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Crossrail – Innovation Management System

NashTech Software Development

Installation Guide

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5th April, 2013



RECORD OF CHANGE

* A – Added, M – Modified, D - Deleted

Date	Changed Items	*A, M, D	Description	Version
5-Apr-2013	All	A	Initial version	1.0

SIGN OFF

	Name & Role	Date	Signature
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Reviewer/s	██████████		
Approver/s			

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1 INTRODUCTION

1.1 Purpose

This document is a guide for deploying IMS on IIS 7 or higher. The web applications require version 4.0.30319 of the .NET framework.

1.2 Scope

1.3 Definitions, Acronyms and Abbreviations

1.4 References

This tutorial requires the CrossrailIMS.zip file containing the installs for the web app and service.

2 INSTALLATION GUIDE

2.1 Preparation

2.2 Install package

Unzip InnovationIMS.zip File (including all the web files and folders) to a temporary location on a local drive. There should be four unzipped folders under the root CrossrailIMS folder:

CrossrailIMS\CrossrailIMS

CrossrailIMS\DataGatewayService

CrossrailIMS\DBScripts

CrossrailIMS\ImportInnovationService

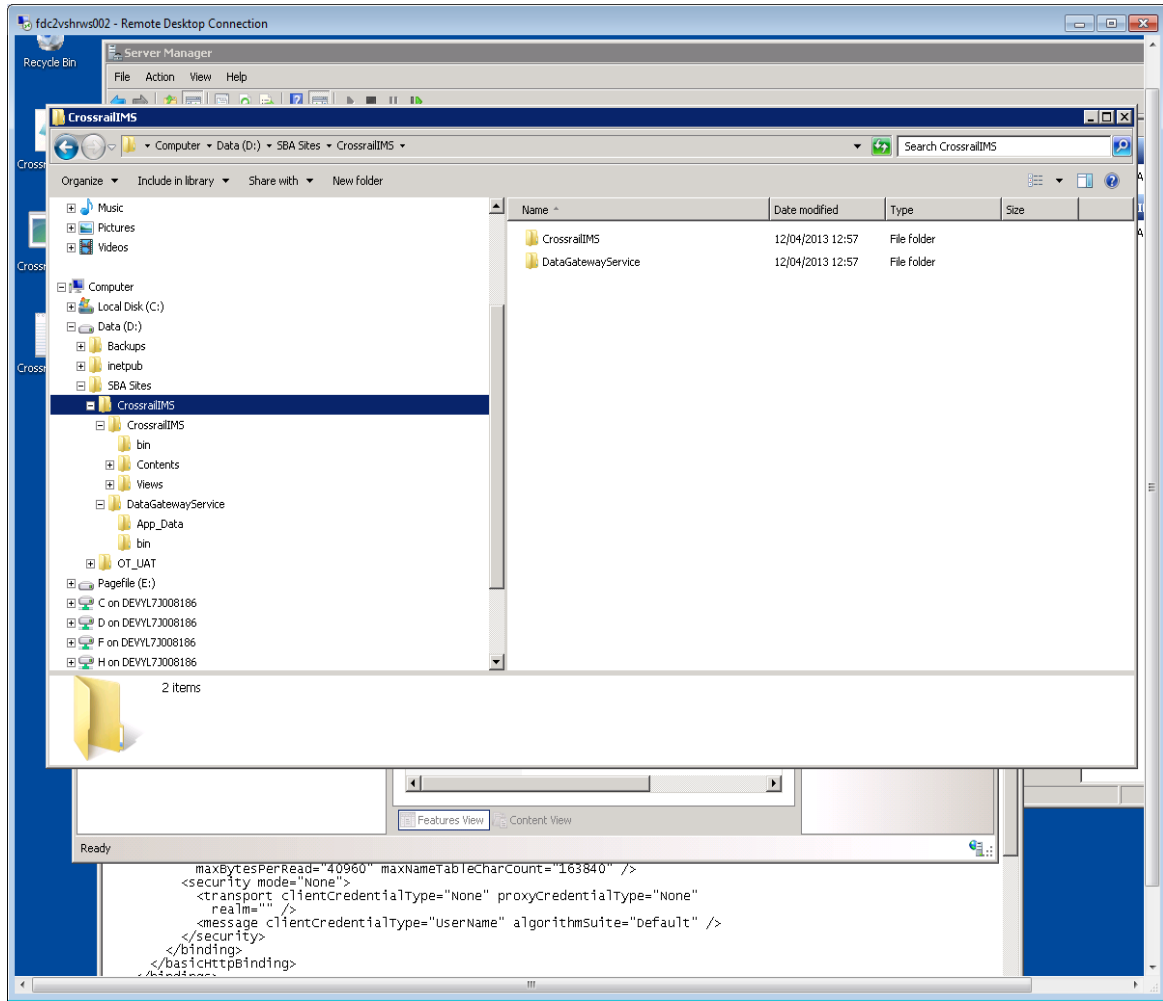
Create the following folder on the target remote web server:

D:\SBA Sites\CrossrailIMS - **this one will be used during the installation steps.**

Copy the following unzipped local folders to this new target folder on the remote web server:

CrossrailIMS\CrossrailIMS

CrossrailIMS\DataGatewayService



There should now be 2 folders under D:\SBA Sites\CrossrailIMS on the remote web server:

- CrossrailIMS
- DefaultGatewayService

2.3 Create database and tables

This step assumes that SQL Server 2008 R2 is installed on the target remote database server.

Open SQL Server Management Studio connecting to the target database and create a database named: “CrossrailIMS”

Under the local DBScripts folder (see step 2.2), open InnovationIMS_Script.sql file in a SQL Server Management Studio query window.

Notes: A new administrator is required at the bottom of the SQL script. Please amend the exiting INSERT statement to insert a person who is in Crossrail Active Directory.

```
INSERT [User] ([UserName], [RoleId], [IsDisabled], [FullName]) VALUES (
N'your-AD-account', 1, 0, N'your-full-name')
```

- your-AD-account : replace by your exact Active Directory account
- your-full-name : replace by your full name

Execute this script to create tables and master data.

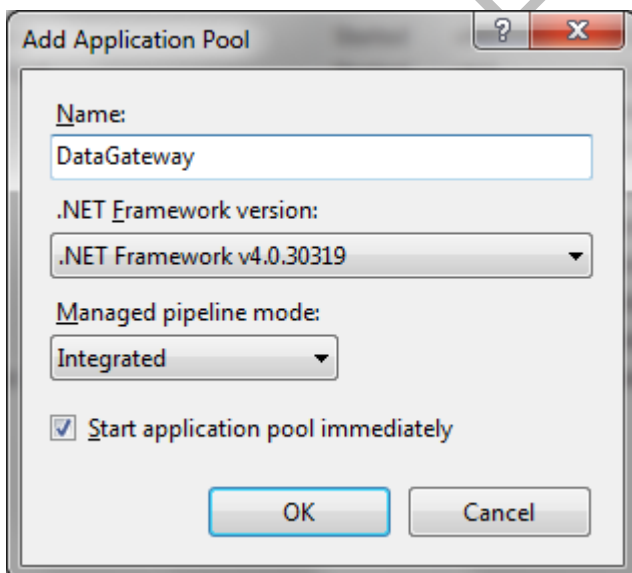
A new SQL user account is also required in order for the web app and service to communicate with the target database. This can be created with the following SQL:

```
CREATE LOGIN [IMSAppUser] WITH PASSWORD=N'Password123',
DEFAULT_DATABASE=[CrossrailIMS], DEFAULT_LANGUAGE=[us_english],
CHECK_EXPIRATION=OFF, CHECK_POLICY=ON
GO
```

```
ALTER LOGIN [IMSAppUser] DISABLE
GO
```

Enable the new account. This is the SQL account that will be used in the web.config connection strings. Add the new user account to the CrossrailIMS database with db_owner role membership.

2.4 Create Application pools



Create the following two application pools on the target remote web server (.NET framework 4.0):

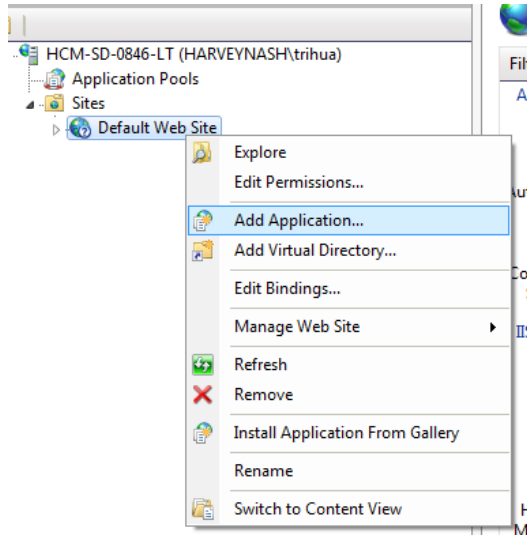
- DataGateway
- CrossrailIMS

Ensure that these pools run under an account that has all the required permissions required to make LDAP queries. The NetworkService account has been used on the staging environment.

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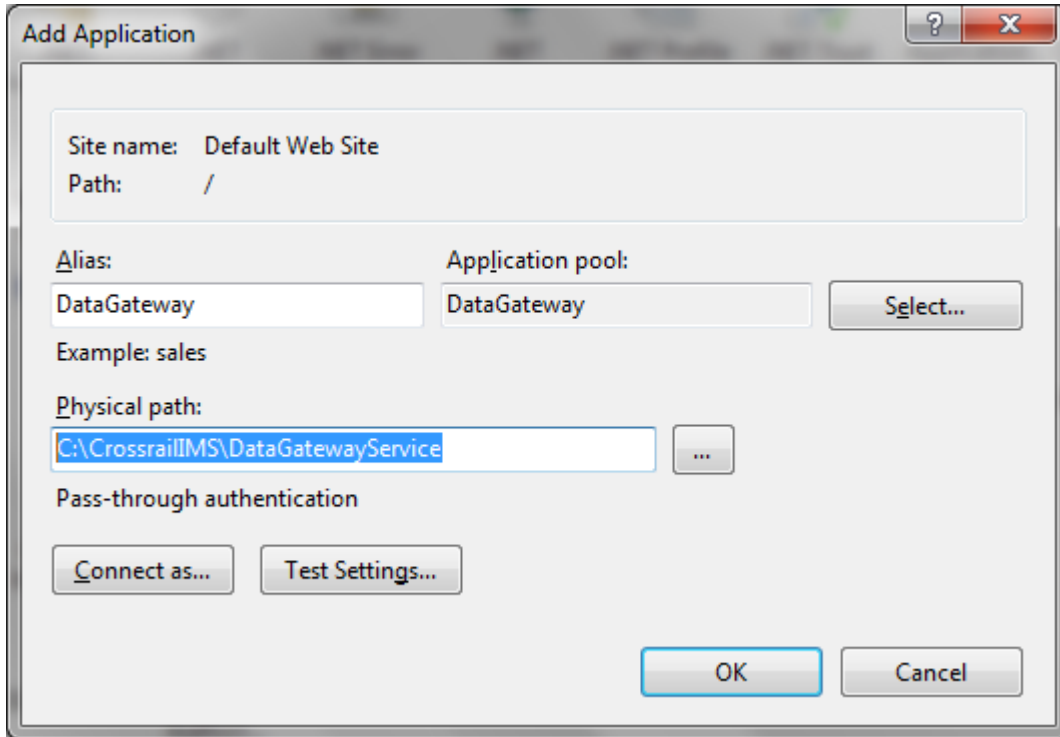
2.5 Setup DataGatewayService application

Open IIS Manger, right click on “Default Web Site”, select Add Application



Input the Alias name: “DataGateway”, select application pool: “DataGateway” and browse the “Physical path” to

“D:\SBA Sites\CrossrailIMS\DataGatewayService”. For example:

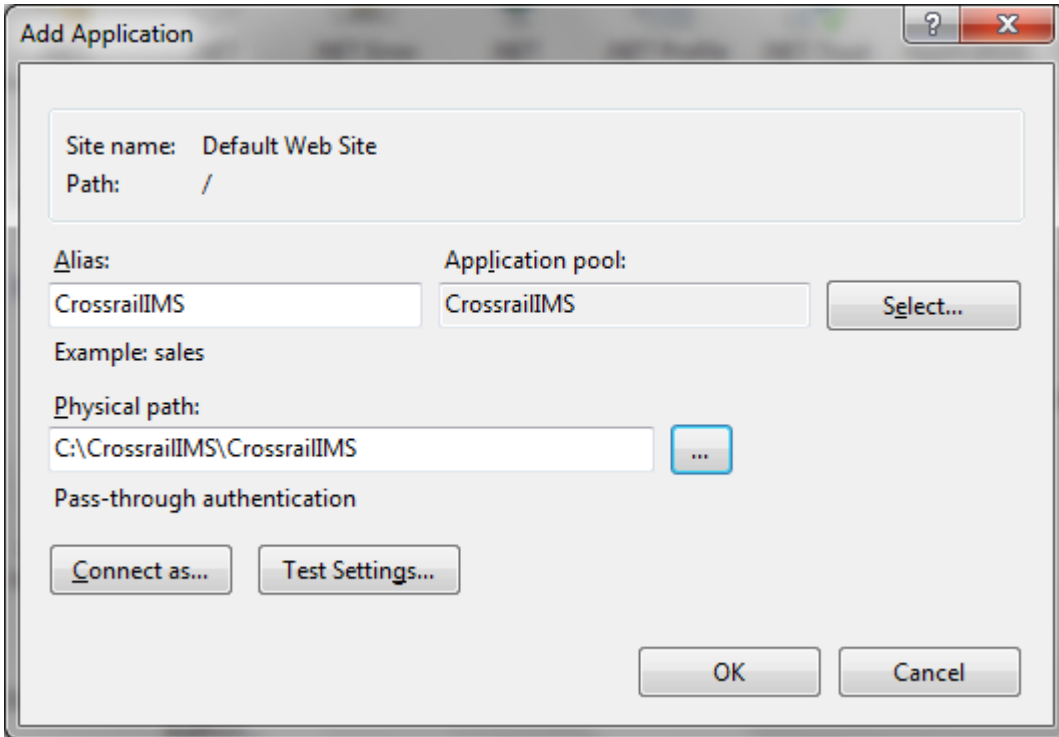


Click OK to complete.

2.6 Setup CrossrailIMS application

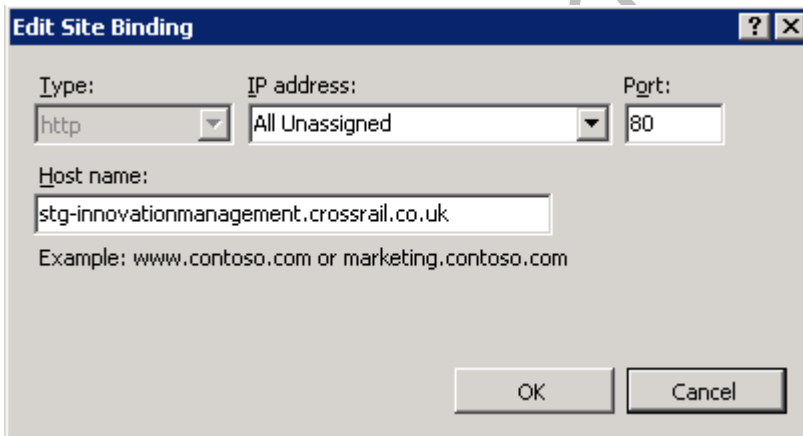
Open IIS Manger, right click on "Sites", select "Add Web Site"

Input the site name: "CrossrailIMS", select application pool: "CrossrailIMS" and browse the "Physical path" to "D:\SBA Sites\CrossrailIMS\CrossrailIMS". For example



Click OK to complete.

Right click on the newly created CrossrailIMS web site within the IIS Manager and select “Edit Bindings”. Click on “Add”.



Add the host name depending on the target environment for the install. Click OK.

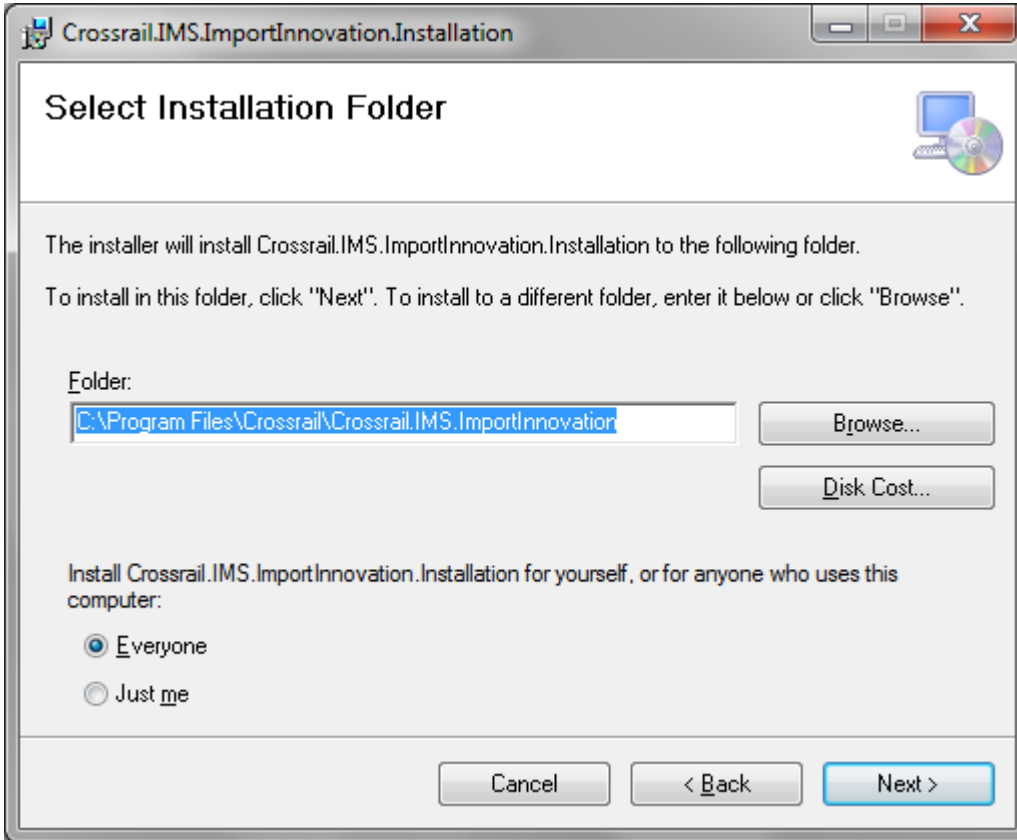
2.7 Setup Import Innovation service

Copy the setup.exe file from the local unzipped ImportInnovationService folder to a temporary location on the remote target web server. Run setup.exe to install. The setup program will request a folder location to install the service.

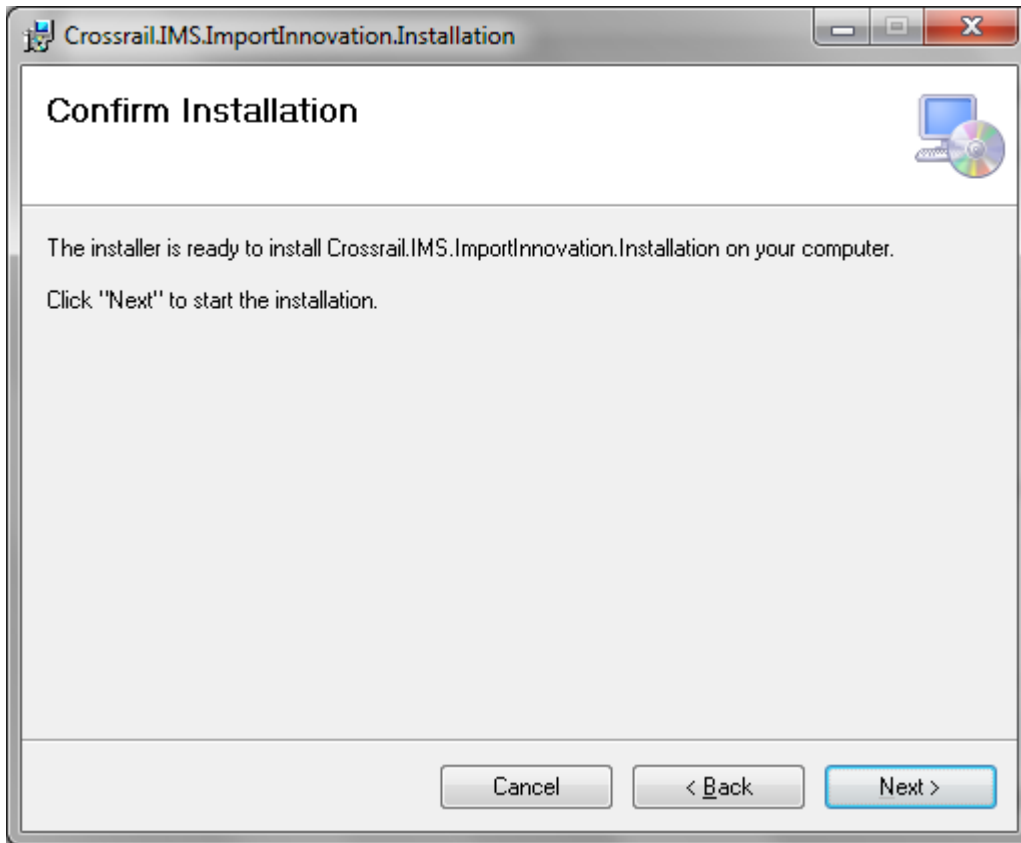
Key-in the folder name: “C:\Program Files\Crossrail\Crossrail.IMS.ImportInnovation”

(It may be C:\Program Files (x86)\Crossrail\Crossrail.IMS.ImportInnovation if your system runs 64 bit system operation)

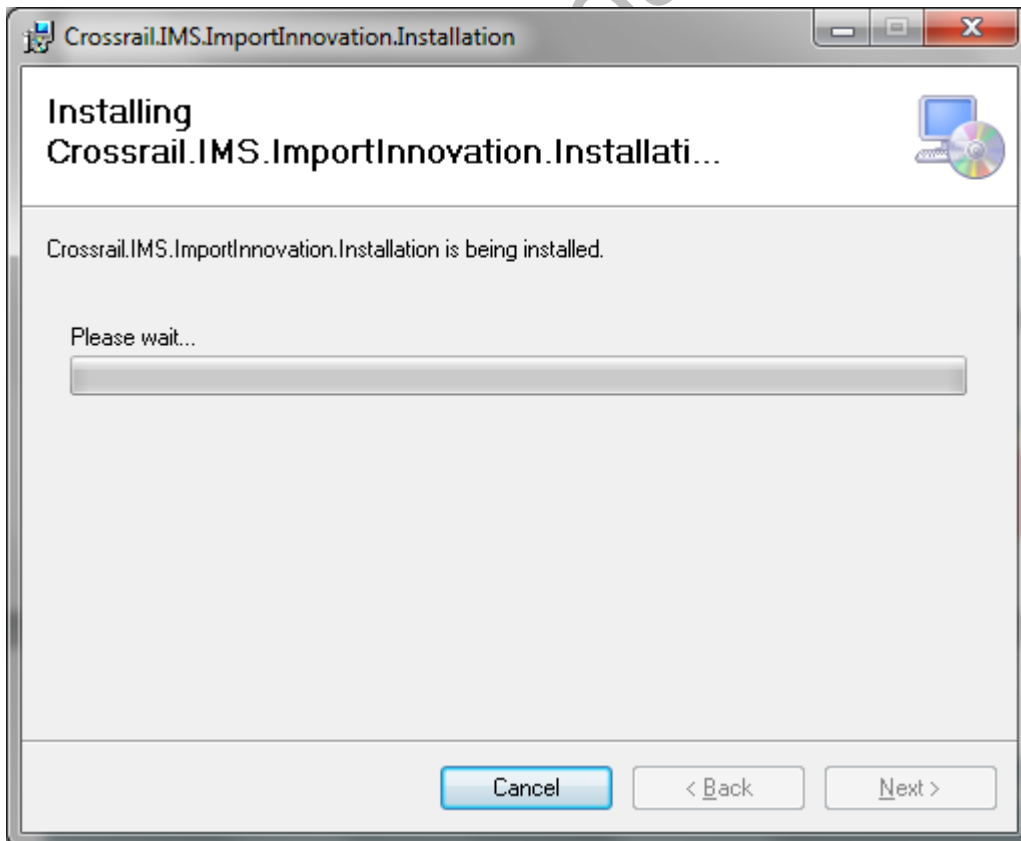
Select the Everyone Radio button.



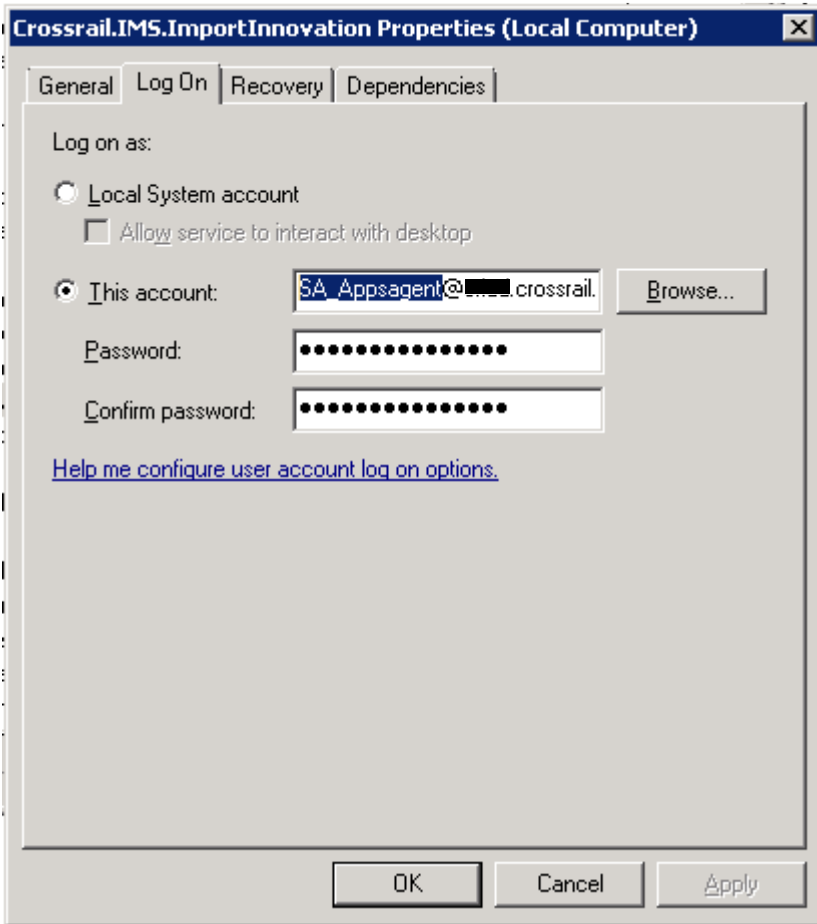
Click Next



Click Next to install



Change the logon account that the service runs under. Double click on the service (Crossrail.IMS.Innovation) in the local services window (Start>Administrative Tools>Services). Click on the “Log On” tab and enter the account details for the service to run under. Typically this account is SA_Appsagent (contact the small business team for password details).



Click on the “General” tab. Make sure the Startup type is set to “Automatic”. Start the service only after all other instructions in this guide have been actioned.

Modify the configuration files

2.7.1. Data Gateway

Open the web.config on the remote target web server under “D:\SBA Sites\CrossrailIMS\DataGatewayService”

The following config settings need to be changed:

Item	Description
MainContext	Database connection string. This will depend on the environment of the target install. On UAT the connection string is: <pre><add name="MainContext" providerName="System.Data.SqlClient" connectionString="Data Source=FDC2PMSSQL003\INST_01;Initial Catalog=CrossrailIMS;uid=IMSAppUser;pwd=*****"/></pre>

	Make sure that the UID used is the same as the SQL account set up in step 2.3. Make sure that the PWD is the same as for the SQL account set up in step 2.3.
--	--

2.7.2. CrossrailIMS application

Open the web.config on the remote target web server under “D:\SBA Sites\CrossrailIMS\CrossrailIMS”.

The following config settings need to be changed:

Item	Description
Domain	The domain name of Active Directory in Crossrail (CRLAD)
ADMembershipGroupName	The AD security group name for the application (AG_GS_InnovationManagement)
RelatedFilesPath	The folder where contain the upload file (can be a shared folder). This will depend on the target environment for the install. Refer to the project manager for further details.
Address (under system.serviceModel - client node)	<pre><client> <endpoint address="http://localhost/DataGateway/DataGatewayService.svc" binding="basicHttpBinding" bindingConfiguration="BasicHttpBinding_IDataGatewayService" contract="DataGatewayService.IDataGatewayService" name="BasicHttpBinding_IDataGatewayService" /> </client></pre> <p>Should be: <a href="http://<your server ip address>/DataGateway/DataGatewayService.svc">http://<your server ip address>/DataGateway/DataGatewayService.svc or (if DataGateway and ImportInnovationService are on the same server) http://localhost/DataGateway/DataGatewayService.svc</p>

2.7.3. Import Innovation service

Open **Crossrail.IMS.ImportInnovation.Hosting.exe.config** under **C:\Program Files (x86)\Crossrail\Crossrail.IMS.ImportInnovation** on the remote target web server.

The following config settings need to be changed:

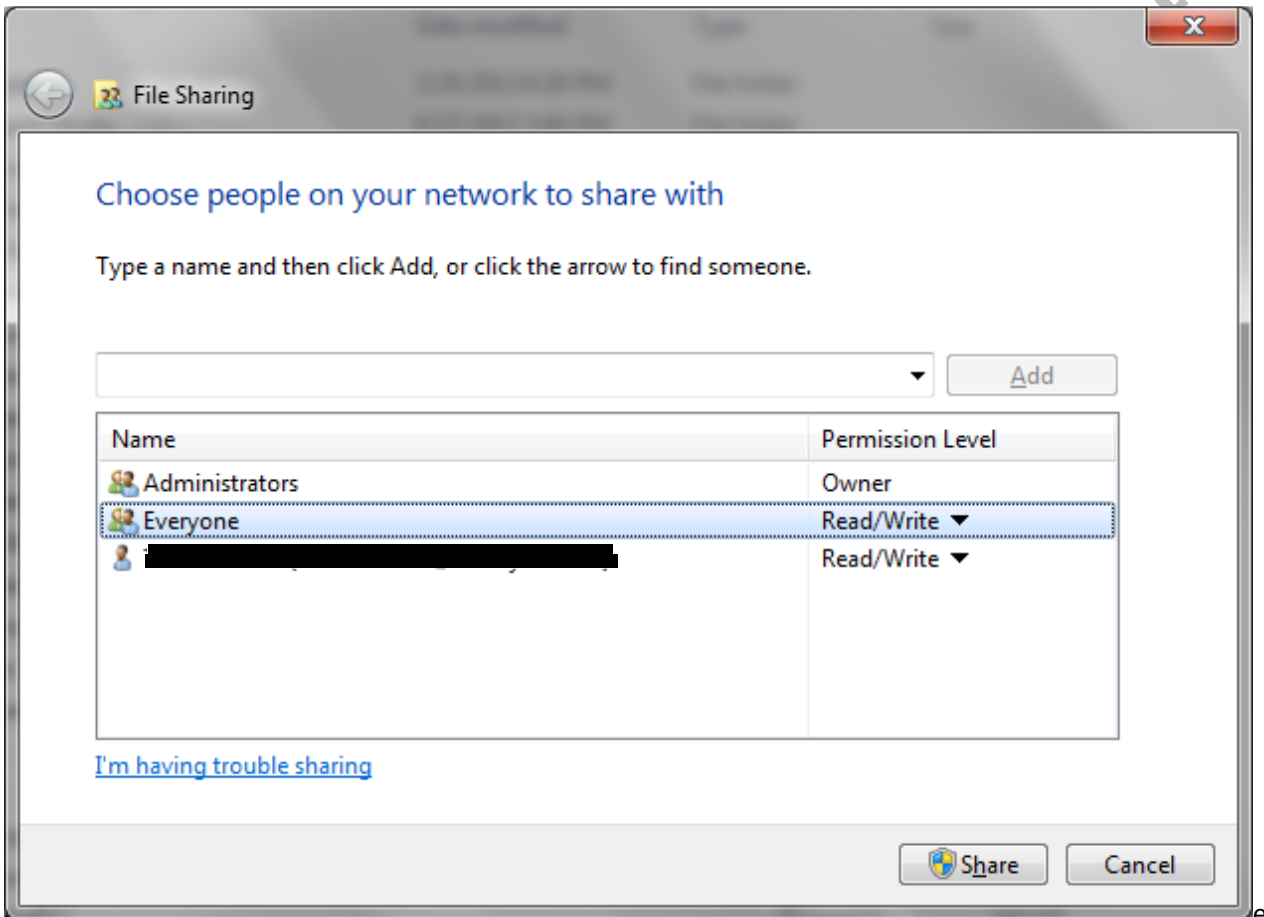
Item	Description
ImportInnovationInterval	The interval for the service to poll the folder (in millisecond) for new files.

	<p>Import Time: “ Innovation ideas shall be imported at least every 10 (configurable) minutes.”</p> <p>In UC Crossrail_ IMS_UC_01_Manage Innovation , Section 7.2 – BR-09</p>
SMTPServer	The SMTP server to send email. (sntp-apps.crlad.crossrail.co.uk)
SMTPPort	The port of SMTP
UserName	The user name to use SMTP
Password	The password to use SMTP
SendFrom	The from email address attach to the sent email
ContactEmail	Indicate which email address will be received the message when importing.
SendCC	The CC person, the same email content with ContactEmail.
ServerNameRunImport	The server name which is hosting the Importing service (the name of the current server where the service is installed)
InnovationFolder	<p>The shared folder where the xml files are in.</p> <p>The folder containing the XML file which is to be imported into to the system</p>
InnovationProcessedFolder	<p>Contain the successful files after importing</p> <p>The folder containing the XML files that have been imported successfully.</p>
InnovationFailedLoadsFolder	<p>Contain the unsuccessful files after importing</p> <p>The folder containing the XML files that failed during the import process.</p>
<p>Address</p> <p>(under system.serviceModel - client node)</p>	<pre><client> <endpoint address="http://localhost/DataGateway/DataGatewayService.svo" binding="basicHttpBinding" bindingConfiguration="BasicHttpBinding_IDataGatewayService" contract="DataGatewayService.IDataGatewayService" name="BasicHttpBinding_IDataGatewayService" /> </client></pre> <p>Should be</p> <p><a href="http://<your server ip address>/DataGateway/DataGatewayService.svc">http://<your server ip address>/DataGateway/DataGatewayService.svc</p> <p>or</p> <p>(if DataGateway and ImportInnovationService are on the same server)</p>

<http://localhost/DataGateway/DataGatewayService.svc>

2.8 Create Share folder and grant the permission

Security and sharing needs to be set up on the folder specified in the InnovationFolder section in 2.7. Select the folder and configure the following:

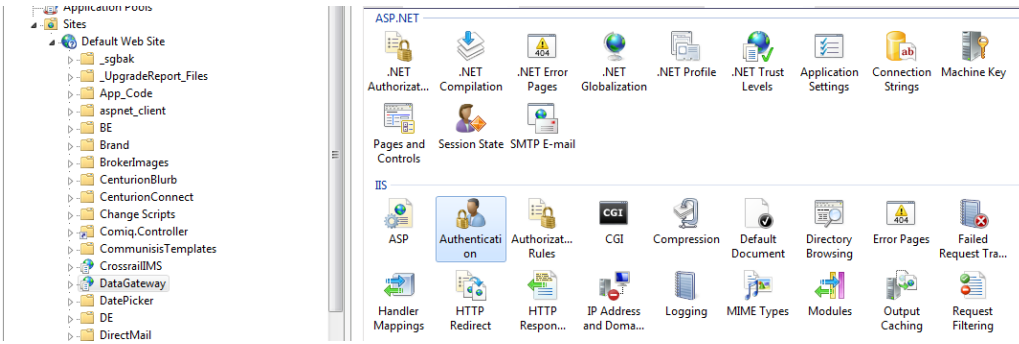


Allow everyone to read/write.

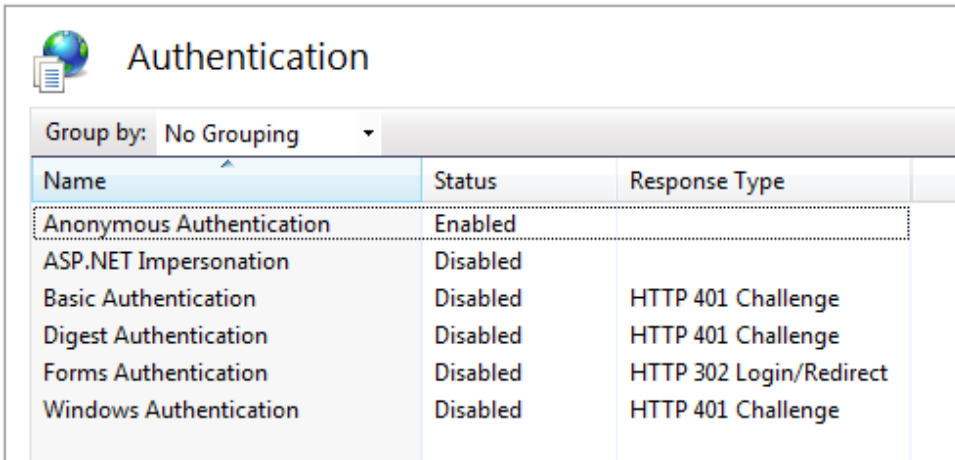
2.9 IIS authentication setting

2.9.1. Data Gateway

Open IIS Manager, click on DataGateway application in the left panel, choose Authentication on the right panel.

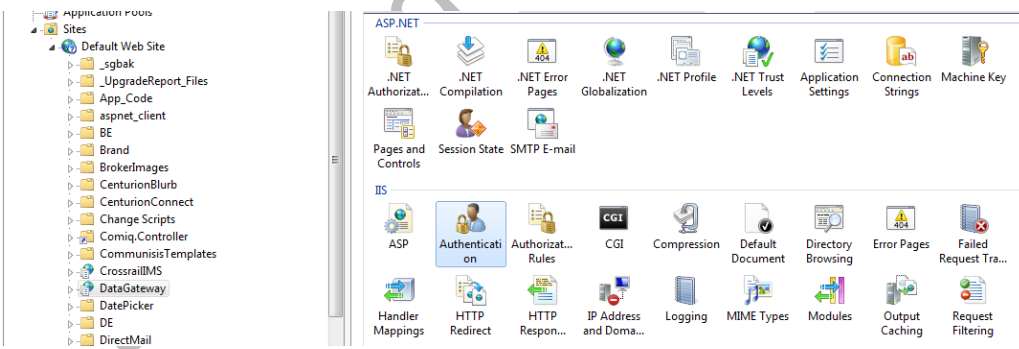


Set the authentication as below:



2.9.2. CrossrailIMS

Open IIS Manager, click on CrossrailIMS application in the left panel, choose Authentication on the right panel.



Set the authentication as below:

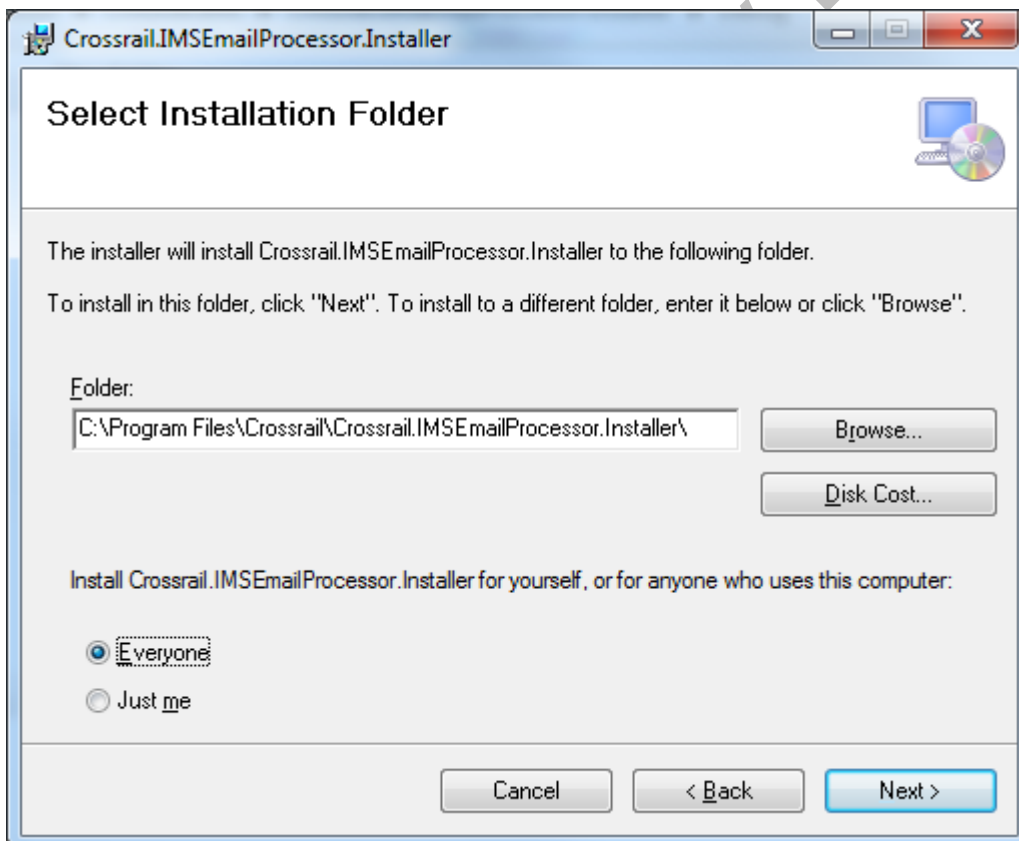
Authentication

Group by: No Grouping

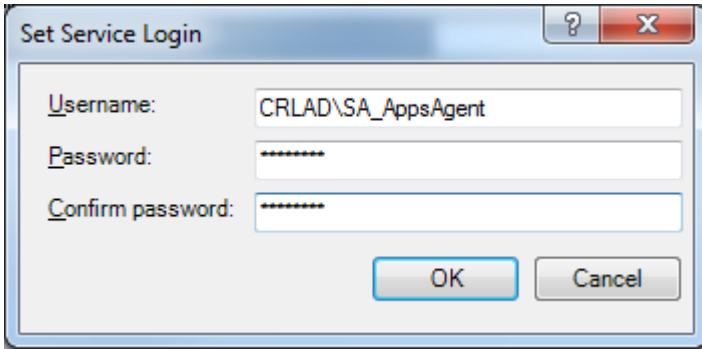
Name	Status	Response Type
Anonymous Authentication	Disabled	
ASP.NET Impersonation	Disabled	
Basic Authentication	Disabled	HTTP 401 Challenge
Digest Authentication	Disabled	HTTP 401 Challenge
Forms Authentication	Enabled	HTTP 302 Login/Redirect
Windows Authentication	Enabled	HTTP 401 Challenge

2.10 Install Email Processor Windows Service

Copy over the Windows Service installation files to a temp folder on the Web Server. Run the installer and follow it through the installation steps.



When prompted for the service user login, enter the details for CRLAD\SA_AppsAgent



Create a folder named TempImport under the InnovationsSubmissions folder.

Run the CreateScript.sql located in the installation files on the IMS database.

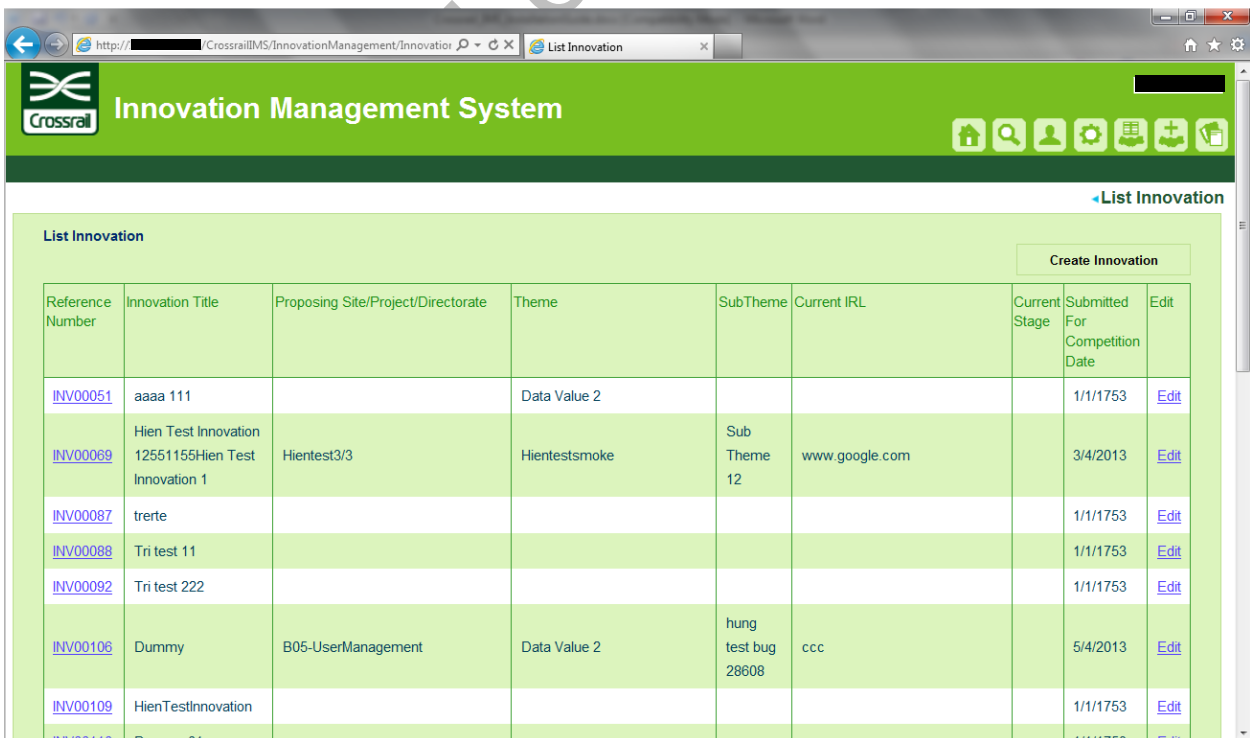
Start the Crossrail.IMS.EmailProcessor windows service.

3 GETING STARTED

Start the Crossrail.IMS.ImportInnovation service created in step 2.7.

Open a browser and type <http://stg-innovationmanagement.crossrail.co.uk> (This URL will depend on the target environment for the install. Refer to section 2.6 and use the same host header)

Please make sure that your account has already been added in the application Database (refer to section 2.2).



4 SYSTEM FUNCTIONAL DESCRIPTION

N/A

5 APPENDIX

N/A

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