



# Server Installation Guide

Version 6.0 SP1



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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.**

January 02, 2014

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# Introduction

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## Purpose

This document describes how to install Portrait Dialogue 6.0 SP1 (server components).

For information on how to install Portrait Dialogue's client software, see the *Portrait Dialogue Client Installation Guide*.

## Intended audience

This guide is intended for System Administrators who need to install Portrait Dialogue. This document assumes familiarity with administration of target install systems, as well as appropriate levels of access to those systems.

## Related documentation

Document	Media (zip/dvd) and location
Portrait Dialogue 6.0 SP1 Release Notes	Portrait Dialogue media in: \Documentation\ <i>&lt;language_code&gt;</i> \
Portrait Dialogue MTS and DCOM setup	Portrait Dialogue media in: \Documentation\en-us\
Portrait Dialogue Client Installation Guide	Portrait Dialogue media in: \Documentation\ <i>&lt;language_code&gt;</i> \

**Tip:** All documents are also available on Portrait Software's support website: <http://support.portrait-software.com>



# Product 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.

## Key components

### Dialogue Server

The Dialogue Server is the core component of the Portrait Dialogue product suite and ensures correct customer process behavior. The Dialogue Server sends information to the customers (through mail, e-mail or SMS), handles customer responses (e.g. questionnaires), notifies the customer service representatives when different events occur, generates reports etc. All this happens automatically, either controlled by time or by events in the system, but it can also be controlled manually if required.

### Dialogue Web Server

- Used to host external web applications
- Uses MS IIS Technology
- Portrait Dialogue applications are based on .Net Framework 4.5
- Normally installed in the DMZ for security reasons
- Scaled according to traffic
- Communicates with Application Server via Web Services

### SQL Server or Oracle database

Portrait Dialogue uses a SQL Server or Oracle database to store its configuration, as well as cache data used to inform the business rules that Portrait Dialogue evaluates.

### Portrait Shared Server

Portrait Shared Server consists of five key components:

- **Portrait Shared Services (PSS)**. Provides the set of web services that allow Portrait Suite applications (Portrait Explorer, Miner, Dialogue and Interaction Optimizer) to communicate with each other.
- **Portrait Shared Repository (PSR)**. Provides the Portrait Shared Repository and Portrait Data Warehouse databases.

- **SharePoint Tasks (Optional)**. Provides an integrated task management solution where tasks assigned to individuals in Portrait HQ are displayed in SharePoint for greater visibility. **Note:** SharePoint Tasks is optional for Portrait Dialogue and Portrait Interaction Optimizer, and not required for Portrait Explorer.
- **Portrait Reports (Optional)**. Provides a set of pre-built reports on the operational performance of Portrait Interaction Optimizer and Portrait Dialogue. **Note:** Portrait Reports is optional for Portrait Dialogue and Portrait Interaction Optimizer, and not required for Portrait Explorer
- **Portrait HQ**. Provides a central dashboard for planning, launching and monitoring large scale (1 to 1) marketing campaigns. In addition to providing live (up-to-the-minute) summary views of your overall marketing position, Portrait HQ also provides real-time data enabling you to evaluate campaign progress and take immediate action if required.

## Optional components

Portrait Dialogue can optionally be integrated with other Portrait Software products, including Interaction Optimizer, Portrait Explorer and Portrait Miner.

**Note:** This installation part of this guide takes you through installing Portrait Dialogue as a standalone application. If you want to install or integrate Portrait Dialogue with other Portrait Software applications, see the *Portrait Suite Installation Guide*.

### Interaction Optimizer

Portrait Interaction Optimizer (IO) works with your existing customer applications to help convert inbound customer interactions into revenue opportunities.

Interaction Optimizer helps provide targeted (1-to-1) sales, service and retention offers for individual customers, at a specific moment of interaction, on any channel, for example web, inbound call, and email. Interaction Optimizer offers intelligent point of customer interaction by leveraging an organization's data in real-time to ensure the customer receives the right offer at the right time.

Portrait Interaction Optimizer enables customer data to be connected across different business units and channels without duplication. Multiple customer channels (via marketing campaigns) can be managed from a single view using Interaction Optimizer's HQ dashboard. Marketing campaigns can be added or changed 'on the fly' for immediate impact, and a simulation capability allows marketers to perform rapid 'what if' analysis to determine the right campaign mix – before placing into production.

### Portrait Miner

Portrait Miner is a powerful predictive analytics solution that enables customer insight professionals and business users alike to achieve a clear picture of their customers for the purpose of greater understanding and prediction of future behavior. Portrait Miner can be used to predict profit-impacting behaviors and propensities, including customer churn, cross sell and up sell opportunities, campaign planning and segmentation, customer satisfaction and loyalty, and customer lifetime value.

Portrait Dialogue (PD) uses Portrait Miner's analytic rule repository to hold analytic rules used to score PD recommendations.

### Portrait Explorer

Portrait Explorer is an easy-to-use, browser-based, customer data exploration tool. It allows business users to access their customer data quickly and easily without the need for advanced analytical or statistical help.

Portrait Explorer allows business users to:

- search for customers or groups of customers across an enterprise
- drill down on individual customers to confirm their personal details and data
- use key selection criteria (age, sex, income) to expose customers and groups of customers for potential review or campaign actions.

### Microsoft SharePoint

Microsoft SharePoint is a highly scalable web application that helps manage company content. It is typically used to store company documents such as Word and Excel documents but can also be extended to offer alternative functionality such as wiki and collaboration spaces.

Portrait Dialogue and Portrait HQ use SharePoint to help manage tasks related to a marketing campaign. During the planning phase you can assign tasks to individuals and then display them in SharePoint for greater visibility. Using SharePoint also enables task recipients to display their tasks in Microsoft Outlook.

# Installation overview

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## Installation overview

To install Portrait Dialogue server software, complete the procedures listed below.

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<a href="#">Installing Portrait Shared Server</a> on page 41	20m
<a href="#">Configuring Portrait Dialogue</a> on page 53	15m

## Installation pre-requisites

### Servers

Server	Software / Config	Software level
All servers	MS Windows Server	<p>Portrait Dialogue can be installed on <b>any</b> of the following:</p> <ul style="list-style-type: none"> <li>• 2012 in either 32 or 64-bit versions on Standard or Enterprise Editions</li> <li>• IIS 8.0 (configured with IIS 6.0 compatibility mode)</li> <li>• 2008 R2 SP1 in 32 or 64-bit on Standard or Enterprise Editions</li> <li>• IIS 7.5 (configured with IIS 6.0 compatibility mode)</li> </ul>
All servers	Various	<ul style="list-style-type: none"> <li>• Microsoft .Net Framework v3.5</li> <li>• Microsoft .Net Framework v4.5</li> <li>• 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 <a href="http://technet.microsoft.com/en-us/library/cc731383.aspx">http://technet.microsoft.com/en-us/library/cc731383.aspx</a> .</li> </ul>

Server	Software / Config	Software level
Application servers	Various	<ul style="list-style-type: none"> <li>• MS SQL Server feature: Client Tools Connectivity</li> <li>• SQL Server Native Client (version 11 or later). If you are running MS SQL Server 2008, SQL Server Native Client 11 can be downloaded from the SQL Server 2012 Feature Pack web page.</li> <li>• Oracle native 32-bit client drivers if you are using an Oracle database</li> <li>• Support for distributed transactions (Distributed COM and Network DTC)</li> </ul>
Database servers	SQL Server and Oracle	<p><b>SQL Server</b></p> <ul style="list-style-type: none"> <li>• Support for distributed transactions (Distributed COM and Network DTC)</li> <li>• 2012 and 2008 R2 SP1, supported in either 32-bit or 64-bit, for Standard and Enterprise Editions and either case-sensitive or case-insensitive master databases.</li> </ul> <p><b>Note:</b> The following SQL Server features must be installed:</p> <ul style="list-style-type: none"> <li>• Database Engine Services</li> <li>• Management Tools - Basic</li> <li>• Management Tools - Complete</li> <li>• Client Tools Connectivity</li> <li>• SQL Server feature: Integration Services</li> <li>• SQL Server feature: Reporting Services (optional)</li> </ul> <p><b>Oracle</b></p> <p>11i R2 <b>Note:</b> The following restrictions:</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• If you are using an Oracle database, then Oracle native 32-bit client drivers must be installed.</li> <li>• If running Portrait HQ in a 64-bit environment and Portrait Dialogue is using an Oracle database, Oracle</li> </ul>

Server	Software / Config	Software level
		<p>native 64-bit client drivers must be installed on the Portrait HQ database servers.</p> <p><b>Note:</b> Portrait Dialogue customer databases can be either Oracle or SQL Server, however Portrait HQ along with other Portrait Suite products require SQL Server 2008 R2 or 2012.</p> <p><b>Note:</b> If the database and application server reside on different domains or have firewalls between them, see <b>MTS and DCOM set up</b> in the Appendix.</p>
SharePoint servers	MS SharePoint (Optional)	<ul style="list-style-type: none"> <li>SharePoint Server 2013</li> <li>SharePoint Foundation 2013</li> </ul>
Portrait Dialogue servers	Operating system	<ul style="list-style-type: none"> <li>The Portrait Dialogue server runs as a 32-bit application on either 32 or 64-bit operating systems.</li> <li>If running on a 64-bit system, IIS must be set in 32 bit mode.</li> <li>The IIS application pool used by Portrait Dialogue web applications must be ASP.NET v4.0 Classic.</li> <li>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.</li> </ul>

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**Client applications**

Server	Software	Software level
Web application client	Various	<ul style="list-style-type: none"> <li>Internet Explorer 9 or 10</li> <li>Silverlight 5.0 (for Portrait HQ)</li> </ul>

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## Portrait Software - suite compatibility

Portrait Dialogue is compatible with the following Portrait Software.



<b>Software</b>	<b>Software level</b>
Portrait Foundation	4.4 Update 4
Portrait Miner	7.0A
Interaction Optimizer	5.5
Portrait Explorer	4.0

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**Note:** This guide takes you through installing Portrait Dialogue as a standalone application. If you want to install or integrate Portrait Dialogue with other Portrait Software applications, see the *Portrait Suite Installation Guide*.



# Setting up your server environment

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# Configuring your Application and Web servers

## Configure your Web Server and Application Server

Use the following procedures to configure your Application Server and Web Server role information. If you are using multiple servers or instances, you will need to repeat the procedures on all machines.

**Note:** The following procedures guide you through setting up your environment for Windows Server 2008 R2. If you are using a different server version, some of the steps may be different.

## Adding Web Server and Application Server role functionality

1. Log on to your Windows Server machine.
2. Click **Start > Administrative Tools > Server Manager**.
3. In the **Server Manager** window, expand the **Roles** feature and verify that **Application Server** and **Web Server** roles have been set up.
4. If the Web and Application Server roles have not been set up, right-click **Roles** and select **Add**. Check the Web Server and Application boxes (if same machine) and follow the install prompts to add them.

## Configuring Web Server roles

Use the following procedure to configure Web Server Role Services for Portrait Interaction Optimizer and Portrait HQ.

**Note:** This procedure assumes you are installing Portrait Dialogue and Portrait HQ on the *same machine*. If you are installing them on different machines then you will need to configure the role services separately.

1. In the **Server Manager** window, click **Roles > Web Server (IIS)**.
2. In the **Role Services** section on the right-hand pane, ensure the following items are installed. If not, right-click **Web Server (IIS)** and select **Add role services** and add the missing items.
  - **Management Tools**
  - **Windows Authentication and ASP.NET** (required for Portrait Dialogue and Portrait HQ)
  - **IIS 6.0 Management Compatibility** (required for Portrait Dialogue installation)
3. Click **Features** in the left panel and ensure the following items are installed for Portrait HQ. If not, click **Add Features** on the right and add the missing items.
  - **Message Queueing**

## Enabling IIS to run 32-bit applications on 64-bit Windows (optional)

If installing Portrait Dialogue on a 64-bit server, you must enable IIS to run 32-bit applications on 64-bit Windows.

1. Open a command prompt and navigate to the `%systemdrive%\Inetpub\AdminScripts` directory.
2. Type the following command: `cscript.exe adsutil.vbs set W3SVC/AppPools/Enable32BitAppOnWin64 1`.
3. Press ENTER. Note: Ensure that the IIS application pool used to run the Dialogue Web Applications is configured with a Managed Pipeline Mode of Classic. By default, Dialogue Web Applications use the DefaultAppPool application pool.

## Configuring Application Server roles

Use the following procedure to configure Application Server services for Portrait Dialogue and Portrait HQ.

**Note:** This procedure assumes you are installing Portrait Dialogue and Portrait HQ on the same machine. If you are installing them on different machines then you will need to configure the role services separately.

1. In the **Server Manager** window, click **Roles > Application Server**.
2. In the **Role Services** section on the right-hand pane, ensure the following services are installed:
  - **Application Server Foundation (on 32-bit machines only)**
  - **Web Server (IIS) Support**
  - **TCP Port Sharing**
  - **Windows Process Activation Service Support**
  - **HTTP Activation**
  - **Message Queueing Activation**
  - **TCP Activation**
  - **Distributed transactions**
  - **Named Pipes Activation**
  - **COM+ Network Access**
3. If not, right-click **Application Server > Add role services** and add the missing items.
4. Verify COM+ Network Access has been configured correctly:
  - a) Select **Administrative Tools > Component Services**.
  - b) In the side explorer menu, open **Component Services > Computer**.
  - c) Right-click **My Computer** and select **Properties**.
  - d) Ensure **Enable Distributed COM on this computer** is checked on the **Default Properties** tab and **Use local coordinator** on the **MSDTC** tab.
  - e) Portrait Dialogue transactions often run longer time than the default Windows Server 2008 transaction timeout setting of sixty seconds. To update this, click the **Options** tab and enter 0 in the **Transaction timeout** field.
5. Verify distributed transactions service is set up correctly:

- a) Select **Administrative Tools > Component Services** .
- b) In the side explorer menu, open **Component Services > Computer > Distributed Transaction Coordinator** .
- c) Right-click **Local DTC** and select **Properties**.
- d) Ensure **Network DTC Access** is checked on the **Securities** tab.

## Configuring users and groups

We recommend creating a system user and user group for ease of administrating access to Portrait Dialogue applications.

1. Create one domain user account with local administrator rights, for example, <yourdomain\MhSystemUser.
2. Create one domain user group, for example, <yourdomain\MhUsers.
3. Open **Computer Management** and **Distributed COM users**, and add the domain user group.

# Configuring your Database servers

## Verifying the SQL agent service is running

Use this procedure to verify the SQL agent service is running.

1. Log on to your SQL Server machine.
2. Click **Start > All Programs > Microsoft SQL Server > SQL Server Management Studio** .
3. Connect to the instance of the Database Engine, as the `admin` user. In the **Object Explorer** window, right-click **SQL Server Agent (Agent XPs disabled)** and select **Start**.

## Configuring network support for MS DTC

Use this procedure to enable network support for Microsoft's Distributed Transaction Coordinator which is required for Portrait HQ (PSS) to function correctly.

**Note:** The Portrait HQ installer automatically configures the Distributed Transaction Coordinator, however, if your database server is a separate machine to your Portrait HQ installation, you need to manually configure MS DTC on the database server.

1. On the database server, click **Start > Run** and type `dcomcnfg.exe`.
2. In the **DCOM Configuration** application, expand the tree to **Component Services > Computers > My Computer > Distributed Transaction Coordinator > Local DTC** .
3. On the **Security** tab, check the **Network DTC access** and also **Allow Inbound** and **Allow Outbound** checkboxes.

# Installing the Dialogue Database

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# Introduction

This section guides you through setting up Portrait Dialogue with one database and instance. The steps should be repeated for each additional database.

## Before you begin

Before you begin, ensure you have:

- Created the Portrait Dialogue database and a database user with full access to the database
- Checked that all prerequisite software has been installed. For more information, see [Installation prerequisites](#).
- Installed the database client tools and preferably the management tools on the application server
- Tested the database connectivity between the application server and the database server

We recommend running the installation from the application server. If for any reason this is not possible you can run it directly on the database server, but this will require manual creation of the instance, and sharing of root directory on the application server after installing the dialogue server

## Installing the Portrait Dialogue database

1. To start the installation, double-click **InstallMenu.exe** which can be found in the root directory of the Portrait Dialogue installation media (DVD/zip files).
2. Click **Setup Dialogue Database**. The **Welcome** screen appears.
3. Click **Next** to continue. The **Destination Folder** screen appears.
4. Select the installation folder (or accept the default location) and then click **Next** to continue. The **Database Type** screen appears.
5. Select the database server type you are installing Portrait Dialogue to and then click **Next**. The **Database Server** screen appears.
6. Choose the database server (Server name for SQL Server or TNS alias for Oracle).
7. Enter your username and password credentials which must have administrative privileges on your SQL Server. Note: Windows authentication only supported on SQL Server.
8. Enter (or browse for) the name of database (only applies to SQL Server).
9. If you cannot browse the database catalog, your user credentials may be incorrect. Click **Next** to continue, the **Instance Name** screen appears.

**Note:** The information entered here is used as the connection settings for the Instance you define later in the setup. The instance connection string can be altered later using the Dialogue Admin tool.



10. Enter the instance name for your installation, for example:

- PROD (for production)
- TEST (for testing)
- DEV (for development)

The name cannot contain any special characters (like \$ % ) or space (blanks).

11. Enter a short identifier (ISID) for your new instance. The short identifier must consist of one or two uppercase alphabetic characters.

12. Click **Next** to continue. The Customer ID Datatype screen appears.

13. Choose the datatype to use for the Customer ID field, and then click **Next**.

**Note:** Examine the customer data you are going to use with Portrait Dialogue. To get optimal performance we recommend using the same datatype for the Customer ID that you have in your customer database. **Note:** If you are going to use `varchar` as your customer id datatype, the collation of the Dialogue Server database and the customer ID column in your customer database must be the same. This setting is global for the current instance. It can be changed later using SQL scripts provided on the install CD (SQL Server Only). **Note:** No script is available for Oracle, and there is only support for four data types:

- String (`varchar2(40)`)
- Unicode string (`nvarchar2(40)`)
- Numeric (`number(31, 0)`)
- Integer (`integer`)

14. On the **Template Folder** screen, select the root folder for templates and file storage for this instance. Check the **Share** checkbox to share the folder as MH, and then click **Next** to continue.

**Note:** If you chose to alter the default path, make sure you take the Instance name into consideration in the path if running multiple instances.

15. Click **Install**.

## Verifying the database installation

1. Open **SQL Server Management Studio** and log on to the server using the same credentials you specified during the install.
2. Check that the Portrait Dialogue tables are populated in the database.
3. Open a new query window and execute the following query:

```
select * from SYSTEM_INFO.
```

4. Verify that you get the correct version returned in the `SI_DATABASE_VERSION` field.

**Note:** All system SQL queries in Portrait Dialogue are written without database and user prefix i.e. `select * from db.dbo.mytable` is written `select * from mytable`. So your user account used in the connection string must be set up to support this.



# Installing the Dialogue Server

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# Introduction

This section guides you through installing the Dialogue Server.

## Before you begin

Before you begin, ensure you have:

- Uninstalled any other instances of Dialogue Server that have been installed on the server. **Note:** You can only run one Dialogue Server per application server - the Dialogue Server runs as a COM+ package and 3 Windows services.
- Installed the Portrait Dialogue database described in the previous section
- Checked that all prerequisite software has been installed. For more information, see [Installation prerequisites](#).
- Created a user account (local or domain) with local administrator rights to use as the Dialogue Server service account
- Logged on to the application server with a user that has administrative rights.

**Note:** If you want to use Windows authentication in Portrait Dialogue, you must use a domain user account as the Dialogue Server service user account.

**Note:** The Dialogue Server runs as a 32-bit application on either 32 or 64-bit operating systems.

## Installing the Dialogue Server

1. To start the installation, double-click **InstallMenu.exe** which can be found in the root directory of the Portrait Dialogue installation media (DVD/zip files).
2. Click the **Install Dialogue Server**. The **Welcome** screen appears.
3. Click **Next** button to continue. The **Destination Folder** screen appears.
4. Select the Portrait Dialogue Server installation directory (or accept the default option). Click **Next** to continue. The **Setup Type** screen appears.
5. Select the installation type and click **Next**. The **Logon Information** screen appears.
6. Enter the credentials for the user account that the Dialogue Server processes will run under. This is the Dialogue Server service user account. The username must be in the form: <domain>\<username> or <machine name>\username.

You can also create an account using the “New user Information” during setup.

**Note:** The installation will verify the credentials you enter. If for some reason this verification fails, you will get an error message. You may ignore this and continue if you are sure the credentials are right.

7. Click **Next** to continue.
8. Click **Install**.

## Installing the Portrait Dialogue License

After you have installed the server, you need to copy a Portrait Dialogue license file into the folder where the server was installed. This file is provided by Portrait Bowes Software or one of its distributors. Restart the Dialog Server COM+ application (using **Component Services**) after the file has been installed.

The default folder for the license file is: `<portrait dialogue root directory>\Dialogue Server`



# Installing Dialogue Web Applications

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## Introduction

This section guides you through installing the Portrait Dialogue web applications.

The web applications are typically installed on an internal server (usually the same server as the Dialogue Server) and optionally on a public (Internet) server. You can install the web applications on an existing web site or create a new site to use.

## Before you begin

Before you begin, ensure you have:

- Installed the Dialogue Server and Database
- Checked that all prerequisite software has been installed. For more information, see [Installation prerequisites](#).
- The URL to the Dialogue Server API (Web services used by the Web Applications)
- Set up a new IIS web site or have the name of an existing site to use

## Installing Dialogue Web Applications

1. To start the installation, double-click on `InstallMenu.exe`, which can be found in the root directory of the Portrait Dialogue installation media (DVD/zip files).
2. Click on **Install Web Applications**. The **Welcome** screen appears.
3. Click on **Next**. The **Destination Folder** screen appears.
4. Choose an installation folder or accept the default option. One folder is created for each of the web applications. The folders will be web shared.
5. Click on **Next**. The **Setup Type** screen appears.
6. Choose to install all web applications (**Complete**) or a subset (**Custom**). Click on **Next** to continue.
7. Overview of the different web applications:
  - **Dialog Server API**—Web service API for the Dialogue Server. Must be installed on the application server where the Dialogue Server is running.
  - **Customer View**—Customer View normally installed on the internal web server.
  - **Customer Web Access**—Hosting applications for questionnaire surveys and viewing email on web. Normally installed on the public web server.
  - **Telemarketing Web**—Telemarketing application normally installed on the internal web server.
  - **Report Portal**—Report Portal application normally installed on the internal web server. Must be installed to use integrated reporting in Visual Dialogue.



- **Report Viewer**—Report Viewer application used to provide simple access to internal and external users for viewing reports. Normally installed internally, optionally installed on the public server.
- **Questionnaire Preview**—used by Visual Dialogue to test and preview questionnaires. Must be installed for questionnaires to work in Visual Dialogue.
- **Dashboard**—Support for this web application is deprecated from version 5.2 onwards. Dashboard will not be installed by default during a “Complete” installation. You will need to perform a “Custom” installation and select this component for it to be installed. Access rights for Dashboard users will need to be explicitly set in Dialog Admin.
- **Emarketing**—HTML email designer normally installed internally. Must be installed for Message Designer templates to work in Visual Dialogue.
- **Web Utilities**—Hosting applications email, link, response tracking, and published files on web. Normally installed on the public web server.

Choose the web site to install the web application to. Make sure you enter the correct name: no verification is done. If you enter an incorrect website name, the installation will fail later. The name of the site configured on the server is shown in the IIS manager.

8. If you want to optionally configure web sharing manually, check **Only copy files** to copy the files to the install directory without creating web shares. If not, leave the field unchecked.
9. Check **Enable Windows Authentication** to configure the internal web applications to use Windows authentication.
  - a. If you checked **Only copy files**, additional screens appear where you can override default web share names for the different web applications - if required.
10. Some of the applications require write access to a subfolder (for logging, caching, etc.) to work. To automatically set this permissions check this option. This will give the “everyone” user group-write access. You can alter this later to strengthen security.
11. Enter the name of your company. This information is used by the Message DDesigner application.
12. Enter error logging options for the Message Designer application.
13. Enter the URL to the Dialogue Server API and the system administrator email address and phone number.
14. Click on **Install**.

## Verifying the web solution installation

The first thing to check is the MHDialogServerAPI (web services) application.

Check that you can access the web service overview page by entering the URL to the MHDialogServerAPI in a browser from all servers you installed any web application to.

**Example URL:** <http://vmdev-test01/MHDialogServerAPI/APIOverviewPage.aspx>

Further testing of the different web applications needs to be done when you have configured the first domain on your new instance.

# Configuring authentication type

Customer View, Telemarketing, Report Portal, Web Portal, and Dashboard support two different authentication mechanisms:

- |                             |   |
|-----------------------------|---|
| <b>Forms authentication</b> | This is the default authentication type. The user logs in using a web-based login page.   |
| <b>Mixed authentication</b> | In this case, the user is first authenticated using Windows authentication. If this is successful, the user is automatically logged in. Otherwise, the user is redirected to the forms authentication page. |

If you want to change the authentication type that you chose during installation, you must do this manually as described in [Changing authentication type in web.config](#) on page 34.

If you are using forms authentication, no special IIS configuration is needed. If you want to use mixed authentication, you need to configure IIS specially. This is done slightly differently for IIS 6 and IIS 7.

## IIS 7 configuration for mixed authentication

1. Open the MHDIALOGSERVERAPI web share in IIS Manager, and switch to Content View.
2. Right click on WindowsAuthenticationAPIService.asmx and switch to features view. Locate and double-click on the **Authentication** option in the right-hand pane. Ensure that only Windows authentication and ASP.NET impersonation are enabled.
3. The WinLogin/WinLogin.aspx page in Customer View, Telemarketing, Report Portal, and Dashboard must only allow Windows authentication and ASP.NET impersonation. Select the WinLogin/WinLogin.aspx page in IIS, and switch to features view. Locate and double-click on the **Authentication** option in the right-hand pane. Ensure that only Windows authentication and ASP.NET impersonation are enabled.

## Changing authentication type in web.config

- For forms authentication:

- The `forms` element must have the attribute `loginUrl="Login.aspx"`.
- The following element must be present in the `appSettings` section:

```
<add key="AuthenticationType" value="Forms"/>
```

- For mixed authentication:

- The `forms` element must have the attribute `loginUrl="WinLogin/WinLogin.aspx"`.
- The following element must be present in the `appSettings` section:

```
<add key="AuthenticationType" value="Mixed"/>
```

## Configuring the Dialogue Server API URL

All Web Applications have a configuration file specifying the URL to the Dialogue Server API. If setting up a web application manually (not using the installation program), then you have to specify this URL manually.

### Steps to set the Dialogue Server API URL manually:

1. Open the web application's Config\MH.DataAccessLayer.config file.
2. Change the serviceBaseLocation attribute in the XML's root element to the Dialogue Server API URL you use.

## Configuring the Dialogue Server API

The Dialogue Server API can be configured for operation in two different modes: COM Server mode and API Proxy mode.

### COM Server mode

The COM Server mode is the default setting. In this mode the Dialogue Server API communicates with the Dialogue Server's COM components. The Dialogue Server API is normally set up with this configuration.

### API Proxy mode

Using the API Proxy mode, the Dialogue Server API acts as a proxy-server, passing all requests through to another installation of the Dialogue Server API server.

To enable this mode, set the UseWebServices value in web.config to true. The address of the Dialogue Server API must also be set:

```
<addkey="UseWebServices" value="true"/>
<addkey="WebServiceURL" value="http://server/MHDialogServerAPI"/>
```

### Configuring access to web services and methods

It is possible to enable and disable the different web services in the Dialogue Server API. Individual methods inside a web service can also be enabled or disabled. All web services and methods are by default enabled.

These settings are defined in an xml config file named APIAccess.config.

### Configuring access to instances

It is possible to enable and disable access to different Portrait Dialogue instances through the Dialogue Server API.

These settings are defined in the xml config file named InstanceAccess.config

## Enabling Link Tracking Integrity Checking

In version 6.0.1, a validation mechanism is introduced for link tracking. This ensures the integrity of tracked URLs in email and other messages, and protects against phishing attacks. The mechanism uses a check sum (in the URL) for validating that the destination URL is original and has not been tampered with. For more information, see *Link Tracking* in the *Portrait Dialogue Reference Guide*.

The validation mechanism is set to *off* by default to ensure compatibility with URLs in messages that have been sent out in previous versions of Portrait Dialogue. To turn validation on, open the `web.config` file (located in: `<WebUtilities>\LT\`) and set the `<checksum enable>` value to `true`:

```
<checksum enable="true">
  <instances>
    <!--<instance name="InstanceName" enable="true" defaultRedirect=""
/>-->
  </instances>
</checksum>
```

**Note:** For existing Portrait Dialogue users upgrading to 6.0 SP1, we recommend turning `checksum` validation on after a period of time when the effect of no longer supporting old links is negligible. For new Portrait Dialogue users, we recommend turning `checksum` validation on as part of the initial installation.

## Installing license for charting component in the Dashboard

The Dashboard uses a third party chart component in some of its widgets. If you want to use any of these widgets then you need a separately bought license. The license can be bought through Portrait Software or one of its resellers.

There are two license types: Web Site and Server.

License type	Description
<b>Web Site license</b>	The Web Site license is tied to a domain on a web server (e.g. <code>www.yourdomain.com</code> ). It is not possible to move this license to a different domain later.
<b>Server license</b>	The Server license allows the use of the chart component on all web sites on a server regardless of domain. It is also possible to move the license to another server.

### Installing a Web Site license

1. Add the license file to the Dashboard's bin folder (it has a \*.lic file extension).
2. Replace the `dotNetCharting.dll` file the license applies to (the email containing the license file should contain a link to it) to the Dashboard's bin folder

3. Find the version number of the dotNetCharting file. You can find it by right clicking on dotNetCharting.dll in the bin folder and selection properties. You should find the version number on the General tab or on the Details tab (depending on which version of Windows you are using). This version number is from now on referred to as the “new version number”.
4. Find the version number of the dotNetCharting file which was used when Dashboard was created. You can find it by right clicking on dotNetCharting.dll located in "Web\Dashboard\DotNetCharting\Web-Site license files" on the installation CD and selection properties. You should find the version number on the General tab or on the Details tab (depending on which version of Windows you are using). This version number is from now on referred to as the “old version number”.
5. Add the <assemblyBinding> section shown in Example #2 below to the web.config file. Add it to the web.config's runtime section if it already exists. If it does not than create a new runtime section at the end of the configuration section (just before the </configuration> end tag) and add the assembly-Binding section there.

**Note:** you have to replace the parts *[old version number]* and *[new version number]* shown in the example with the version numbers you found earlier.

6. If the web.config file's configuration tag contains an xmlns attribute then remove it (the binding redirect is sometimes ignored when this is present). The configuration tag is the first tag in the web.config.

Example:

Remove the bold attribute.

```
<configuration xmlns="...">
```

### Server license

The Server license allows the use of the chart component on all web sites on a server regardless of domain. It is also possible to move the license to another server.

#### Installing the Server license for the first time

1. Create a folder named "dotNetCharting" under "c:\windows\".
2. Add the following to the dotNetCharting folder:
  - The license file you received by email after buying the license (it has a \*.lic file extension).
  - The dotNetCharting.dll file the license applies to (the email containing the license file should contain a link to it).
3. Add the dotNetCharting.dll to the Global Assembly Cache (GAC). You can do this by dragging the assembly from "c:\windows\dotNetCharting" to "c:\windows\assembly". Note: the assembly folder is a special windows folder which behaves a bit differently compared to other folder. If you drag the file to the assembly folder and get a forbidden icon when you attempt to drop it, try to hold down the Ctrl key when you drag the file.
4. Remove the dotNetCharting.dll from Dashboard's bin folder.
5. Replace MHWebControls.dll and MHDB.dll in the Dashboard's bin folder with the ones found under "Web\Dashboard\DotNetCharting\Server license files" on the installation CD.
6. Find the version number of the dotNetCharting file. You can find it by right clicking on dotNetCharting.dll located in "c:\windows\dotNetCharting" and selection properties. You should find the version number on the General tab or on the Details tab (depending on which version of Windows you are using). This version number is from now on referred to as the “new version number”.

7. Find the version number of the dotNetCharting file which was used when Dashboard was created. You can find it by right clicking on dotNetCharting.dll located in "Web\Dashboard\DotNetCharting\Server license files" on the installation CD and selection properties. You should find the version number on the General tab or on the Details tab (depending on which version of Windows you are using). This version number is from now on referred to as the "old version number".
8. Add the <add ... /> tag shown in Example #1 below to the web.config. The add tag must be placed as shown in the example. This means that you have to create the compilation and the assemblies sections if the don't already exist.

**Note:** you have to replace the part [new version number] shown in the example with the new version number you found earlier.

9. Add the <assemblyBinding> section shown in Example #2 below to the web.config file. Add it to the web.config's runtime section if it already exists. If it does not than create a new runtime section at the end of the configuration section (just before the </configuration> end tag) and add the assembly-Binding section there.

**Note:** you have to replace the parts[old version number] and [new version number] shown in the example with the version numbers you found earlier.

10. If the web.config file's configuration tag contains an xmlns attribute then remove it (the binding redirect is sometimes ignored when this is present). The configuration tag is the first tag in the web.config.

Example:

Remove the bold attribute.

```
<configuration xmlns="...">
```

### Installing the Server license after an upgrade

The installation procedure is similar to "Installing the Server license for the first time" above except that the three first steps have already been completed. Proceed from step four.

#### Example #1:

```
<system.web>
  .....
  <compilation>
    <assemblies>
      <addassembly="dotnetcharting, Version=[new version number], Cul-
      ture=neutral, PublicKeyToken=af2cd47db69d93bd" />
    </assemblies>
  </compilation>
  .....
</system.web>
```

#### Example #2:

```
<configuration>
  ...
  <runtime>
    <assemblyBindingxmlns="urn:schemas-microsoft-com:asm.v1">
      <dependentAssembly>
        <assemblyIdentityname="dotnetCHARTING"publicKeyTo-
        ken="af2cd47db69d93bd" />
        <bindingRedirectoldVersion="[old version number]"newVer-
        sion="[new version number]" />
      </dependentAssembly>
    </assemblyBinding>
  </runtime>
</configuration>
```

```
        </dependentAssembly>  
    </assemblyBinding>  
</runtime>  
    ...  
</configuration>
```





# Installing Portrait Shared Server

## In this section:

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- **Installing Portrait Shared Server** ..... 44
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## Installation overview

Installation procedure	Time estimate
<a href="#">Deploying SharePoint (optional)</a> on page 44	10m
<a href="#">Installing Portrait Shared Server</a> on page 44	15m
<a href="#">Installing DWH SSIS packages</a> on page 46	10m
<a href="#">Scheduling data warehouse updates</a> on page 47	10m
<a href="#">Configuring a Portrait HQ user's type</a> on page 48	5m
<a href="#">Mapping field names for analytics integration</a> on page 48	5m
<a href="#">Configuring Portrait HQ / Dialogue integration</a> on page 50	10m

## Installation pre-requisites

The Portrait HQ install procedures assume the following.

HQ Feature	Prerequisite
Portrait Shared Services (PSS)	Windows Server configured with the Application Server and Web Server roles
Portrait Shared Repository (PSR)	Microsoft SQL Server or SQL native client.
SharePoint Tasks	Microsoft SharePoint 2013 or Microsoft SharePoint Foundation 2013
Portrait Reports	Microsoft SQL Server Reporting Services

## Before you begin

Before starting the installation, ensure you:

- **Plan your installation!** The Portrait Shared Server installer provides the option to install all Portrait Shared Server features on one server, or alternatively, install all features on separate servers via the **Custom Install** option. You need to:
  - Decide on which features you want to install. Note: The Task Management and Report features are optional.

- Decide on which features you want to group together on the one server. For example, you might want to set up a server with the Portrait Shared Server (PSS) and Portrait Shared Repository (PSR) components. You may then want to install the Reports component on a separate Reports server and the Task Management on a pre-existing SharePoint server.

**Note:** Just how you install the Portrait Shared Server and its four key components is up to you and your server environment.

**Note:** The installation procedures that follow point you towards the **Custom Install** screen based on the assumption you will want to install at least one feature on a separate machine.

- In IIS, ensure that the Default Web Site has an HTTP Site Binding on port 80. This binding only has to be present whilst running the PSS installation; you can remove it after successfully installing Portrait Shared Server.
  - If you choose to use SharePoint with Portrait Shared Server, see *SharePoint and Portrait Shared Server installation considerations* in the appendix.
  - Collect all information required for the install. For more information, see the Installation Datasheets in the appendix.
  - Note the following install restrictions:
    - Portrait Shared Server **must** be installed on a machine that has SQL Server or SQL native client installed.
    - If your SharePoint server is separate to your PSS server, then you must install the SharePoint Tasks feature before Portrait Shared Services.
    - The SQL Server database must be configured with the TCP/IP protocol enabled if it is running on a separate server from where you are installing the Portrait Shared Server
    - You will need Administrator access on the machine where you are running the installer, and you will need to be able to either provide sysadmin database credentials (by providing SQL Server authentication credentials for a sysadmin role) or selecting a user to whom the DBO role will be set after the install. This user will be added to the list of SQL server logins.
    - It is recommended that you use the same Windows account (username and password) to manage the PSS application pool and connection to the PSR database. The account should:
      - be on a network domain rather than a local machine
      - have `db_datareader` and `db_datawriter` role permissions on the PortraitPSR database
    - The MS DTC service must be running on the database server and Portrait HQ (PSS) server.
- Note:** The Portrait HQ installer automatically configures the Distributed Transaction Coordinator, however, if your database server is a separate machine to your Portrait Shared Server installation, you need to manually configure MS DTC on that machine.

- Source all required software:

Software + documentation	Media location (zip file/dvd)
Portrait Shared Server software	Portrait Dialogue media in: \Portrait Shared Server\

## Deploying SharePoint (optional)

Portrait HQ use SharePoint to help manage tasks related to a marketing campaign. You can assign tasks to individuals and then display them in SharePoint for greater visibility. Using SharePoint also enables task recipients to display their tasks in Microsoft Outlook.

To deploy the SharePoint solution:

1. Log on to your SharePoint server.
2. Run the `setup.exe` in the `\Portrait Shared Server` directory on your installation media (zip-file/DVD).
3. Accept the license agreement and default installation folder.
4. On the **Installation Type** screen, select **Custom**.
5. On the **Custom Setup** screen, ensure that the **SharePoint Tasks** feature will be installed on the local hard drive.
6. Click **Install**.
7. To verify that the solution package has been successfully deployed:
  - a) Go to **SharePoint Central Administration**.
  - b) Navigate to **System Settings > Farm Management > Manage farm solutions**
  - c) Verify `PortraitSharedServerPortal.wsp` is in the **Deployed** state.

## Installing Portrait Shared Server

Portrait Shared Server includes four installation components: Portrait Shared Services (PSS), Portrait Shared Repository (PSR), SharePoint Tasks, and Portrait Reports.

- **Portrait Shared Services (PSS)**. Provides the set of web services that allow Portrait Suite applications (Portrait Explorer, Miner, Dialogue and Interaction Optimizer) to communicate with each other.
- **Portrait Shared Repository (PSR)**. Provides the Portrait Shared Repository and Portrait Data Warehouse databases.
- **SharePoint Tasks (Optional)**. Provides an integrated task management solution where tasks assigned to individuals in Portrait HQ are displayed in SharePoint for greater visibility. **Note:** SharePoint Tasks is optional for Portrait Dialogue and Portrait Interaction Optimizer, and not required for Portrait Explorer.
- **Portrait Reports (Optional)**. Provides a set of pre-built reports on the operational performance of Portrait Interaction Optimizer. **Note:** Portrait Reports is optional for Portrait Interaction Optimizer, and not required for Portrait Explorer. If you want to optionally install Portrait Reports for Portrait Dialogue, see the *Installation of HQ Reports for Portrait Dialogue* guide on the Portrait Dialogue release media.

**Important:** Portrait Shared Server can be installed with a single Portrait product such as Portrait Dialogue or Portrait Explorer, or it can be installed with multiple Portrait Suite products to enable application integration. The following steps guide you through the install using the **Custom Install** option where you can select or deselect options based on whether you are installing single or multiple Portrait products.

1. Run the `setup.exe` in the `\Portrait Shared Server` directory on your installation media (.iso). Ensure you right-click the `setup.exe` and select **Run as Administrator**.
2. Select the display language for your installation.
3. Click **Next** on the **Welcome** dialog.
4. Accept the license agreement and click **Next**.
5. Accept the default destination folder and click **Next**.
6. On the **Installation Type** screen, select **Custom Install**.
7. On the **Custom Setup** screen, click **Portrait Shared Repository** and **Portrait Shared Services** and select **This feature will be installed on local hard drive**.
  - If you want to disable SharePoint Tasks (Optional) or Portrait Reports (Optional) for Portrait Dialogue or Interaction Optimizer, click the install component and select **This feature will not be available**.
8. On the **Database User properties** screen, enter the user credentials for the Portrait Shared Repository and Data Warehouse databases.
9. On the **Database Server** screen, select the database server that you are installing to. Edit the name of the database catalog; if you want to change the Portrait Shared Repository database name from the default of `PortraitPSR`. **Note:** The installer uses the login you specify on this screen to connect to the database server and create or update the Portrait database. You must specify a login that has at least the dbcreator server role.
10. On the **Database Server** screen, edit the name of the database catalog if you want to change the Portrait Data Warehouse database name from the default of `PortraitDW`.
11. On the **Web Site** screen, ensure that the `Default Web Site` is selected as the Web Site. Choose **Create a new web site** if you want to install the HQ into a new web site.
12. On the **Application Pool properties** screen, enter the user name and password of the account that you want to use to run the HQ.
13. On the **Portrait Analytics Web Services properties** screen, check **Enable Portrait Analytics Web Services Integration** *if* Portrait Explorer is one of the products you are installing. If not, uncheck this option.
  - If you checked this option, enter your Portrait Analytics Web Services (PAWS) password. The password you enter here must match the PAWS password you supply when installing Portrait Analytics Web Services. You should accept the defaults for the URLs on this page.
14. On the **Portrait Dialogue Service Properties** screen, check **Enable Portrait Dialogue integration** *if* Portrait Dialogue is one of the products you are installing. If not, uncheck this option.
  - If you checked this option, enter the URL of the Dialogue Server, and the name of the Dialogue Server instance. Accept the default URL if the Dialogue Server is installed on the same server as Portrait Shared Server.
15. On the **Portrait SharePoint Services Properties** screen, check the **Enable SharePoint Integration** checkbox *if* Portrait Dialogue or Interaction Optimizer are products you are installing and you want to use the SharePoint Tasks feature. If not, uncheck this option.
  - If you checked this option, enter the URL for the Portrait tasks site that you want the installer to create for you. The URL you provide identifies which SharePoint site collection the Portrait tasks site will be created in. This SharePoint site collection must already exist and use the Team Site template. To create a new site collection in SharePoint:
    - Launch SharePoint Central Administration

- Select Application Management > Create site collections
  - Enter the title Team Site for the site collection. **Note:** The site collection must be named Team Site.
  - Select Collaboration tab > Team Site template.
16. On the **SharePoint Admin Services** screen, if applicable, enter the details of an account that has administrative rights on your SharePoint server. Ensure you enter the correct port for the SharePoint Administration site. This port can be determined by launching SharePoint Central Administration on the SharePoint server and looking at the port number in the URL.
  17. On the **Marketing HQ properties** screen, enter the currency symbol you wish to use to present financial data in the Portrait HQ marketing dashboard.
  18. On the **Interaction Optimizer Properties** screen, check **Enable Interaction Optimizer Integration** *if* Interaction Optimizer is one of the products you are installing. If not, uncheck this option.
    - If you checked this option, provide the URL of the web site hosting the IO web service. Accept the default if IO is installed on the same server as Portrait Shared Server.
  19. On the **Report Server properties** screen, check the **Add link to report portal in HQ** box *if* you want to add a link to the Interaction Optimizer reports to the HQ. You must replace localhost in the Report Manager URL with the name of your Report Server (even if the Report Server is collocated with Portrait Shared Server).
  20. On the **Report Server Data Source Properties** screen, if applicable, enter the name of the database server where the Portrait Data Warehouse database resides. Enter the name of the Portrait Data Warehouse database. Enter the details of a SQL Server login that has at least Connect, Select and Execute permissions on the Portrait Data Warehouse database.
  21. On the **Ready to Install the Program** screen, click **Install**.
  22. Click **Finish**.

## Installing DWH SSIS packages

The campaign monitoring features of Portrait HQ rely on historical and aggregated data from the Portrait Data Warehouse database (named `PortraitDW` by default). This data warehouse database is populated and updated by SSIS packages that need to be installed on to a database server that has SQL Server Integration Services.

If you are installing Interaction Optimizer or Portrait Dialogue, follow this procedure:

1. Log on to your database server and run the `setup.exe` file located in `\Portrait Shared Server\SSIS Packages\` on your installation media. Right-click the `setup.exe` file and select **Run as Administrator**.
2. Accept the default installation folder and click **Next**.
3. On the first **Database Server** screen, provide the connection details for the PSR database. (The default PSR database catalog name is `PortraitPSR`.)
4. On the second **Database server** screen, provide the connection details for the PDW database. (The default PDW database catalog name is `PortraitDW`.)
5. On the next screen, check **Enable IO integration** if you are installing Interaction Optimizer . Check **Enable Dialogue Integration** if you are installing Portrait Dialogue.

6. On the **Database Server** screen(s), provide the connection details for the IO database (if installing Interaction Optimizer) and then the PD database (if installing Portrait Dialogue).
7. Click **Install** to install the DW Populate SSIS package. This package gets installed as `DWPopulate.dtsconfig` in the Portrait Shared Server install folder, for example, `C:\Program Files (x86)\PST\Portrait Shared Server\SSIS`.

**Note:** Interaction Optimizer users can optionally tune the `DWPopulate` package by changing configurable settings that are held in the `DWPopulate.dtsconfig` file. The relevant settings are:

- The minimum number of rows that remain in the source IO staging tables. **This is a system tuning parameter and should not be changed from the default value unless recommended by the Portrait support team.**

```
\Package.Variables[User::IO_MinSourceHistoryRows].Properties[Value]
```

- The size of the batches of records copied from the source IO staging tables. **This is a system tuning parameter and should not be changed from the default value unless recommended by the Portrait support team.**

```
\Package.Variables[User::IO_BatchCopySize].Properties[Value]
```

The correct tuning of these values can reduce the locks being taken out on the staging tables during data transfer and therefore reduce the performance impact of `DWPopulate` on the IO runtime.

## Scheduling data warehouse updates

The SSIS packages used to update the data warehouse must be scheduled to run at regular intervals to ensure that the data warehouse is kept up to date. To use SQL Agent to schedule data warehouse updates, follow this procedure:

1. Create a new SQL Agent job from **SQL Server Management Studio**. Right-click **SQL Server Agent** and select **New Job...** Specify a name and description for the new job and then select **Steps**.
2. Add a new job step by clicking the **New...** button on the steps page.
3. Provide a name for the job step and specify its type as **SQL Server Integration Services Package**. The package source should be set to **File System** and the **Controller.dtsx** package should be selected by browsing to the location that the SSIS packages were installed.
4. Specify the configuration file in the **Configuration** tab by clicking on **Add**, browsing to the location of where SSIS packages are installed and selecting the `DWPopulate.dtsConfig` file.
5. Click the **OK** button to add the new job step.
6. Select the **Schedules** page in the new job wizard and click the **New...** button to add a schedule for the job.
7. It is recommended that the DW population process is run once every hour. Select the **Schedule Type of Recurring** and ensure the schedule is enabled. The frequency of the schedule should be **Daily** and should be set to occur every hour starting at midnight and ending at 23:59. Click **OK** twice to complete the schedule definition and new job.

## Configuring a Portrait HQ user's type

You must set up user accounts for each of your Portrait HQ users, using Portrait Dialogue's Admin application

A Portrait HQ user can be one of four different types: marketing operations, direct marketer, senior management or creative. The type will determine what default content is seen by the user.

Configuration of a user's type is done via the Portrait Dialogue instance that is used by the Portrait HQ and is performed via Portrait Dialogue. When no configuration has been performed users will be of the marketing operations type. To assign a type to a user, one of the following Access Rights should be given to the user via Dialogue Admin:

- Portrait HQ business stakeholder users
- Portrait HQ creative users
- Portrait HQ Customer Insight users
- Portrait HQ direct marketer users
- Portrait HQ marketing operations users
- Portrait HQ senior marketing management users

If a user is given more than one of the above access rights, they will receive the type that occurs earliest in the list above.

### Portrait HQ user rights in Portrait Dialogue

After installation and configuration the users that should have access to Portrait HQ need to be given access rights. This needs to be done in the Dialog Admin tool under <instance name>/Users and Security/Users. Under the Access rights tab there are a number of access rights that need to be assigned to any user who wishes to access Portrait HQ, such as "Allow user to access Portrait HQ" and "Allow user to add and edit campaigns". No access rights will be given to Portrait HQ users as a part of the Portrait Dialogue installation, so this needs to be done manually for users that should have Portrait HQ access.

## Mapping field names for analytics integration

### Field mappings

If your analytics datasets are built using field names that are different from the underlying field names in Portrait Dialogue, or need to be resolved by Portrait Dialogue expressions rather than field references, then you must publish a 'rule input mappings' definition to the repository. This controls how Portrait Dialogue will map from analytics field input-names to Portrait Dialogue field names when an analytics rule or decision optimization is executed within a Portrait Dialogue dialog.

You can publish a set of rule-input mappings for Portrait Dialogue by preparing an XML file and then running the **cmsmappingpublish** command-line utility within the Portrait Miner environment. Each Portrait Dialogue customer domain has its own mappings.



### Field-mapping definition format

A rule-input mappings file has a format like the following, where it specifies that it is defining mappings for use in Portrait Dialogue, and it gives the *source* (what the field is called in Portrait Dialogue) and *target* (what the field is called in Portrait Miner) names for each field. You do not need to provide mappings for fields which have the same name in both Portrait Dialogue and Portrait Miner.

```
<?xml version="1.0" encoding="UTF-8"?>
<mapping system="PCM">
  <field source="PCM-Name" target="Analytics-FieldName"/>
  ...
</mapping>
```

Whenever the rule input-mappings need to be changed (if you add additional fields to your Portrait Dialogue customer domain which have non-matching names in Analytics, for example), you can import a new set of mappings for that domain and the new mappings will take effect immediately - any subsequent execution of Analytics Rule or Decision Optimization operations in Portrait Dialogue dialogs in that domain will immediately pick up the new mapping definition.

A `<field>` element in a mappings file can also include two additional optional attributes:

- **sourcetype**: This can be set as either **sourcetype="FIELD"** or **sourcetype="FUNCTION"**, and specifies whether the 'source' value should be interpreted by Portrait Dialogue as being a customer domain field name or a Portrait Dialogue function. If not given, then the default is FIELD.
- **type**: This can be used to describe the type of the field in the Analytics environment, and can have the value "integer", "real", "string" or "date". It is for description only - it does not have any effect on the meaning of the field mapping.

If the **sourcetype** is defined as "FUNCTION", then the value of the 'source' attribute must be a valid Portrait Dialogue expression which returns a single value of one of the following data types: *string*, *integer*, *float*, *datetime/date*, or *boolean* (where a boolean is mapped to the integer values 0 for *false* and 1 for *true*).

### Example

Here is an example of a mapping file that uses functions:

```
<?xml version="1.0" ?>
<mapping system="PCM">
  <!-- Maps to the answer of an integer question in a questionnaire.
  Returns NULL if the customer has not answered that questionnaire -->
  <field target="TI_Q1" sourcetype="FUNCTION" source="AnswerInt(1014,
  "Q1", "")" />
  <!-- Maps to the answer of single choice question (radio buttons)
  in a questionnaire. Returns the alternative key (e.g. "A1"), and NULL if the
  customer has not answered that questionnaire -->
  <field target="TI_Q2" sourcetype="FUNCTION" source="AnswerSingle-
  Choice(1014, "Q2")" />
  <!-- Maps to the answer of a boolean alternative of a question (check
  boxes) in a questionnaire. Returns true/false, and NULL if the customer has
  not answered that questionnaire -->
  <field target="TI_Q2_BOOL" sourcetype="FUNCTION" source="IsAn-
  swered(1014, "Q2", "A1")" />
```

```
<!-- Checks if a message of a specific template has been created
for the customer. Returns true/false -->
<field target="TI_MSG_TEMPLATE_1170" sourcetype="FUNCTION" source="has
Messages[templateid = 1170]" />
<!-- Checks if a customer has a specific value in a category with
values. Returns true/false -->
<field target="TI_CATEGORY_1011_I5" sourcetype="FUNCTION" source="has
Categories[Name = "CATEGORY_1011" and Value = "I5"]" />
<!-- Checks if a customer has been treated by a dialog operation
(requires participant logging in the dialog). Returns true/false -->
<field target="TI_OFFER_1" sourcetype="FUNCTION" source="HasOperationHistory(4519)" />
<!-- Checks if a customer has been treated by a dialog branch (re-
quires participant logging in the dialog). Returns true/false -->
<field target="TI_OFFER_2" sourcetype="FUNCTION" source="HasBranchHistory(1231)" />
</mapping>
```

# Configuring Portrait HQ / Dialogue integration

## Configuring Portrait HQ settings

The following settings need to be set in order for Portrait HQ to integrate with Portrait Dialogue:

- `PssEnableAnalytics` enables Portrait Miner integration if that is installed.
- `PssEnableCampaigns` enables the Portrait HQ icon in Visual Dialogue.
- `PssHqUrl` is the url to the Portrait HQ web installation.
- `PssServiceBaseUrl` is the url to the PSS.

The settings can all be found in Dialog Admin under `General Admin / Parameter collections / PSS Integration`.

## Configuring Portrait HQ Silverlight integration

Portrait HQ is built on top of Silverlight 5 which supports the hosting of web browser controls within Portrait HQ. This means certain Portrait Dialogue web applications can be embedded within Portrait HQ for improved user experience and integration.

To enable this improved functionality, Portrait HQ must be run with evaluated trust. This involves the following network administrator set up:

### Updating the Client Registry

Configure client computers to allow trusted applications inside the browser by enabling the following registry key:

Setting key path for 32-bit computers:

```
HKEY_LOCAL_MACHINE\Software\Microsoft\Silverlight\
```

Setting key path for 64-bit computers:

KEY\_LOCAL\_MACHINE\Software\Wow6432Node\Microsoft\Silverlight\

Value name:

AllowElevatedTrustAppsInBrowser

Value type:

DWORD

Valid Values:

Disabled - 0x00000000

Enabled - 0x00000001

### Installing Certificate to Trusted Publishers certificate store

Portrait HQ is a signed application with a valid certificate. Install the certificate (*supplied with release CD*) to the Trusted Publishers certificate store and (*if necessary*) the Trusted Root Certification Authorities store.

For more information, see [http://technet.microsoft.com/en-us/library/cc730989\(WS.10\).aspx](http://technet.microsoft.com/en-us/library/cc730989(WS.10).aspx)

**Note:** We recommend rolling out the changes via group policy. For more information, see:

- <http://www.grouppolicy.biz/2011/04/silverlight-5-group-policy/>
- [http://technet.microsoft.com/en-us/library/cc770315\(v=ws.10\).aspx](http://technet.microsoft.com/en-us/library/cc770315(v=ws.10).aspx)

**Note:** A batch file `HQClientConfig.bat` has been included on the release media in the event you want to update individual machines.



# Configuring Portrait Dialogue

## In this section:

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- **Web parameters** .....54
- **Email parameters** .....54

## Introduction

For Portrait Dialogue to work correctly, some parameters have to be configured manually after the installation is finished. Most of these have to do with the web solutions. See the help file provided with Dialogue Admin for more help on how to change parameters.

## Web parameters

The following parameters have to be changed to match your web installation. They can all be found under General Admin - Parameter collections.

- Internal URLs/CustomerViewURL
- Internal URLs/DashboardURL

Dashboard links from the navigation pane and **View** menu in Visual Dialogue are disabled by default. To enable them, you will need to set the Internal URLs/DashboardEnabled parameter to “TRUE”.

- Internal URLs/QuestPreviewURL
- Internal URLs/ReportPortalURL
- Internal URLs/ReportViewerURL
- Internal URLs/TelemarketingURL
- Internal URLs/WebPortalURL
- Public URLs/AnswerFormURL
- Public URLs/EmailMessageURL
- Public URLs/UnsubscribeURL
- Public URLs/WebProfileURL
- Public URLs/WebUtilsURL

## Email parameters

You have to set the name of the email server you will use to send emails. This can be found under Channel types/Email/Output channels. Open the email channel and edit the control parameter SMTP host IP to the match name of the host where your email server is installed.

## Appendix

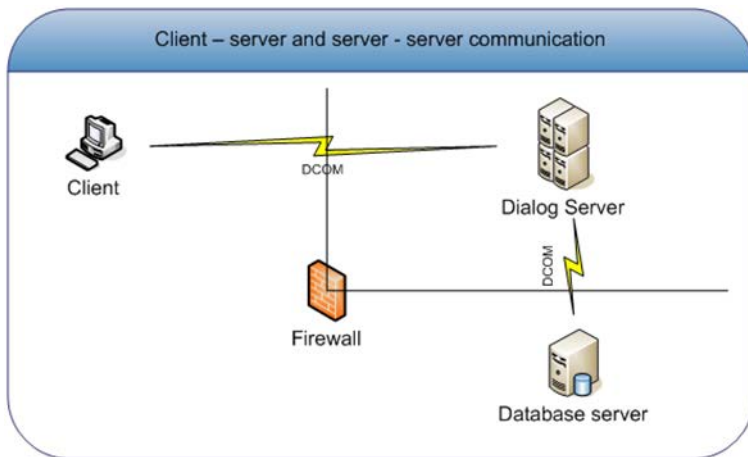
### In this section:

- **Configuring MTS and DCOM setup with firewalls/different domains . . . . .56**
- **Cloning DTC servers . . . . .57**
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# Configuring MTS and DCOM setup with firewalls/different domains

## Configuring DTC to Work Through a Firewall

This scenario applies to both client – Dialogue Server, and Dialogue Server – database server communication. The server – database server communication is only applicable when you use Microsoft SQL Server, and NOT when you use Oracle DBMS.



You can configure DTC to communicate through firewalls, including network address translation firewalls.

DTC uses Remote Procedure Call (RPC) dynamic port allocation. By default, RPC dynamic port allocation randomly selects port numbers above 1024. By modifying DTS setup, you can control which ports RPC dynamically allocates for incoming communication. You can then configure your firewall to confine incoming external communication to only those ports and port 135 (the RPC Endpoint Mapper port).

You must provide one incoming dynamic port for DTC. You may need to provide additional incoming dynamic ports for other subsystems that rely on RPC.

## General

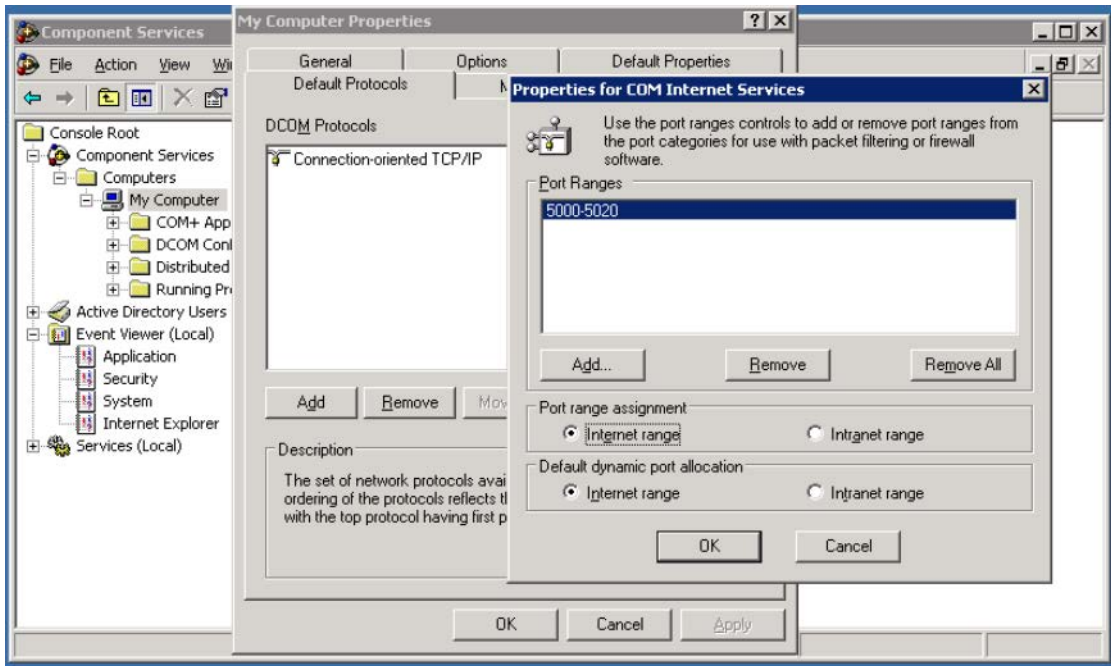
DTC requires that you are able to resolve computer names by way of NetBIOS or DNS. You can test whether or not NetBIOS can resolve the names by using ping and the server name. The client computer must be able to resolve the name of the server, and the server must be able to resolve the name of the client. If NetBIOS cannot resolve the names, you can add entries to the LMHOSTS files on the computers.

To configure client – server communication you only need to change DTC settings on the Application server. For Application server – database server communication you need to change DTC settings on both servers.



## Setting up DTC

To control RPC dynamic port allocation open “Component services”. Right click on “My Computer” choose “Properties”. On the “Default Protocols” tab make sure the TCP/IP protocol is in top of the list. Click on this and add the port range as shown below:



Microsoft recommends that you open up ports from 5000 and up, and that you open a minimum of 15 to 20 ports.

You must reboot the server for applying these settings.

## Setting up the firewall

The firewall must be open in both directions for the specified ports (tcp/ip) and for port 135 (UDP).

## Cloning DTC servers

Often IT departments use cloning tools to roll out new servers. If you clone a server you should always make sure the machines have unique identities. If they have the same identity the DTC services are unable to communicate. You will get the following error in the event log:

The local MS DTC detected that the MS DTC on “CLONED SERVER” has the same unique identity as the local MS DTC. This means that the two MS DTC will not be able to communicate with each other. This problem typically occurs if one of the systems were cloned using unsupported cloning tools. MS

DTC requires that the systems be cloned using supported cloning tools such as SYSPREP. Running 'msdtc -uninstall', do a reboot and then 'msdtc -install' from the command prompt will fix the problem. Note: Running 'msdtc -uninstall' will result in the system losing all MS DTC configuration information. Note: On Windows 2008 Server with UAC enabled, the commands must be run as administrator.

## Portrait HQ datasheet

Use this datasheet when installing Portrait HQ with Portrait Interaction Optimizer. We recommend you print this checklist and fill in all information prior to completing your installation/upgrade.

Installation item	Recommended or default value
Installation or destination folder	C:\Program Files\PST\Portrait Shared Server\
Installation type	Complete
Database user domain	To be determined at time of install
Database user name	To be determined at time of install
Database login user's password	To be determined at time of install
HQ SQL server instance	To be determined at time of install
Portrait Shared Repository database name	PortraitPSR
Portrait Data Warehouse database name	PortraitDW
Portrait HQ Service Account domain	To be determined at time of install
Portrait HQ Service Account name	To be determined at time of install
Portrait HQ Service Account password	To be determined at time of install
Portrait Dialogue server address	http://localhost/mhdialogserverapi
Portrait Dialogue server instance	Default
Portrait SharePoint services address	http://localhost/Portrait
Currency symbol	To be determined at time of install
Foundation Decisions web service address	http://localhost/DecisionsWCFWebService/DecisionsWebService.svc
Foundation IO Bridge web service address	http://localhost/IOBridgeWCFWebService/IO-BridgeWebService.svc
Report server URL	Default = http://localhost/ReportServer

---

## SharePoint / Interaction Optimizer install considerations

If you install SharePoint (optional) and Portrait Shared Server together on a single machine, then they have to run within separate web sites. You will have to decide which of them will run on the default port of 80, and which of them will run on some other port. Then carry out the following steps during the install:

- If you are happy to run SharePoint on port 80, and the Portrait Shared Server applications (and any other web applications on the server) on some other site, then you will have to modify the properties of the IIS "Default Web Site" to change its port to something other than 80, then start it running. Alternatively (and this is the recommended configuration), if you would rather run the Portrait Shared Server applications (and any other web applications on the server) on the default port 80, and run SharePoint on some other port. Then you will have to start the IIS "Default Web Site", as it will have been stopped when you installed SharePoint. If PCM is already installed on the "Default Web Site", then it's a good idea to install SharePoint to a new website called "SharePoint - 8080" on port 8080. This is done under the SharePoint installation.
- Define "Alternate Access Mappings" for each URL that SharePoint needs to be accessible on. For instance, if you have changed the port that SharePoint is running on, then you must edit the mapping that referred to the old port, to give it the new port instead. Additionally, you should create extra mappings for the fully-qualified domain-name variants of each internal URL if you need the SharePoint site to be accessible via a fully-qualified domain name (as by default SharePoint only provides mappings for the simple unqualified form).
- To set up these mappings, run the SharePoint Central Administration tool (from "Administrative Tools" on the start menu), go to the "Operations" menu, and select "Configure alternate access mappings".

**For example**, if you have changed your SharePoint to run on *myserver:8090* instead of *myserver:80*, and you also want it to be accessible as *myserver.mydomain.mycompany.com*, then you need to:

- edit the existing *http://myserver:80* mapping to change its port to 8090.
- edit that mapping again to define an 'intranet' or 'internet' fully-qualified equivalent URL *http://myserver.mydomain.mycompany.com:8090*.

