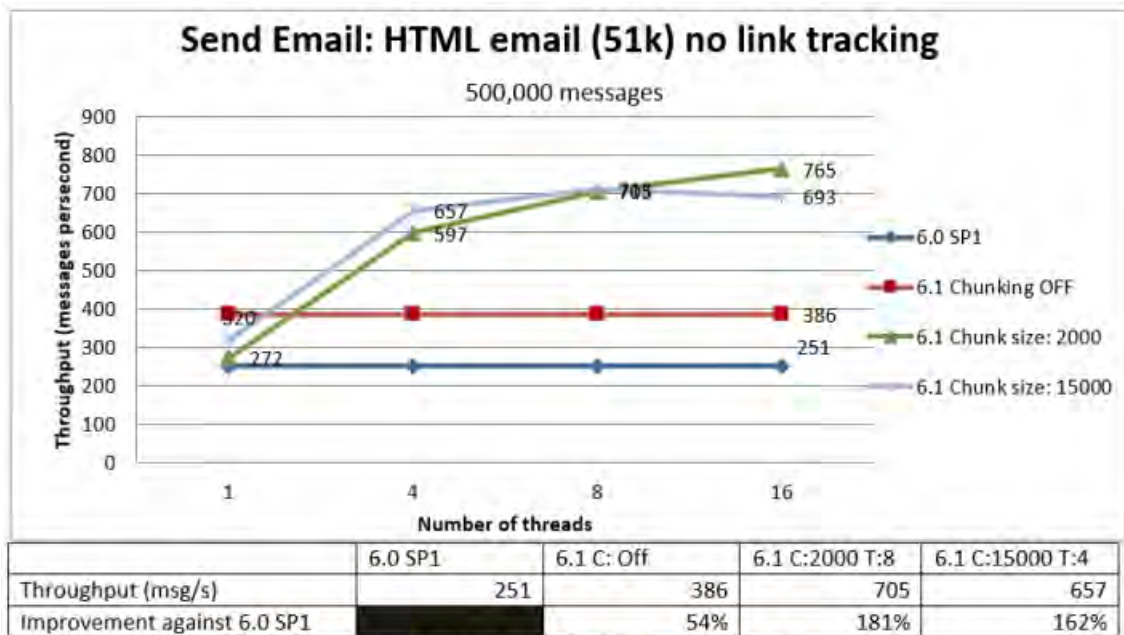
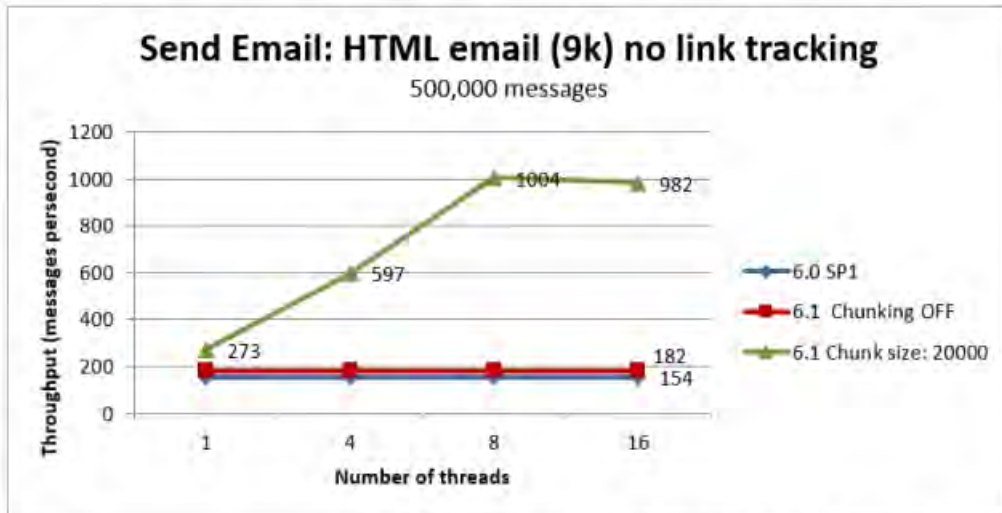


Figure 5: Throughput of Send Email operation (HTML email 51k) on SQL

Scenario 2: Send email operation on Oracle

Below results from running the Send Email operation in a single dialog on Oracle database platform. The tests were run with various number of threads, and also tests were run with chunking and multi-threading swithced off. In addition tests were run on version 6.0 SP1 as a comparison.



	6.0 SP1	6.1 C:OFF	6.1 C:20000 T:8
Throughput (msg/s)	154	182	1004
Improvement against 6.0 SP1		18%	552%

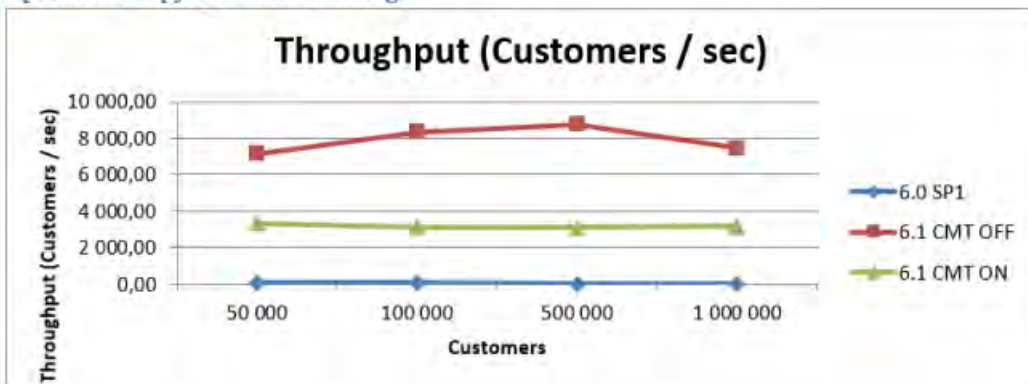
Figure 9: Throughput of Send Email operation (HTML email 9k) on ORACLE

Note: In scenario 1 and 2 we can see a clear gain in performance as a result of chunking and multi-threading. However, some operation types may see a similar gain. In face, some operations may have slightly decrease in performance, but the big upside is the increased concurrency. See scenario 3 below.

Scenario 3: Copy to another dialog operation

Below results from running the Copy to Another Dialog operation. As the charts show, the operation type itself has been significantly optimized from version 6.0 to version 6.1. In addition we can see that the actual operation runs faster with chunking and multi-threading switched off. However, the upside to run this, and other similar operation types, with chunking and multi-threading is to avoid long running transactions that causes locking and reduces overall concurrency and performance.

Operation: Copy To Another Dialog



Scenario 4: Generation and sending email in a stressed environment

In this scenario we looked at generation and sending of 500,000 emails of Message type HTML 53k with link and merging. We had four other dialogs running to stress the system. These background dialogs had various operations including Send Email, Select, Divide, Copy to Another Dialog and more.

Below is the results from monitoring how many emails being sent as a function of time. At time 0 the Send Email operation in the dialog is kicked off. In version 6.0 the actual sending of the emails cannot start before the generation has completed, while in version 6.1 the actual sending starts as the first chunk completed its generation.



Optimization of specific dialog operations

The following standard dialog operations have been optimized with respect to large scale participant batch performance. In many cases bulk database queries are now used rather than one-by-one participant level ones



Copy to another dialogue

The operation type used to insert a participant in a another dialog has been optimized using database bulk inserts.



Divide by random

The branch type "Divide using random" has been optimized using database random functionality.



Set category

The operation type used to set and remove categories has been optimized using database bulk inserts.



Log offer

The operation type used to log campaign offers from a dialogue has been optimized. The optimization is based on database bulk inserts, as opposed to one-by-one inserts as it traditionally used.



Log response

The operation type used to log campaign responses from a dialogue has been optimized. The optimization is based on database bulk inserts, as opposed to one-by-one inserts as it traditionally used.



Create letter

The message framework has been optimized with respect to memory usage. The optimization is specially valid for the Create letter operation type.

Oracle specific improvements

Use of temporary tables for message generation

Portrait Dialogue 6.1 introduces the use of temporary database tables during message generation in dialogs for Oracle installations. Previous versions of used this technique only on SQL Server installations. The enablement of temporary tables is configured under upgrade and installation and can also be modified in Dialogue Admin.

Performance tests show a gain of up to more than 100% in speed for message creation when temporary tables are introduced:

Operation	Parti- pants	Chunk size	Thread count	Throughput / hour	Change (%)
Email 9K - Temp tables off	500,000	20,000	8	1,698,113	0
Email 9K - Temp tables on	500,000	20,000	8	3,711,340	118.6

For instructions on how to configure temporary tables when upgrading an Oracle based installation, refer to the upgrade documentation.

Removal of triggers

Prior to PD 6.1, triggers were used to insert sequence values on Oracle. Inline calls to Oracle sequence are now used and triggers have been omitted. This behavior has been changed in 6.1 to improve performance.

Performance test has shown that the removal of these triggers may improve performance up to 40% for some dialog operation types. For example, the following improvements were seen:

- Create email operations: up to 16 %
- Select operation: up to 40 %

SQL Server specific improvements

In some cases, Portrait Dialogue now uses *Forward Only* cursor type when accessing server side data sets on SQL Server. This cursor type is less DB resource requiring than *Key Set* cursor type used in previous PD releases.

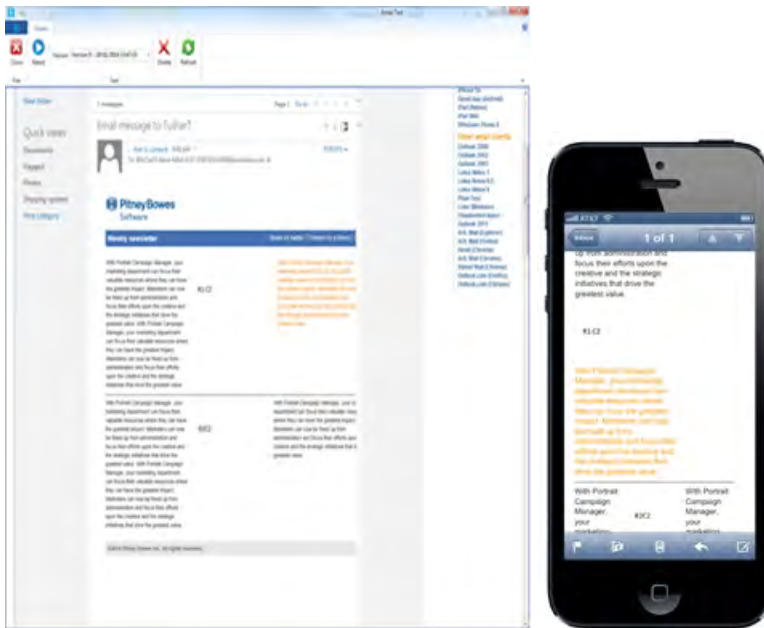
Dialog operations that loop through customers, and that are not using *chunking*, were identified to benefit from this change. Among the standard dialog operations, the “Create letter” doing an “Export to file (all-in-one)” is the most important. A performance gain of approx. 600% was measured.

Enhanced support for mobile devices in emails

Portrait Dialogue 6.1 comes with several enhancements to better support mobile devices through responsive design for email.

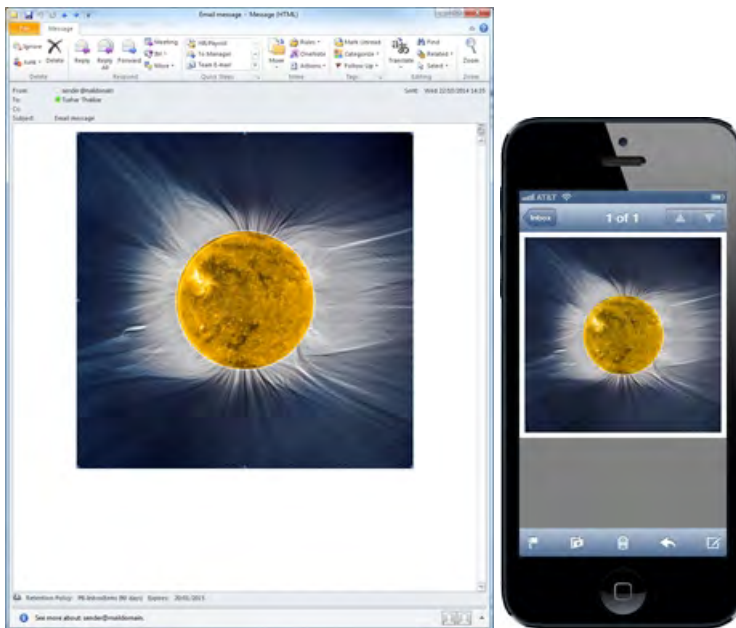
Fluid Container

In Emarketing emails, **Container** item types have been enhanced with an option for fluid rendering. This means that coloumns can automatically be stacked on smaller screens, while still display side-by-side on larger screens.



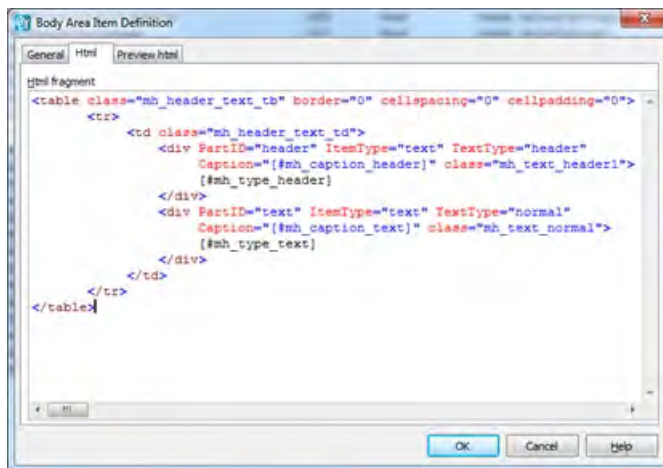
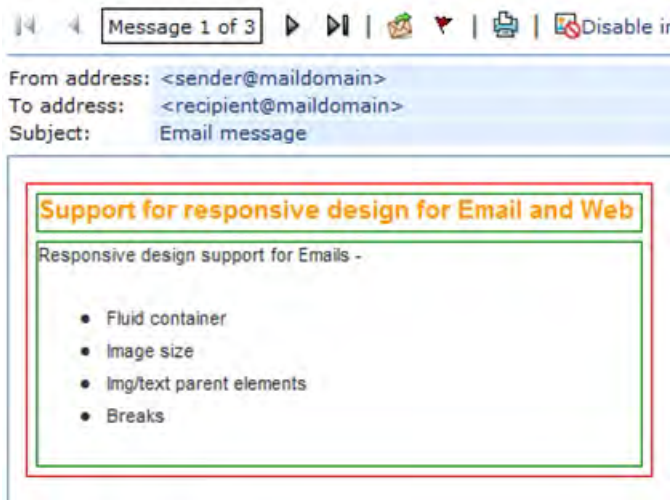
Calculation of image size

In the Emarketing emails, the image element's width and height attributes were automatically calculated and set in previous versions. However, in many email designs these attributes should be left blank for best display on various screen sizes. A master templates options has now been introduced to control whether this attributes are calculated and set automatically.



Parent element of composite items

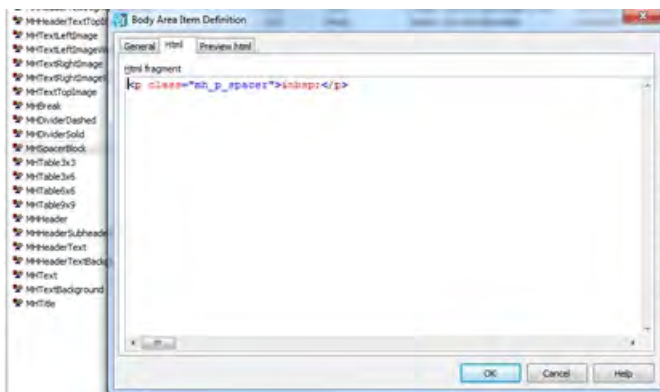
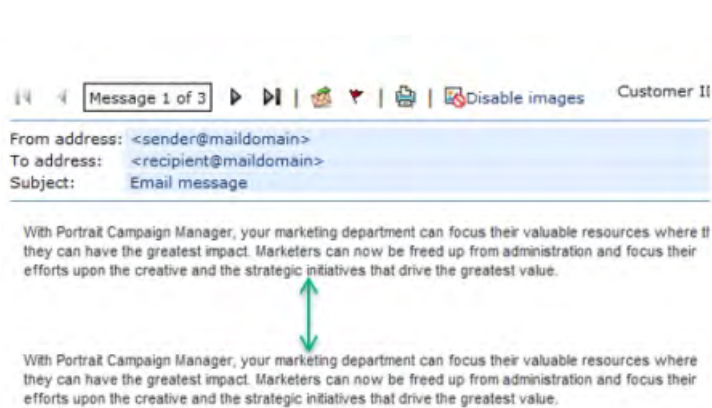
In the Emarketing emails, composite items are now wrapped in parent HTML table so that a CSS class can be used to style the whole element. An example is the **Header and text** body area item type:



The red border in the first image above is an example on what can be controlled by the new CSS classes **mh_header_text_tb** and **mh_header_text_td**.

Space block

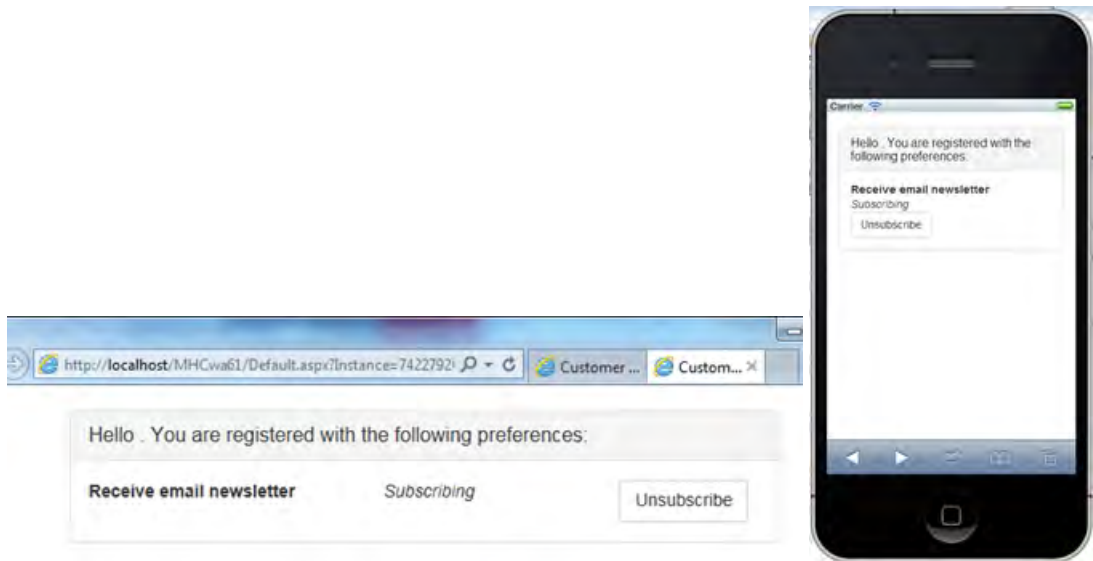
A new static item type has been introduced for Emarketing emails. This new item is called **Spacer** and makes it easier to control the spacing between to items using CSS.



Enhanced support for mobile devices on web pages

Portrait Dialogue 6.1 comes with several enhancements to better support mobile on web pages displayed to the end-customer. These improvements are in the HTML rendering of Customer Web Access (CWA) web application and aims for better display on various screen sizes.

Subscribe / Unsubscribe pages



Customer Profile page

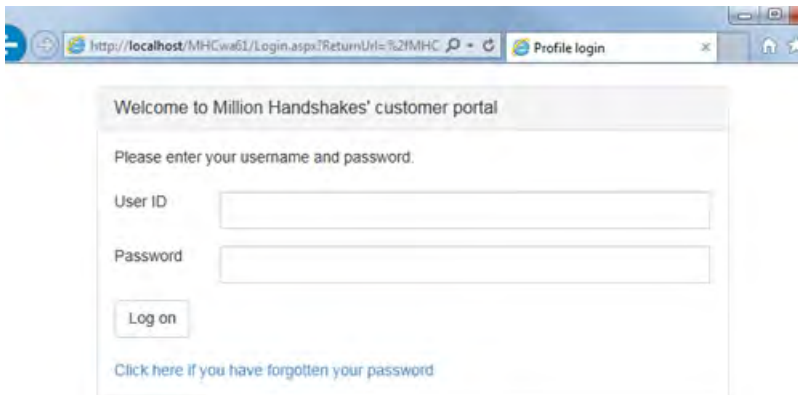
The screenshot shows a web browser displaying a "Customer Profile page". The page is divided into several sections:

- Contact:**
 - Fornavn: Tushart
 - Fødselsdato: dd/mm/yyyy
 - Marital Status: Single
 - Last Modified: 31/10/2013 16:10:20
- Company:**
 - Company Name: BUM YANG FOOD CO., LTD
 - Homepage: www.pb.com
 - Edit button
- Categories:**
 - Simple categories:**
 - BR Simple 1
 - BR Simple 2
 - BR Simple 3
 - Value categories:**
 - Jeg ønsker å motta nyhetsbrev
 - Ja
 - Nei
 - Scoring categories:**
 - BR Scoring 1: 1
 - BR Scoring 2: 2
 - BR Scoring 3: 3
- Update button**



Logon Pages

Logon pages includes basic logon page and also forgotten password page.





Customization and Branding

The web pages in the above sections can be customized by editing the **Profile.css** file. The new style rendering is based on the design library **Bootstrap**. The Bootstrap library is open source HTML, CSS and JavaScript front-end framework. It eases the process of creating responsive, fluid and "mobile first" web pages.



In principle, customization works similarly as in previous versions, however the css classes has changes. This means that for installations having an existing customization of these web pages, the customization has to be reviewed as part of an upgrade. The documentation (en_pd_configuring_cwa.pdf) for configuraing the CWA application has been updated.

Questionnaire Improvements

Note: The rendering of questionnaires has not yet been enhanced similarly to the above examples in this version.

In Portrait Dialogue 6.1 it is possible to use the questionnaire style to control the **DOCTYPE** property of the HTML. This allows for more use of more modern CSS and HTML.

```
HTML_source
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
</head>
<body>
<h1>This is using HTML 5 doctype!!!</h1>
<br>
#MHQUESTIONNAIRE
</body>
</html>
```

A property has been added to both both flow script (server side) and client side scripting in questionnaire. This property let you check whether the questionnaire currently being displayed on a mobile device, or not.

- In flow script: *boolean* **IsMobileDevice**
- In client side script: *boolean* **MHIsMobileDevice**

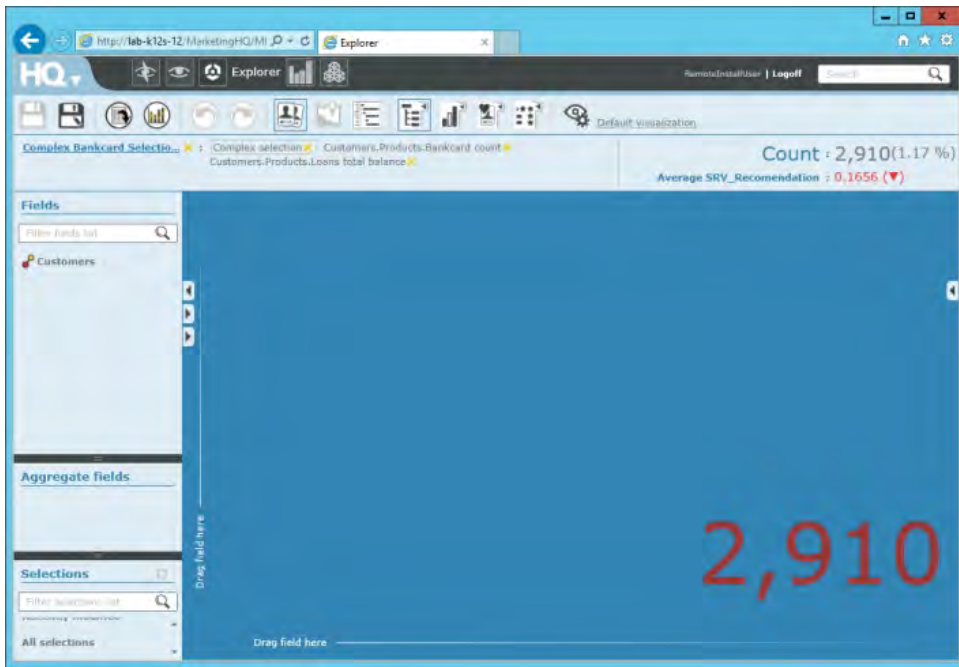
Below is an example on how you can use this property in flow script. In the example, a question is hidden if the respondent is using a mobile device - to make questionnaire a bit shorter on a small device.



Enhanced Explorer Integration

The previous version of Portrait Explorer (v4.0) allowed selections and lists created within Portrait Explorer to target communications in Portrait Dialogue. These were restricted to only analyzing 1:1 customer data (1 record per customer). In this release, broader range of selections and lists – those using 1:many customer data and those using transactional aggregates - can be created in Portrait Explorer 5.0 and consumed in Portrait Dialogue. To share logical view of customer data in all Portrait Suite modules, a single publishing tool - CustomerMetadataTool - is provided in this release.

Below is screenshots showing the the same selection in Explorer and Visual Dialogue. The selection is displayed as a normal selection in Visual Dialogue, except it is read only as it can only be edited in Explorer.



The screenshot shows a software application window titled 'Complex Bankcard Selection (read only) (default@LAB-K12S-12) - Visual Dialogue'. The window has a menu bar with 'Home', 'Create', 'View', 'Web', and 'Design'. Below the menu bar is a toolbar with various icons for navigation, selection, and editing. The main area is divided into several sections. At the top, there is a 'Selection Tools' section with a 'Selection expression' field containing the following text:


```
InTheLast(DateOfBirth, 50, "Years") AND Income > 50000 AND NOT ComplaintIndicator
AND AttritionLikelihood > 0.01
AND Products.Bankcard_Count >= 2 AND Products.Bankcard_Count < 3
AND Products.Loans_TotalBalance >= 0 AND Products.Loans_TotalBalance < 5000
```

 Below the selection expression is an 'Information' dialog box with a blue header and a white body. It contains the text 'Selection contains 2910 customers' and an 'OK' button. At the bottom of the window, there is a table titled 'Sample of 25 customers in selection'. The table has the following columns: 'mh_customer_id', 'CustomerID', 'FirstName', 'LastName', 'EmailAddress', 'Branch', 'AddressLine1', 'AddressLine2', 'HomePhoneNumber', 'WorkPhoneNumber', and 'MobilePhoneNumber'. The table contains 25 rows of customer data.

mh_customer_id	CustomerID	FirstName	LastName	EmailAddress	Branch	AddressLine1	AddressLine2	HomePhoneNumber	WorkPhoneNumber	MobilePhoneNumber
59	59	Mariah	Gonzalez	Mariah.Gonzalez@gmail.com	0017	701 Cozy Pike	Terre Haute	716 300 9871	716 300 9871	716 661 9267
71	71	Kyle	Bell	Kyle.Bell@gmail.com	0040	914 Shady Terrace	Whiteman Air Force Base	302 120 2310	302 120 2310	302 824 2109
250	250	Alexis	Hill	Alexis.Hill@gmail.com	0001	724 Harvest Woods	Wilmar	206 569 7895	206 569 7895	206 288 6669
395	395	Aaron	Murphy	Aaron.Murphy@msdn.com	0001	419 Jagged Swale	Wilmington	956 487 0731	956 487 0731	956 119 7998
403	403	Julian	Moore	Julian.Moore@yicos.com	0090	164 Honey Landing	New Brunswick	303 256 0051	303 256 0051	303 954 5160
458	458	Hayden	Hill	Hayden.Hill@msdn.com	0001	122 Hazy Bank	Vulcan	303 175 9084	303 175 9084	303 626 0618
494	494	Megan	Gomez	M.Gomez@aol.com	0090	277 Dusty Woods	Hyannis	862 396 1331	862 396 1331	862 938 5650
531	531	Kyle	Martin	K.Martin@msdn.com	0001	338 Thunder Delf	Kramer	307 565 7897	307 565 7897	307 310 7436
671	671	Tan	Baker	Tan.Baker@aol.com	0001	329 Red Way	Southington	303 037 4523	303 037 4523	303 073 4924
736	736	Hannah	Harris	H.Harris@yicos.com	0077	42 Cotton View	Brooklyn	312 051 1587	312 051 1587	312 388 8570
781	781	Tamara	Tamara	Tamara@msdn.com	0040	4711 oak Dr	McKeesport	724 384 7364	724 384 7364	724 680 8161

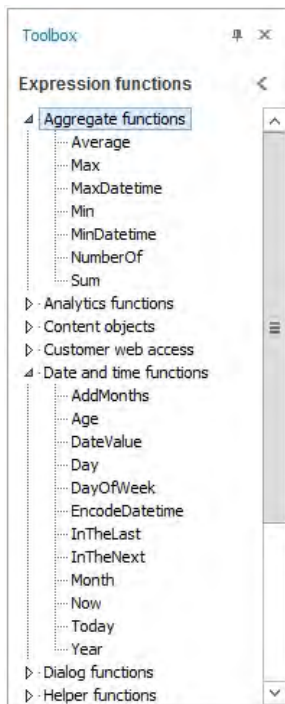
New Expression functions

Minor enhancements

As a result of enhancing the Explorer integration, several new Expression functions have been added to PD:

- Average
- MaxDateTime
- MinDateTime
- InTheLast
- InTheNext

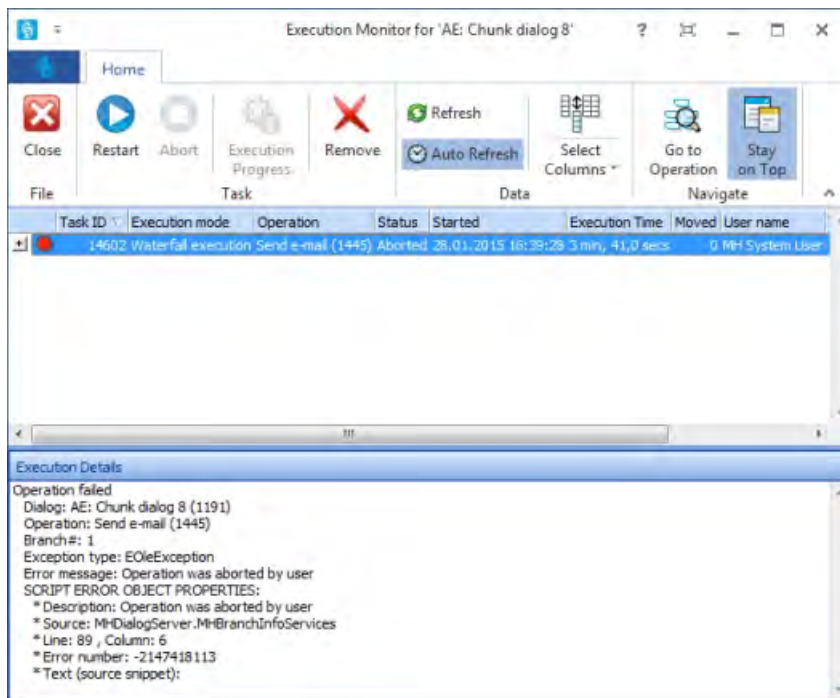
Although, these functions was created for the Explorer integration they are fully usable where ever using PD Expressions.



Minor enhancements

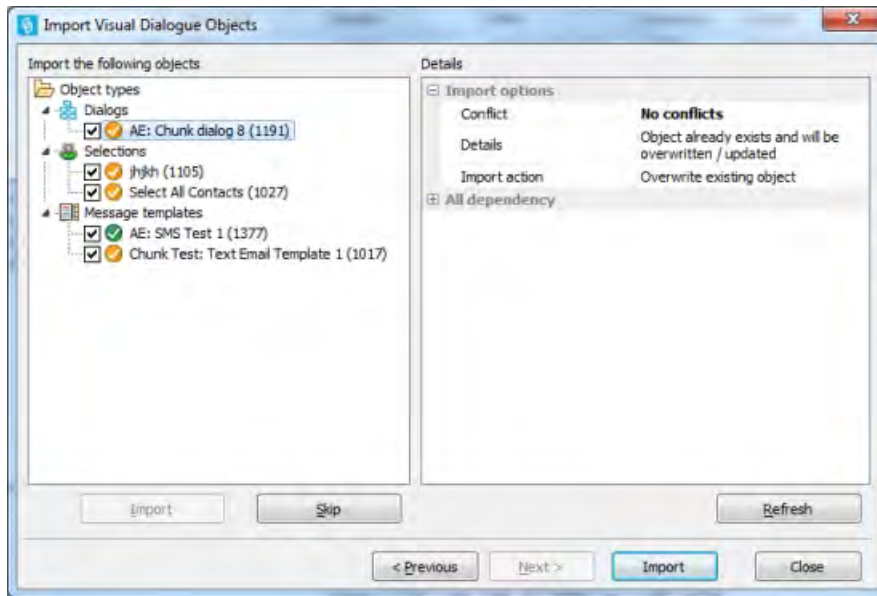
Visual Dialog - General

Some windows in the Visual Dialogue now has a "Stay on top" option to make the window flow on top of the application's main window. A useful example is the Dialog Execution Monitor.



Import Wizards

The import wizards in Dialogue Admin and Visual Dialogue now have a different icon to indicate that an object will be overwritten during import. This applies when importing in complementary mode only. The new icon is shown in the screen shot below where the existing green style icon indicates creating a new object, while the new yellow style icon indicates overwriting an existing object.



Integration with Port25 PowerMTA

Portrait Dialogue 6.1 adds a "Job ID" header to emails to improve integration with Port25 PowerMTA mail server.

Improved handling of DATE only fields in selections

Traditionally PD Selection Designer has surrounded date only fields with the expression function **DateValue(...)** to assure potential time parts are truncated in the SQL generated. However, sometimes such truncation results in poor query performance because indexes are not used, or not used optimally. In version 6.1, a new Dialog Admin parameter has been introduced to control this behavior of Selection Designer. By default, Selection Designer will behave as in previous versions, however it can now be configured to omit adding the **DateValue(...)** functions to truncate date only fields.

Updated platform support

To keep Portrait Dialogue current with the most recent third-party operating systems and other servers, version 6.1 introduces support for:

- SQL Server 2014 as a database platform for both Dialogue system tables and customer data
- Oracle 12 as a database platform for both Dialogue system tables and customer data
- Internet Explorer 11 for end user access to the Dialogue web apps
- Support for Windows Server 2012 R2 as server platform
- Support for Windows 8 for our Windows client applications.

Installation considerations

In this section:

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- **Supported languages**32
- **Portrait suite compatibility**33
- **Upgrading to Portrait Dialogue 6.1**33

Supported platforms

Servers

Server	Software / Config	Software level
All servers	MS Windows Server	<p>Portrait Dialogue can be installed on any of the following:</p> <ul style="list-style-type: none"> Standard and Datacenter Editions of Windows Server 2012 (only available in 64-bit version) IIS 8.0 (configured with IIS 6.0 compatibility mode) Standard and Datacenter Editions of Windows Server 2012 R2 (only available in 64-bit version) IIS 8.5 (configured with IIS 6.0 compatibility mode)
All servers	Various	<ul style="list-style-type: none"> Microsoft .Net Framework v3.5 Microsoft .Net Framework v4.5 All server names should be no longer than 15 characters, or even shorter for languages that require more than one byte storage for each character. For more information, see http://technet.microsoft.com/en-us/library/cc731383.aspx.
Application servers	Various	<ul style="list-style-type: none"> The Portrait Dialogue server runs as a 32-bit application on either 32 or 64-bit operating systems. MS SQL Server feature: Client Tools Connectivity SQL Server Native Client (version 11 or later) Oracle native 32-bit client drivers if you are using an Oracle database Support for distributed transactions (Distributed COM and Network DTC)
Database servers	SQL Server	<ul style="list-style-type: none"> Support for distributed transactions (Distributed COM and Network DTC) 2014 Update 1 Enterprise and Standard Editions (64-bit version) with either case-sensitive or case-insensitive server collations. 2012 SP1 Enterprise and Standard Editions (64-bit version) with either case-sensitive or case-insensitive server collations.

Server	Software / Config	Software level
		<ul style="list-style-type: none"> • Note: The following SQL Server features must be installed: <ul style="list-style-type: none"> • Database Engine Services • Management Tools - Basic • Management Tools - Complete • Client Tools Connectivity • SQL Server feature: Integration Services • SQL Server feature: Reporting Services (optional)
	Oracle	<p>11i R2 or 12c R1 Note: The following restrictions:</p> <ul style="list-style-type: none"> • For full Oracle Unicode support, the Oracle database must be set up with Unicode character set. We recommend NLS_NCHAR_CHARACTERSET=AL16UTF16 and NLS_CHARACTERSET=AL32UTF8. • If you don't plan to use full Unicode support, you can have a non Unicode character set for NLS_CHARACTERSET, for example WE8ISO8859P1. The character set you use must support the « and » characters. This means for instance US7ASCII cannot be used. • If running Portrait HQ in a 64-bit environment and Portrait Dialogue is using an Oracle database, Oracle native 64-bit client drivers must be installed on the Portrait HQ database servers. <p>Note: Portrait Dialogue customer databases can be either Oracle or SQL Server, however Portrait HQ along with other Portrait Suite products require SQL Server 2012 SP1 or 2014.</p> <p>Note: If the database and application server reside on different domains or have firewalls between them, see <i>MTS and DCOM set up</i> in the <i>Portrait Dialogue Server Installation Guide</i>.</p>
SharePoint servers	MS SharePoint (Optional)	<ul style="list-style-type: none"> • SharePoint Server 2013 • SharePoint Foundation 2013
Portrait Dialogue servers	IIS	<ul style="list-style-type: none"> • If running on a 64-bit system, IIS must be set in 32 bit mode.

Supported languages

Server	Software / Config	Software level
		<ul style="list-style-type: none">• The IIS application pool used by Portrait Dialogue web applications must be ASP.NET v4.0 Classic.• Web applications use SOAP to communicate with the web services on the application server. Port 80 is used by default. Communication port can be changed in the web.config file for each application.

Client applications

Client	Software	Software level
Web application client	PD Web Applications	<ul style="list-style-type: none">• Internet Explorer 10 or 11
	Portrait HQ	<ul style="list-style-type: none">• Any browser supporting Microsoft Silverlight v5 applications• Microsoft Expression Blend Preview for Silverlight 5 (optionally required for customizing Guided Dialogue cards)
Windows clients	Various	<ul style="list-style-type: none">• Windows 7 SP1 or 8.1. Both 32 and 64 bit versions are supported.• Internet Explorer 10 or 11

Supported languages

Portrait Dialogue 6.1 is available in English (US) only. The previous version 6.0 also supported French, German, Japanese, Portuguese (Brazilian) and Spanish. These languages may be available in a service release.

The web applications, Message designer and end customer questionnaire delivery are also available in French, German, Japanese, Portuguese (Brazilian), Spanish, Norwegian (Bokmål and Nynorsk), Danish, Finnish and Italian. These languages are shipped purely for the convenience of those customers, and are:

- Not fully tested
- Documented in English only
- For use at your own risk.

Portrait suite compatibility

Portrait Dialogue 6.1 is one product within the Portrait Interaction Suite. It is compatible with the following applications and versions:

- Portrait Foundation 5.0 Update 1
- Portrait Miner 7.0B
- Portrait Uplift 7.0B
- Portrait Interaction Optimizer 5.6
- Portrait HQ 2.1
- Portrait Explorer 5.0

Upgrading to Portrait Dialogue 6.1

Upgrading to version 6.1 will require the following considerations:

- Portrait Dialogue 6.1 is released as a full release as a complete CD image and all software components must be upgraded (reinstalled)
- Oracle customers who plan to start using Portrait HQ or analytical scoring extensions to Portrait Dialogue should install a SQL Server Standard Edition database to host the additional campaign metadata and reports in the Portrait HQ or the real-time rules integration with Portrait Customer Analytics.
- Ensure Silverlight 5 is installed on all client PCs or that these PCs can be upgraded when using the HQ.
- Customers also using Portrait Customer Analytics should upgrade to Portrait Miner 7.0B).
- Oracle 10 is no longer supported, therefore all customers should upgrade to Oracle 11R2 or higher before upgrading to version 6.1.
- SQL Server Native Client 11 is now the supported version to be used on the Portrait Dialogue application server. It can be downloaded from Microsoft.
- Customized plug-ins written in .Net or Native Win32 languages will need to be recompiled to reflect changes in the plug-in API. .NET Framework 4.5 is now the supported .NET version for plug-ins.
- Customized dialog operation types (branch plug-ins) should take changes related to chunking and multi-threading into account to gain performance and concurrency. Please refer to PD Reference Guide for more information about chunking and multi-threading.
- The look and feel of Subscribe / Unsubscribe and Profile web pages has changes. Installations using the customization options for these web pages must review and re-test their customizations after upgrading.

For more details on the upgrade and installation process, please refer to the guides for Installation and Upgrade on the installation media.

End of life and deprecation

In this section:

- **Deprecated features**36
- **Unsupported Features and Platforms**36

Deprecated features

This release deprecates a number of components, which *are all still supported* in Portrait Dialogue 6.1, but support *will be removed* from the product in a future release. These include:

- **Miner list integration:** the particular implementation of the Miner/Dialogue list integration will be replaced by a single suite wide approach for sharing lists.
- **Dialogue reports:** will be replaced by a more complete and standards-based SQL Server Reporting Services reports.
- The **Dialog Overview** view in the Dialog Designer in Visual Dialogue is deprecated and switched off by default. It may be enabled from the Visual Dialogue's Options screen.
- **Broadcasts:** as a way to track responses from above the line marketing activities
- **Simple email testing:** Portrait Dialogue offers industry standard spam rating and email deliverability monitoring through its Litmus service integration offering.
- **PD Dashboard:** a user interface for monitoring the system. The Portrait HQ now offers monitoring functionality for campaigns and dialogs within Portrait Dialogue. The PD Dashboard has not been localized and is no longer installed by default.

Unsupported Features and Platforms

No features are removed and unsupported between version 6.0 and 6.1, except for the support of languages (see [supported languages](#)).

See [supported platforms](#) for a list of all supported Windows versions, DBMS versions and versions of other third party platforms. Versions not listed here are not tested and supported with PD 6.1. As an example SQL Server 2008 R2 is no longer supported.

If upgrading from a version prior to 6.0, please refer to previous release notes for lists of features that are no longer supported.

The Pitney Bowes Product Support document is available online [Pitney Bowes Software Support and Maintenance Handbook](#) which defines the version support policy for Portrait Dialogue. This policy outlines that a release includes a minimum of two years of support, or one year after the successor major release is available, whichever is longer. In particular:

- This release of Portrait Dialogue 6.1 will be supported until January 2017 or one year after the next major release, whichever is longer.
- Portrait Dialogue 6.0 will be supported until January 2016 (one year after this release).

Portrait Dialogue 5.x versions will no longer be support after the release of version 6.1.

Known issues

In this section:

- **Known issues**38

Known issues

Portrait Dialogue

Issue	Explanation / Symptom	Status
Dialogs	<p>Scripts for scripted operations do not appear when opening a dialog in read only mode.</p> <p>Set Category operation: There is no longer a validation of the value set for a scoring category after it was optimized (v6.1)</p>	<p>No workaround.</p> <p>Non-blocking error.</p>
Message Design & Handling	<p>Emails being test sent from Web Message Designer will not contain embedded images</p> <p>Web Message Designer crashes if the Message Type does not have an output channel.</p> <p>Portrait Dialogue fails when merging documents using Word 2007 on Windows Server 2008 and higher.</p> <p>Bounce logic will fail if email addresses contains uppercase characters on Oracle</p> <p>Web Message Designer: Misc. CSS and GUI related problems in Firefox</p> <p>Web Message Designer: Error when adding static items to an email in aligned container with full spanned static items.</p> <p>Web Message Designer: Links in text on the clipboard are always blue</p> <p>In Web Message Designer, associate an offer with a body area item of an email template, the properties of the item still displays 'Item not related to any offers'.</p>	<p>No workaround exists. However, using linked images instead of embedded images works.</p> <p>No workaround exists. However, this is not a problem with any of the out-of-the-box message types.</p> <p>No workaround exists: the problem is Windows specific.</p> <p>Workaround exists: The workaround is to have lowercase characters in the email address in the DB (or in a shadow column)</p> <p>Non-blocking error.</p> <p>Workaround exists: add static items to the leftmost column only.</p> <p>Non-blocking error.</p> <p>Reopen the body area item and the text will be updated.</p>

Issue	Explanation / Symptom	Status
Selections	<p>A selection criterion on an empty string doesn't work in on SQL Server; This is because a SQL Server allows a string to have both the value of empty and NULL. PD expressions only treat blank strings that have the value of NULL in the database correctly.</p> <p>Selections based on expressions (Design or Expression mode) with a high number (100+) criteria with the OR operator between them, may cause the Dialog Server to crash.</p>	<p>Make sure blank strings are set to NULL (and not an empty string) in the customer database</p> <p>Workaround: Take another approach to writing the selection.</p>
Questionnaires	<p>Hidden mandatory questions are validated</p> <p>The default texts added to "Welcome" and "Thank you" pages in questionnaire layout will be in the UI language of Visual Dialogue - not the language of the Questionnaire (under questionnaire properties).</p>	<p>No workaround.</p> <p>Workaround exists: Change the texts manually.</p>
Content Objects	<p>In Content Object Designer when switching from HTML view to Design view in HTML emails the HTML gets corrupted.</p>	<p>Workaround: Do not use Design view.</p>
Reporting	<p>Int64 not supported in Report Designer</p> <p>Unicode characters in Reports not working for EXCEL format</p>	<p>Int64 is not supported as parameter data type for a report.</p> <p>No workaround.</p>
Customer View	<p>In shortened URLs with link tracking, link tracking does not get disabled when viewing the message in Customer View.</p>	<p>As a user, do not click these links from within Customer View.</p>

Issue	Explanation / Symptom	Status
Telemarketing	Searching in Telemarketing Web might be slow when the Telemarketing project uses a "Custom SQL" and there are a large number of participants in the project.	Avoid using custom SQL in the cases where performance does not make it possible.
Administration & Configuration	Dialogue Admin: Constraint error when saving customer domain after switching fields names	Workaround exists: do not swap the field names of two fields in a domain group. Split the operation in two parts and save in between.
	Portrait Dialogue Web Applications sometimes fail it can't get access to the ASP.NET temporary folder.	Workaround exists: manually delete ASP.NET temporary files.
	The name of the temp database in Portrait Dialogue cannot be a delimited identifier.	Workaround exists: Use a regular identifier as name of the temp database.
	Portrait Dialogue upgrade may leave old shortcuts on desktop and start menu when upgrading versions prior to 6.0.	Workaround exists: delete the shortcuts after upgrading.

Portrait Dialogue / Portrait HQ Integration

Issue	Explanation / Symptom	Status
Embedded Guided dialogs in HQ	Using the embedded guided dialogs in Portrait HQ with a laptop causes problems with screen display after clicking the Add message content option.	Workaround exists: On your laptop, expand to full screen using F11 and collapse the (PD) Message designer side pane before using the +Add menu to add content to the message.
Guided dialogs	If you have a campaign name that is longer than 53 characters and try to use a guided dialog you are unable to save the campaign	Workaround exists: Use a shorter name for the campaign
	Suspended Guided Dialogue does not resume operation when campaign is resumed	
	If you create a Guided Dialogue Setup campaign and either 'Launch now' the Guided Dialog's end date is not set which results in them never stopping automatically when they reach that date.	Manually stop Guided Dialogues when they reach their end date.

Issue	Explanation / Symptom	Status
Dialogs in campaigns (general)	Every dialog has 'is active' state; this is displayed in Portrait HQ as 'Execution status' either 'Ready' or 'Not Ready'. The HQ view of a dialog's 'is active' status is only updated when campaign is closed and reopened: no local refresh mechanism is place for 'Design' step.	Reopen the HQ campaign to see dialog status updates made in Visual Dialogue
Reporting	If you change the names of the treatment types by editing the PSR directly, then these changes are not populated through the PDW and reporting. Add new treatment types in preference to renaming existing ones.	
SharePoint 2013 does not work with 32-bit applications.	Sharepoint 2013 does not work with 32-bit applications. It will throw a dll error message.	For a workaround, see the description here .

Fixed issues

In this section:

- Issues resolved in Portrait Dialogue 6.1 44

Issues resolved in Portrait Dialogue 6.1

Portrait Dialogue

Portrait Dialogue 6.0 contains all fixes in version 6.0 SP and up to Hotfix 6.0.1.288. In addition the fixes below are available in version 6.1.

Area	Explanation / Symptom	Status / Comment	TFS ID (internal)
Visual Dialogue General	Dialogue preview images fails to preview Unicode characters in text message templates.	Fixed.	TFS 27018
	Save-as bug in Visual Dialogue - name on tab not changed.	Fixed.	TFS 30662
	Exceptions in threads not logged correctly. This makes it harder to solve bugs that is difficult to reproduce, e.g. because of a timing issue.	Fixed.	TFS 33489
Questionnaires	Save button is not shown on a first questionnaire web page in a layout without a prolog	Fixed.	TFS 27385
	An invalid participant id in the questionnaire URL prevents the respondent from answering. It should instead blank the answer form's participant ID and let the respondent continue.	Fixed.	TFS 31711
Dialogs	Error when running the Copy to another dialog operation when there are no participants in the FROM group	Fixed.	TFS 28558
	Unable to deselect Offer & Treatment in Operation Properties.	Fixed.	TFS 29491
	Visual Dialogue: It is not possible to type full width Japanese characters in a dialogue comment.	Fixed error in Unicode support.	TFS 30100
	View Participant window always shows max 100 participants on first load irrespective of value specified in ribbon bar above	Fixed.	TFS 30127

Area	Explanation / Symptom	Status / Comment	TFS ID (internal)
	View Participant screen: No participant history dates in detail view when participant logging is disabled.	Fixed.	TFS 33393
Message Design & Handling	Saving templates in Web Message Designer application adds time to the Created timestamp.	Fixed.	TFS 28895
	When designing SMS messages in Visual Dialogue the character count sometimes shows a too high number, e.g. having exactly 160 characters gives a count of 162.	Fixed.	TFS 28930
	When editing an Emarketing master templates, stylesets are not reflected in edit preview immediately when applied for Container Item Types.	Fixed.	TFS 29945
	Web Message Designer - Application permissions could be bypassed by using keyboard shortcuts.	Fixed.	TFS 30434
	HTML email template's 'Attachment' control parameter not working properly	Fixed.	TFS 33153
	Rtf templates created in versions before 5.2 doesn't merge non-us characters correctly	Fixed.	TFS 33172
	Left margin is not working in RTF message template.	Fixed	TFS 33553
Selections	Selection designer may appear partly hidden on low resolution screens	Fixed.	TFS 31238
Telemarketing	Correct ordering missing from TM participant queries.	Fixed.	TFS 32403
	The query used in TM to fetch next participant to call should contain an order by clause with the following fields: CC-PA_LOCKED_BY_USER_NAME, CC-PA_ASSIGNED_USER_NAME and CC-PA_NEXT_CALL_DATETIME. This is missing from the SQL generated by the dialogue server.		

Area	Explanation / Symptom	Status / Comment	TFS ID (internal)
Web Application General	Sometimes internal web apps (e.g. Customer View) opens on the wrong PD instance in a multi-instance environment.	Fixed.	TFS 32860
	Published files: Add possibility to configure cache headers, default to private	Fixed. Cache headers can now be configured in web.config.	TFS 32887
Dialogue Admin	Dialogue Admin: SQL Server Native Client 11 connection string is sometimes set wrong for secondary database connection	Fixed.	TFS 29661
	Tab not correctly changing when using verify customer domain function. When you double click an error / warning in the verification results for a domain (e.g. a parameter binding warning), you are taken to the list of parameters, however the tabs (fields / parameters) does not change as expected.	Fixed.	TFS 32340
	Dialogue Admin: Remove unused options from customer domain data group properties	Unused UI elements intended for future functionality now removed.	TFS 32926
	Not possible to change only instance name when editing the properties of an instance.	Fixed.	TFS 33385
Dialog Server General	SendMessage service is not displaying "instance" in the PD Process Monitor.	Fixed.	TFS 30986
	Send email plug-in does not correctly call Dispose(...) of System.Net classes (from .NET 4.5)	Fixed.	TFS 33136
	Small memory leak in Dialog, Questionnaire and Content Object classes	Fixed.	TFS 33233
Installation and Upgrade	Problems with duplicate field names in system groups upon refreshing system data. When two or more system groups have the same field names, the fields are only installed once by refresh system data,	Fixed.	TFS 32052

Area	Explanation / Symptom	Status / Comment	TFS ID (internal)
	while they should exists once for every group they are in.		

Portrait HQ

Area	Explanation / Symptom	Status / Comment
Installation	When you rerun the PSS installer, the modify option does not correctly collect all the parameters. Installation should not require database server-level permissions.	If you want to change the installed Portrait Shared Server features, uninstall Portrait Shared Server, then install the set of features you require using the Custom installation type. Fixed.
	PSS installer times out when upgrading.	Fixed.
Campaigns - general	Only log a response to the latest treatment if there are multiple treatments for the same offer to the same people.	Fixed.
	Unable to enter decimals in target settings in HQ.	Fixed.
	Too many decimal places displayed for forecast response rate.	Fixed.
	Adding multiple existing offers to new marketing activity only adds one.	Fixed.
	Marketing Activity Budget response rate field rounding issue.	Fixed.
	Labels on HQ Monitor charts are truncated.	Fixed.
	Data for wrong marketing activity shown in Monitor page.	Fixed.
	Response fact counts is incorrect in PDW.	Fixed.
	Retrieve treatment query does not fetch treatment history from DW.	Fixed.

Area	Explanation / Symptom	Status / Comment
Campaign - dialog specific	Guided dialog schematic image flow is not rendered for branch parameter types like List, Response Log etc.	Fixed.
	Guided dialog schematic image repeats all questions within a step under a given section even though a question belongs to other section.	Fixed.
Reporting	Reports cannot be installed to a different location without modifying URLs in each rdl file.	Fixed. Location can be specified upon installation.
	Deleted campaigns appear in reports.	Fixed.

Future releases

In this section:

- **Future Portrait Dialogue releases50**

Future Portrait Dialogue releases

Pitney Bowes strategy is to help large business to consumer organizations better engage with their customers across all stages of their customer lifecycle and through any channel those customers chose delivering profitable business outcomes. The Pitney Bowes vision is to deliver on this strategy by providing a single, fully integrated customer engagement solution which delivers highly personalized engagements across any channel. The future releases of Interaction Optimizer will be delivered as part of the roadmap of this next generation solution. The capabilities of this solution will include:

- **Consistent and relevant interactions across any channel:** a single place to design, personalize and deliver interactions to any channel whether they be inbound (reactive) or outbound (proactive) communications, whether their purpose is for marketing or service uses, or whether their aims be promotional or operational – with an open approach to embracing new channels as they become available.
- **Orchestration within customer journeys:** customer journey mapping is becoming the de-facto standard for helping organizations become more customer centric and our customer engagement solution will encapsulate both the mapping process and the automating of interactions within those customer journeys
- **Tracking customer behavior across all channels:** in addition to the real-time access to customer data for decisioning - our solution will maintain a cross channel contact history of what happened within its own interactions but additionally allow for an extensible approach to tracking customer behavior within those channels themselves.
- **Event driven:** as part of these customer journeys, our solution will allow you to control when interactions happen – whether that be at a specific point in time, or relative to a particular behavior or event.
- **Analytically driven:** capability to consume your predictive analytics outputs to better engage customers and equally will embed its own adaptive intelligence to automatically learn and optimize the engagement process.
- **Reporting and monitoring:** the solution will include from the outset the relevant reporting and measurement hooks and presentations to ensure appropriate insights are available to keep the interactions running to plan.
- **Single message designer:** ability to create content for any channel, designed in the context of a customer (no preview required) and accessing external content from a Content Management System, with the resulting content created in line with modern standards
- **Global governance and customer preferences:** decisions will be made in the context of global customer governance rules (around frequency and recency of communications) coupled with customer preferences to ensure relevance.
- **Test and learn:** ability to easily try different interactions to learn what works best in influencing customer engagement.
- **Collaboration, review and approvals:** designed to allow distinct groups within an organization to work efficiently together and ensure the quality of the resulting interactions.