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Crossrail – Innovation Management System



RECORD OF CHANGE

Date	Changed Items	*A, M, D	Description	Version
5-Apr-2013	All	А	Initial version	1.0
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* A – Added, M – Modified, D - Deleted

SIGN OFF

	Name & Role	Date	Signature
Originator		05-Apr-2013	
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

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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
Add Application Pool
<u>N</u> ame:
DataGateway
.NET <u>F</u> ramework version:
.NET Framework v4.0.30319
Managed pipeline mode:
Integrated 👻
Start application pool immediately
OK Cancel

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

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			THO
🐻 Sites			AS
Default Web Site			-
2	Explore		
	Edit Permissions		utl
1	Add Application		
2	Add Virtual Directory		
	Edit Bindings		S
	Manage Web Site	•	IIS
6	Refresh		
×	Remove		
1	Install Application From Gallery		
	Rename		
	Switch to Content View		H
	CHV V		"Με

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

C

"D:\SBA Sites\CrossrailIMS\DataGatewayService". For example:

Site name: Default Web Site	1			
Path: 7	A			
<u>A</u> nas: DataGateway	DataGateway):	S <u>e</u> lect	
Example: sales				
<u>P</u> hysical path:				
C:\CrossrailIMS\DataGatewayS	ervice			S
Pass-through authentication				
Connect as Test Sett	ings			
		OK	Canad	

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

earnino

Add Application	and service of	? ×
Site name: Default Web Site Path: /		
<u>A</u> lias:	App <u>l</u> ication pool:	
CrossrailIMS	CrossrailIMS	S <u>e</u> lect
Example: sales		
Physical path:		
C:\CrossrailIMS\CrossrailIMS		
Pass-through authentication		
<u>C</u> onnect as Test Settings		
	ОК	Cancel

Click OK to complete.

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

Edit Site Binding		?	×
<u>T</u> ype: http	IP address:	P <u>o</u> rt:	
Host name:			
stg-innovationma	nagement.crossrail.co.uk		
Example: www.c	ontoso.com or marketing.con	ntoso.com	
		OK Cancel	

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.

Crossrail.IMS.ImportInnovation.Installation		
Select Installation Folder		X
The installer will install Crossrail.IMS.ImportInnovation.Installation to the following To install in this folder, click "Next". To install to a different folder, enter it below o	iolder. r click "Browse".	er e
Eolder: C:\Program Files\Crossrail\Crossrail.IMS.ImportInnovation	B <u>r</u> owse Disk Cost	
Install Crossrail.IMS.ImportInnovation.Installation for yourself, or for anyone who computer:	uses this	
Cancel < <u>B</u> ack	Next >	
Click Next		

🖞 Crossrail.IMS.ImportInnovation.Installation	
Confirm Installation	
The installer is ready to install Crossrail.IMS.ImportInnovation.Installation on your computer. Click "Next" to start the installation.	j.
Cancel < <u>B</u> ack Next >	
Click Next to install	n
Installing Crossrail.IMS.ImportInnovation.Installati	
Crossrail.IMS.ImportInnovation.Installation is being installed.	
Please wait	
Cancel < <u>B</u> ack <u>N</u> ext >	

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).

Cro	ossrail.IMS.ImportInnovation Properties (Local Computer) 🛛 🛛 🗙	
j	General Log On Recovery Dependencies	ł
	Log on as:	×
:	Local System account Allow service to interact with desktop	
	⊙ <u>I</u> his account: <u>SA_Appsagent</u> @ LITE .crossrail. <u>B</u> rowse	
	Password:	
	Confirm password:	
I	Help me configure user account log on options.	
i		ľ
:		
	OK Cancel Apply]

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: <add connectionstring="Data Source=FDC2PMSSQL003\INST_01;Initial Catalog=CrossrailIMS;uid=IMSAppUser;pwd=*******" name="MainContext" providername="System.Data.SqlClient"></add>

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:

ltem	Description
Domain	The domain name of Active Directory in Crossrail (CRLAD)
ADMembershipGroupName	The AD security group name for the application
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	<pre><crient> </crient></pre> <endpoint <="" address="http://localhost/DataGateway/DataGatewayService.svc" th=""></endpoint>
(under system serviceModel	<pre>binding="basicHttpBinding" bindingConfiguration="BasicHttpBinding_IDataGatewayService" contract="DataGatewayService_IDataGatewayService" name="BasicHttpBinding_IDataGatewayService" /></pre>
client node)	
- chent houe)	Should be:
	http:// <your_server_ip_address>/DataGateway/DataGatewayServic</your_server_ip_address>
	<u>e.svc</u>
	or
	(if DataGateway and ImportInnovationService are on the same server)
	http://localhost/DataGateway/DataGatewayService.svc

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.

	Import Time: "Innovation ideas shall be imported at least every 10						
	(configurable) minutes."						
	In LIC Crossrail IMS LIC 01 Manage Innovation Section 7.2 PP 00						
SMTPServer	The SMTP server to send email. (smtp-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	The shared folder where the xml files are in.						
	The folder containing the XML file which is to be imported into to the						
	system						
InnovationProcessedFolder	Contain the successful files after importing						
	The folder containing the XML files that have been imported						
	successfully.						
	Contain the unsuccessful files after importing						
InnovationraneuLoausroider	contain the unsuccessful mes after importing						
	The folder containing the XML files that failed during the import						
	process.						
Address	<client></client>						
	<pre><endpoint <="" address="http://localhost/DataGateway/DataGatewayService.svc" binding="basicHttpBinding" bindingconfiguration="BasicHttpBinding IDataGatewayService" pre=""></endpoint></pre>						
(under system.serviceModel	<pre>contract="DataGatewayService.IDataGatewayService" name="BasicHttpBinding_IDataGatewayService" /> </pre>						
- client node)							
	Should be						
	http:// <vour_server_ip_address>/DataGateway/DataGatewayServic</vour_server_ip_address>						
	e.svc						
	or						
	(if DataGateway and ImportInnovationService are on the same server)						

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:

The set	
) 🐹 File Sharing	
	AND DECEMBER OF STREET, STREET
Choose people on your network	to share with
choose people on your network	
Type a name and then click Add, or click t	he arrow to find someone.
.,,,,	
	✓ <u>A</u> dd
Name	Permission Level
Administrators	
Section 2017	Read/Write
8	Read/Write 🔻
,	
Par having travilla sharing	
I m naving trouble sharing	
	Share Cancel

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.

	Ш	ASP.NET - .NET Authorizat Pages and Controls	.NET Compilation Session State	NET Error Pages SMTP E-mail	.NET Globalization	.NET Profile	.NET Trust Levels	Application Settings	Connection Strings	Machine Key
p - 📫 CenturionConnect p - 📬 Change Scripts p - 🚰 Comiq.Controller p - 📬 CommunisisTemplates		ASP	Authenticati on	Authorizat Rules	CGI CGI	2 Compression	Default Document	Directory Browsing	A04 Error Pages	Failed Request Tra
 TorsrallMS DataGateway DatePicker Det DE DirectMail 		andler Handler Mappings	HTTP Redirect	HTTP Respon	IP Address and Doma	Logging	MIME Types	And ules	Output Caching	R equest Filtering

Set the authentication as below:

	p - CE Handle	r HTTP HTTP IP Ad gs Redirect Respon and D	ldress Logging MIMETypes Modules Out oma Cach	vut Request ing Filtering
e	t the authentication as below:			
	Authentication			
	Group by: No Grouping -			
	Name	Status	Response Type	
	Anonymous Authentication	Enabled		
	ASP.NET Impersonation	Disabled		
	Basic Authentication	Disabled	HTTP 401 Challenge	
	Digest Authentication	Disabled	HTTP 401 Challenge	
	Forms Authentication	Disabled	HTTP 302 Login/Redirect	
	Windows Authentication	Disabled	HTTP 401 Challenge	

2.9.2. CrossrailIMS

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

Apprication Pous Sites G Sites G Sites Jefault Web Site G Sigbak Sigbak G Si	ASP.NET - NET Authorizat	.NET Compilation	.NET Error Pages	.NET Globalization	.NET Profile	.NET Trust Levels	Application Settings	Connection Strings	Machine Key
BE Brand Brokerimages CenturionBlurb CenturionConnect	Pages and Controls	Session State	SMTP E-mail		0				-
 P. 200 Change Scripts P. 200 Comiq.Controller P. 200 CommunisisTemplates P. 400 CrossralIMS 	ASP	Authenticati	Authorizat Rules	CGI	Compression	Default Document	Directory Browsing	Error Pages	Failed Request Tra
DataGateway DatePicker DE Occentral	Handler Mappings	HTTP Redirect	HTTP Respon	IP Address and Doma	Logging	MIME Types	Modules	Output Caching	Cequest Filtering

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	0

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.

B Crossrail.IMSEmailProcessor.Installer	
Select Installation Folder	
The installer will install Crossrail.IMSEmailProcessor.Installer to the following folder.	
To install in this folder, click "Next". To install to a different folder, enter it below or	click "Browse".
Eolder: C:\Program Files\Crossrail\Crossrail.IMSEmailProcessor.Installer\	B <u>r</u> owse Disk Cost
Install Crossrail.IMSEmailProcessor.Installer for yourself, or for anyone who uses	this computer:
© Everyone	
⊚ Just <u>m</u> e	
Cancel < <u>B</u> ack	Next >

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

Set Service Login	ि ×
<u>U</u> sername: <u>P</u> assword: <u>C</u> onfirm password:	CRLAD\SA_AppsAgent
	OK Cancel

cumer 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).

🔿 🥖 http:,	//.	/InnovationManagement/Innovation 🔎 👻 🖒	× 🥖 List Innovation	×				ł	<u>ک</u> ل
	nnovation	Management Sys	stem		•	3 1	0.2	.	
								inova	itio
List innovat	tion					C	reate Innovatio	on	
Reference Number	Innovation Title	Proposing Site/Project/Directorate	Theme	SubTheme	Current IRL	Current Stage	Submitted For Competition Date	Edit	
INV00051	aaaa 111		Data Value 2				1/1/1753	<u>Edit</u>	
<u>INV00069</u>	Hien Test Innovation 12551155Hien Test Innovation 1	Hientest3/3	Hientestsmoke	Sub Theme 12	www.google.com		3/4/2013	<u>Edit</u>	
<u>INV00087</u>	trerte						1/1/1753	<u>Edit</u>	
<u>INV00088</u>	Tri test 11						1/1/1753	<u>Edit</u>	
INV00092	Tri test 222						1/1/1753	<u>Edit</u>	
<u>INV00106</u>	Dummy	B05-UserManagement	Data Value 2	hung test bug 28608	ccc		5/4/2013	<u>Edit</u>	
<u>INV00109</u>	HienTestInnovation						1/1/1753	<u>Edit</u>	
INIV/00140	Dummu 01						4/4/4750	T de	

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