

Brainware Intelligent Capture Solution Configuration Manager

Installation and Setup Guide

Version: 1.2.x

Written by: Documentation Team, R&D

Date: July 2019

Table of Contents

Brainware Intelligent Capture Solution Configuration Manager Overview	5
BIC Solution Configuration Manager Installation Process	5
Prepare to install.....	5
System Requirements	6
Operating systems.....	6
BIC Solution Configuration Manager database	6
Software.....	6
Internet Information Server.....	6
Internet browsers.....	7
Install BIC Solution Configuration Manager.....	7
Configure database checklist	7
<i>BIC Solution Configuration Manager SQL server checklist.....</i>	<i>7</i>
<i>BIC Solution Configuration Manager Oracle checklist.....</i>	<i>7</i>
Install BIC SCM through Brainware Solution Configuration Manager Installer	8
Manually install BIC Solution Configuration Manager	10
Manually create database objects.....	10
Migration Packet Share Path.....	11
Configure Internet Information Server	11
<i>Creating the Application/Web site.....</i>	<i>12</i>
<i>Directory Security.....</i>	<i>12</i>
Configure Authentication	12
<i>Configure Forms Authentication</i>	<i>12</i>
<i>Configure Windows Authentication.....</i>	<i>12</i>
Post Installation Configuration.....	14
<i>Deploying a Project Package.....</i>	<i>14</i>
<i>Managing Database Connections.....</i>	<i>14</i>
<i>Adding a Project.....</i>	<i>15</i>
<i>Restart the Internet Information Server</i>	<i>15</i>

Update BIC Solution Configuration Manager	16
Index	17

Brainware Intelligent Capture Solution Configuration Manager Overview

The Brainware Intelligent Capture (BIC) Solution Configuration Manager (SCM) is a web-based application for the administrators of Brainware Intelligent Capture. This application allows you to configure and manage the database for the different packaged solutions delivered by Brainware. You can manage a database from an Internet browser by entering the BIC Solution Configuration Manager URL. The BIC Solution Configuration Manager saves the changes made and creates migration packets. You can then import those packets to other environments.

An initial installation of BIC Solution Configuration Manager requires that you complete several tasks in order. The following installation information assumes that you are performing an initial installation of BIC Solution Configuration Manager.

BIC Solution Configuration Manager Installation Process

Prepare to install

The following steps outline the high-level procedures that you need to perform to install and configure BIC Solution Configuration Manager and the information you need to verify before the installation.

Perform and verify the following procedures during the installation process.

- Confirm installation of software prerequisites
- Ensure you have enough disk space for the executables
- Enable Management Services in IIS

System Requirements

Operating systems

You must install and configure one of the following operating systems before you install BIC Solution Configuration Manager.

- Microsoft Windows 10
- Microsoft Windows Server 2012
- Microsoft Windows Server 2016

BIC Solution Configuration Manager database

The BIC Solution Configuration Manager module requires central management of project data in a database. The BIC Solution Configuration Manager database is certified to run on the following database platforms.

- Microsoft SQL Server 2012
- Microsoft SQL Server 2014
- Microsoft SQL Server 2016
- ORACLE 12c
- Oracle 11g

Software

You must install the following software applications before you install the application on your machine.

- Internet Information Server 7
- .NET Framework 3.5 SP1

Internet Information Server

Prior to installing BIC Solution Configuration Manager, you must install Microsoft IIS according to the instructions provided on the Microsoft website. Refer to the Intelligent Capture Technical Specifications for information about supported versions of IIS, as well as any other prerequisite for this product.

For a successful installation, you must not modify the name of the Default Web Site. It must remain "Default Web Site".

During the installation of IIS 7, make sure that you install the following Role Services:

- Static Content
- Default Document

- Directory Browsing
- HTTP Errors
- ASP.NET
- .NET Extensibility
- HTTP Logging
- Request Monitor
- IIS 6 Metabase Compatibility

For more information on installing and configuring IIS, refer to the Microsoft documentation.

Internet browsers

The BIC Solution Configuration Manager application is certified to use the following internet browsers.

- Internet Explorer 9 and higher
- Google Chrome
- Mozilla Firefox

Install BIC Solution Configuration Manager

The following sections define the steps required to install the BIC Solution Configuration Manager.

Configure database checklist

You configure the database checklist depending on your operating system.

BIC Solution Configuration Manager SQL server checklist

You must create the following database accounts before installing BIC Solution Configuration Manager

- Administrative database account with create, modify, and delete rights in the database tables. You can use windows authentication if you have administrator rights to the database server.
- User database account used by BIC Solution Configuration Manager with administrative rights to add, modify, and delete data. You can use windows authentication if your installation has the appropriate rights to the database server.

BIC Solution Configuration Manager Oracle checklist

You must complete the following tasks before installing BIC Solution Configuration Manager.

1. Create an ORACLE instance for BIC Solution Configuration.

2. Create a user for BIC Solution Configuration Manager with a password.
3. Assign rights to the user.
 - i. Allow increased growth of data.
 - ii. Allow insertion, modification, and deletion of data.
 - iii. Allow creation of database entities.
4. Create an administrative database account with create, modify, and delete rights in the database tables. You can use windows authentication if you have administrator rights to the database server.
5. Create database account used by BIC Solution Configuration Manager with administrative rights to add, modify, and delete data. You can use windows authentication if you are installation has the appropriate rights to the database server.

Install BIC SCM through Brainware Solution Configuration Manager Installer

You can install BIC Solution Configuration Manager by following the steps mentioned in the Brainware Solution Configuration Manager Installer Setup Wizard.

The SCM Installer contains the following artifacts.

- The SCM Installer
- The Database Scripts needed to create the SCM Database (both SQL Server and Oracle)
- The product version specific SCM Package files for both BFI and BFT

To install BIC SCM through Brainware Solution Configuration Manager Installer, complete the following steps.

1. Launch the Brainware Solution Configuration Manager Setup Wizard.
2. Enter the directory path where you want to install SCM in the **Install Solution Configuration Manager Web Files to** box.
3. Click **Next**. The **Setting IIS Application Pool Identity** page appears.
4. Select the account using which you want to set up the application pool.
Note You can use the built-in account which is selected by default or create a custom account.
5. Click **Next**. The **Database Creation** page appears.
6. Perform one of the following options.
 - Click the **Database created by the installation** option if you want the installer to set up the database as part of the installation process.

- Click the **Database created manually by the user** option if you want to set up the database manually. For more information, refer to the [Manually create database objects](#) section in this document.
7. Click **Next**. The **Database Connection** page appears.
 8. Specify the database connection string that the SCM application will use in the **SCM Connection String** box and click **Next**.
 9. On the **Migration Packet Share Paths** page, in the **Import Share path** box, enter the share path for the Import packet.
 10. Enter the share path for the Export packet in the **Export Share path** box and click **Next**.
 11. On the **Brainware Intelligent Capture Connection String** page, in the **Brainware Intelligent Capture Connection String** box, specify the Brainware Intelligent Capture Core connection string and click **Next**.
 12. Optional. On the **Deploy Brainware Solution Configuration Package** page, select the check boxes next to the product specific SCM packages that you want to include as part of the installation and click **Next**.
Note: The SCM 1.2 can support BFI 3.1 and above or BFT 2.3 and above, only if the packages are manually added after installation. For more information on how to add a package manually, refer to **Deploying a Project Package**.
 13. Optional. On the **Brainware Solution Configuration Package Connection** page, specify the package specific connection string in the **Connection String** box.
 14. Optional. Type the display name for your project in the **Project Display Name** box and click **Next**.
 15. On the **Summary** page, review the installation details that you have selected and click **Install**.

Manually install BIC Solution Configuration Manager

You can install BIC Solution Configuration Manager manually by following the procedure defined below for manual installation.

To install BIC Solution Configuration Manager manually, complete the following sections as needed.

- [Manually create database objects](#)
- [Migration Packet Share Path](#)
- [Configure Internet Information Server](#)
- [Configure Authentication](#)
- [Deploying a Project Package](#)
- [Managing Database Connections](#)
- [Adding a Project](#)
- [Restart the Internet Information Server](#)

Manually create database objects

For more information on installing the database, refer to the following information on the respective company's website.

- Oracle 11g R2 documentation.
- Microsoft SQL Server 2008 R2 documentation

After creation of a new database on the respective server, complete the following steps to install and configure the database manually.

1. Extract the **BIC_Solution_Configuration_Manager_x.x.xxxx.zip** to a directory of your choice.
2. Launch Windows Explorer and navigate to **<ExtractedFolderLocation>\Database\CreationScripts**.

There are two folders, SQL Server and ORACLE. Each folder contains database scripts to execute that will create the tables, views, indexes, and default data values.
3. Run the database script for your installed database server to create the appropriate values.
4. Check that the database tables have been created correctly and no errors were reported on execution of the database scripts.
5. Navigate to the **<ExtractedFolderLocation>\BICSCMWeb** folder and open the **Web.config** file in Notepad.
6. Search for the connection string in the file - **<connectionStrings>**.
7. Modify the connection strings to connect to the databases. (The "configurator" connection string should point to the BIC Solution Configuration Manager database, and the "distiller" connection string should point to the Brainware Intelligent Capture database.) Passwords entered within the

Web.config connection string will be encrypted upon the start of the BIC Solution Configuration Application and stored as encrypted text within the Web.config file.

Note Replace the values in **RED** with actual values.

SQLServer Example

```
<connectionStrings>
<add name="configurator" connectionString="Data Source=SQLServerName;Initial
Catalog=configurator;Integrated Security=False;User ID=User ID;Password=
Password;MultipleActiveResultSets=True" providerName="System.Data.SqlClient" />

<add name="distiller" connectionString="Data Source=SQLServerName;Initial
Catalog=Intelligent Capture database name;Integrated Security=False;User ID=User
ID;Password= Password;MultipleActiveResultSets=True"
providerName="System.Data.SqlClient" />
</connectionStrings>
```

ORACLE Example

```
<connectionStrings>
<add name="configurator" connectionString="Data Source=Oracle Server Name/Oracle
database name;User ID=User ID;Password=Password"
providerName="Oracle.DataAccess.Client" />

<add name="distiller" connectionString="Data Source=Oracle Server Name/Oracle
database name;User ID=User ID;Password=Password"
providerName="Oracle.DataAccess.Client" />
</connectionStrings>
```

Migration Packet Share Path

BIC Solution Configuration Manager saves each configuration change into a migration packet. These packets can be exported to a network share and then imported to another system from the share. Configuration of the Share path is controlled within Web.config. To configure the Share path:

1. Navigate to the **<ExtractedFolderLocation>\BICSCMWeb** folder and open the **Web.config** file in Notepad.
2. Search for **<add key="DefaultImportPath"** and **<add key="DefaultExportPath"**
3. Modify the Import and Export path values to your network share
4. Save the **Web.config** file.

Configure Internet Information Server

You need to install the Microsoft Internet Information Server before installing BIC Solution Configuration Manager using the settings outlined in the [Internet Information Server](#) section of this document.

Creating the Application/Web site

Create a new application with the following settings.

- Map the Physical Path to the physical path from which the BIC Solution Configuration Manager was extracted.
- Create an application pool or change **DefaultAppPool** with the following advanced properties.
 - Enable 32-bit applications = True
 - Managed pipeline mode = Integrated
 - Identity is set to NetworkService
- Assign the Configurator application to this application pool so that the application can run under 32-bit mode.
- Configure default document to include only **Login.aspx**.
- If your installation is on Windows 2008 R2, disable DEP with following command:
 - `bcdedit.exe /set {current} nx AlwaysOff`

Directory Security

1. Provide modify permission to the App pool under which the BIC Solution Configuration Manager will be running to the BICSCMWeb physical folder.
2. Provide the modify permission to the App pool under which the BIC Solution Configuration Manager will be running to the Network share where the Export and Import Packet will happen.

Configure Authentication

Configure Forms Authentication

The BIC Solution Configuration Manager allows you to log in with your Brainware Intelligent Capture user account. In this case, BIC Solution Configuration Manager will authenticate the username and password against the Brainware Database. The user must be assigned the ADM role within the BIC project in order to have access to the BIC Solution Configuration Manager. There are no additional steps required to enable Forms Authentication.

Configure Windows Authentication

The BIC Solution Configuration Manager allows you to log in with your Windows user account. In this case, the password shared with Windows is used to log in to BIC Solution Configuration Manager. A check against the Brainware Database will be performed to ensure the Windows user has been assigned the ADM role within the BIC project in order to have access to the BIC Solution Configuration Manager.

To use this option, you first need to configure the IIS server.

Note Only Windows Authentication access will be possible after this option is configured.

Configure Windows Authentication for IIS 7

Before starting to configure IIS, make sure that the Configurator application is working properly and back up the web.config file.

Note For more information on configuring Windows authentication within IIS, refer to the Microsoft website.

To configure Windows Authentication access to BIC Solution Configuration Manager with IIS 7:

1. Open the **Authentication** application settings in IIS group.
2. Enable **Windows Authentication** and disable all other authentication methods.
3. Close all of the running browser sessions prior to access the Configurator application.

Windows Authentication Changes to Web.config File

It is highly recommended to have two versions of the web.config file – one for standard authentication and one for Windows Authentication. This will simplify switching between modes.

The following list shows required steps to convert a standard web.config to a web.config with Windows Authentication enabled.

1. Change the **<authentication>** section (located in the **<configuration><system.web>** directory) to the following: **<authentication mode="Windows">**
2. Remove the following line: **<forms loginUrl="Login.aspx" returnUrl="ConfigureProject.aspx" "/>** This is a child of the **<authentication>** section, and is only needed for standard authentication.
3. Change the **<authentication>** (located in the **<configuration><system.web>**) from 'deny' to 'allow':
<authorization <allow users="?" /> </authorization>

Post Installation Configuration

The following sections define the steps required to configure the BIC Solution Configuration Manager.

Deploying a Project Package

BIC Solution Configuration Manager supported projects can be deployed into the application by uploading the appropriate package. Packages are named SCM_ProjectNameandVersion_PackageBuildNumber. For instance, the first Package delivered for BIC for Invoices version 3.0 would be named “SCM_BICI3.0_001.zip”. This package contains the control file BIC Solution Configuration Manager uses to display the project’s configuration options along with Help Text for the project’s configurable options. To upload a package, follow these steps:

1. Log in to BIC Solution Configuration Manager.
2. Select **Manage Project Configuration**→**Manage Existing Package** from the menu bar.
3. Click the **Browse** button and select the package Zip file you want to add.
4. Select the **Is Active** check box to make the project active upon deployment.
5. Click the **Add New Package** button.
6. A message box displays noting the package has been deployed. The new package now displays in the **Existing Packages** table.

Managing Database Connections

BIC Solution Configuration Manager needs access to the configuration database of the projects. These connections’ settings should be configured for each project you wish to configure. To configure database connections:

1. Log in to BIC Solution Configuration Manager.
2. Select **Manage Project Configuration**→**Manage Database Connections** from the menu bar.
3. Enter a database connection number (this can be any integer from 1 to 999999999, but it is suggested to start with 1).
4. Select a Provider Type (SQL or Oracle).
5. Configure the appropriate columns for the provider selected (**Server Name**, **Database Name** (SQL only), **Username/Password** or **Integrated Security**).
6. To test the connection settings, click the **Test Connection** button.
7. Click **OK** on the **Test Success** message box and then click **Insert** to add the connection number to the list of available connections.

Adding a Project

With a package deployed and a database connection group available, you can now add your project to the BIC Solution Configuration Manager's table of available projects. To add a project, complete the following steps.

1. Log in to BIC Solution Configuration Manager.
2. Select **Manage Project Configuration** from the menu bar.
3. Enter a **Project Name** (This name does not have to align with the actual project file name, but should be easily recognizable by all project administrators e.g. "Invoices").
4. Select a **Package** and **Version** from the drop-down lists and select the **Connection Group** assigned to the project's configuration database.
5. Set the **Active** flag according to whether you want the project to appear within **Configure Project**.
6. Click **Insert** to add the project.

Restart the Internet Information Server

After adding a package, you need to restart the IIS server that hosts the BIC Solution Manager. This enables you to view the updates that the package brings into the project.

When the IIS server starts, the display text table is cached locally. So, the updates made to this table are not displayed even if you refresh the login session after adding the package. To view the changes to the display text in the BIC Solution Manager user interface, you must restart the IIS server.

Update BIC Solution Configuration Manager

You can upgrade from a previous version of Solution Configuration Manager to the latest release version without assistance from Production Support and losing your project settings.

Note Take a backup of the existing **web.config** file before you download the latest artifacts from the new release package.

Since Solution Configuration Manager already exists in your system, you only need to upgrade the following components to obtain the latest version.

- **Update the files and artifacts relevant to Solution Configuration Manager:** Download and replace the existing project artifacts and files relevant to Solution Configuration Manager with the new version of files available in the **BFISCM** folder included in the new release package. This should include all files and folders that are part of the **BFISCM** folder excluding the **web.config** file.
- **Update the web.config file:** When you copy the project artifacts, the new web config file is downloaded to your system. But it would mostly contain dummy or blank settings. Replace these dummy settings with the actual settings available in the existing backup web.config file. This specifically includes the Database connection strings and the Import and Export package directory paths. All other settings should remain unchanged.
- **Update the database:** You need to update your database in order to run the new version of Solution Configuration Manager. Run the database update script **Upgrade_SCM<ExistingVersion>to<NewVersion>** available with the new package, for both Oracle and SQL Server. Restart the Internet Information Server.

Index

add		Install	
project	15	BIC Solution Configuration Manager.....	7
authentication		Installation	
configure	12	BIC Solution Configuration Manager.....	5
BIC Solution Configuration Manager		Internet browsers	7
database	6	Internet Information Server	6
Install	7	configure.....	11
Installation.....	5	restart	15
Update	16	manage	
Brainware Intelligent Capture Solution Configuration Manager		database connections	14
Overview.....	5	operating systems.....	6
configuration		Overview	
post installation	14	Brainware Intelligent Capture Solution Configuration Manager	5
configure		post installation	
authentication	12	configuration	14
database checklist	7	project	
Internet Information Server.....	11	add	15
database		project package	
BIC Solution Configuration Manager.....	6	deploy.....	14
database checklist		restart	
configure	7	Internet Information Server	15
database connections		software	6
manage.....	14	System Requirements	6
deploy		Update	
project package	14	BIC Solution Configuration Manager.....	16
install	5		