

# UC Logic Limited iSync Worksite Database Replicator

Version 4.4

Implementation and User Guide

# UC Logic Limited ISync Worksite Database Replicator

#### Implementation and User Guide

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# 1. Overview

Managing multiple iManage databases is often a time consuming process. Each amendment would normally need to be made to each individual database. This is not only a long process but can introduce inconsistent data between different databases.

iSync replicates iManage database administration data, using a designated 'primary' database. This 'primary' database is updated using standard iManage database administration tools; iSync then takes over to replicate this data to all other 'slave' databases.

The replication event can be initiated manually or scheduled using the integrated scheduler routine. This allows fully unattended replication to take place at 'quiet' times for the network.

Individual tables can be selected to be either available or unavailable for synchronising, allowing for selective updating of database information.

# 2. Requirements

- iSync should be installed on a Windows Server (2008/2012) 32/64 bit OS.
- Worksite database schema version 8.5, 9.0, 9.1 or 9.3 The primary database must be the same version as all the slave databases or a higher version. If the primary database is an older version than any slave database, this synchronisation is not supported.
- The server should have the Microsoft SQL client components installed (same version as running on Worksite SQL server) MS SQL 2005, 2008 and 2012 are supported.

e.g.	For	SQL	2008
------	-----	-----	------

🍀 SQL Server 2008 R2 Setup	
Feature Selection Select the Evaluation features to in	istall.
Setup Support Rules Setup Role Feature Selection Installation Rules Disk Space Requirements Error Reporting Installation Configuration Rules Ready to Install Installation Progress Complete	Eeatures:       Description:         Instance Features       Server features are instance-aware and have their own registry hives. They support multiple instances on a computer.         SQL Server Replication       Generative Search         Analysis Services       Reporting Services         Shared Features       Business Intelligence Development Studio         Client Tools Connectivity       Integration Services         Client Tools Connectivity       Glient Tools SDK         SQL Server Books Online       Management Tools - Basic         Management Tools - Complete       SQL Client Connectivity SDK         Microsoft Sync Framework       Microsoft Sync Framework
	Select All       Unselect All         Shared feature directory:       C:\Program Files\Microsoft SQL Server\         Shared feature directory (x86):       C:\Program Files (x86)\Microsoft SQL Server\
	< <u>B</u> ack <u>N</u> ext > Cancel Help

- Microsoft .NET Framework 2.0
- Ad Hoc Distributed queries should be enabled on all SQL Servers being accessed by the iSync application.

Ru the following SQL script to enabled distributed queries

Exec sp\_configure 'show advanced options', 1 RECONFIGURE Exec sp\_configure 'Ad Hoc Distributed Queries', 1 RECONFIGURE GO

## 3. Installation

Run the setup.exe installation application



🖞 UC Logic iSyncService						
Select Installation Folder						
The installer will install UC Logic iSyncSe	ervice to the following	ı folder.				
To install in this folder, click "Next". To in	nstall to a different fo	der, enter it below	v or click "Browse".			
Folder:	1001		Dennes			
C. Artogram Files (OC Edgic (Isyncser	VICEN		Biner (			
		_	<u>D</u> isk Cost			
Install UC Logic iSyncService for your:	self, or for anyone wł	no uses this comp	uter:			
• Everyone						
🔘 Just <u>m</u> e						
	Cancel	< <u>B</u> ack	<u>N</u> ext >			
🚰 UC Logic iSyncService						
To Logic ISyncservice						
Confirm Installation						
Confirm Installation	SyncService on your	computer.				
The installer is ready to install UC Logic is Click "Next" to start the installation.	SyncService on your	computer.				
The installer is ready to install UC Logic is Click "Next" to start the installation.	SyncService on your	computer.				
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Confirm Installation The installer is ready to install UC Logic is Click "Next" to start the installation.	SyncService on your	computer.				
Confirm Installation The installer is ready to install UC Logic is Click "Next" to start the installation.	SyncService on your	computer.				

When the installation is complete there will be a new program group on the Start Menu created for UC Logic – iSync – iSync Manager

# 4. Configuration

The iSync application consists of two modules

- iSync Manager
- iSync Service

All configurations take place using the iSync manager application.

#### Load the iSync Manager program

D	🔐 iSync Manager							
_	Options Help							
1								
	Database	Туре	State	Description	SQLServer			
	Wednesday 11/12/2002 15:09:24							

You now need to configure the set of databases for iSync to replicate.

#### 4.1. Add a database

There are four ways to add a new database:

- Click the a icon from the toolbar
- Right click in the database list window and select Add
- Use the Options menu, Database, Add command
- Use Ctrl-A

🔭 iManage Database 📃 🗌 🗙					
Server	Server ucsigma1				
Timeout (secs)	15				
Login ID	imansa				
Password	******				
Database	imdbPRIM 💌				
Description	Primary Database for London				
	Туре				
	Primary				
C Slave					
O Disabled					
Test Connecti	on OK Cancel				

Enter the following information:

Parameter	Description				
Server	SQL server name or IP address				
Timeout	SQL command timeout.				
	15 Seconds is the default, which is adequate for most local area				
	network implementations. Increase this value for wide area network or				
	if there are SQL timeout errors				
Login ID	A valid SQL login id with access to the database				
Password	Corresponding password for SQL login id				
Database	The SQL name of the iManage database				
Description	Free test description field				
Туре	Primary – Source database, this database will be the master database				
	used to replicate data out to all other databases. There can be only				
	one primary database.				
	Slave – A database that will be synchronised.				
	Disabled – Stop this database from being synchronised. This option				
	can be used to temporarily remove a database from the				
	synchronisation loop.				

After adding the database it will be shown in the main window

Add other databases that need to be synchronised with the primary database.

ptions Help				
10 # 0	•			
Database	Туре	State	Description	SQLServer
🗊 аьнк	Slave		Hong Kong Database	HongKong01
🗊 imanage	Slave		UC Logic Primary	ucsigma1
🗊 imdbBackup	Slave		Backup Primary Database	ucBackup
🗊 imdbCorporate	Slave		Corporate Diatabase	ucLondon
🗊 imdbFamily	Slave		Family Database	ucLondon
🗊 imdbLitigation	Slave		Litigation Database	ucsigma1
🗊 imdbNY	Slave		New York Database	NYSQL01
🗊 imdbPRIM	Primary	Not Scheduled	Primary Database for London	ucsigma1
🗊 imdbPrivateCli	Slave		Private Clients Database	ucLondon
🗊 imdbProperty	Slave		Property Database	ucsigma1
🗊 imdbServices 👘	Slave		Services Database	ucsigma1
💼 imdbtest	Disabled		test	test
🗊 webdb	Slave		Web database	ucsigma1

#### 4.2. Remove Database

There are four ways to add a new database:

- Click the 💷 icon from the toolbar
- Right click in the database in the list window and select Remove Database
- Use the Options menu, Database, Remove command
- Use Ctrl-R

Removing the database deletes the settings for that database. An alternative option is to set the database to 'disabled' if the database is to be used in the future. See the section on *Changing a databases' Type.* 

#### 4.3. Changing a databases' type

A database can have three states:

- Primary Source database, this database will be the master database used to replicate data out to all other databases. There can be only one primary database.
- Slave A database that will be synchronised.
- Disabled Stop this database from being synchronised. This option can be used to temporarily remove a database from the synchronisation loop.

To change the type of a database:

- Right click the database and select
   Set Database Type, Primary|Slave|Disabled
- Highlight the database and use the Option menu, Database, Set Type to Primary|Slave|Disabled
- Use Ctrl-P (Primary)
- Use Ctrl-S (Slave)
- Use Ctrl-D (Disabled)

# Note: There can be only one primary database, if you change the status of a database to primary, the current primary database will be automatically changed to disabled.

You can change a group of databases together by using the multiple select keys (Shift or Ctrl) then selecting the relevant option.

#### 4.4. Replicating Tables

Replication occurs between a primary database and a slave database only for those tables that have been configured to be replicated. Each database has a table configuration that enables or disables tables from the replication event. The following tables are available for replication.

Table	Description
Users	User id and login details
Security Templates	Global security templates and user assignment
Groups	Group names
Group Members	Group membership (will add and remove users from
	groups)
Roles	Role names
Role Members	Role membership (will add and remove users from roles)
Document Classes/Sub Classes	Document classes and sub classes together. These
Database/Libraries	Database names
Document Types	Document Type definitions
Apps	Application definitions
Custom1	Custom data
Custom2	Custom data
Custom3	Custom data
Custom4	Custom data
Custom5	Custom data
Custom6	Custom data
Custom7	Custom data
Custom8	Custom data
Custom9	Custom data
Custom10	Custom data
Custom11	Custom data
Custom12	Custom data
Custom29	Custom data
Custom30	Custom data

A table will only be replicated if both the primary and slave table are checked. This allows for selective table replication to different databases.

4.4.1. Configuring Primary Database Tables for Replication

The starting point for selecting tables for replication is to configure the primary database tables.

Highlight the primary database then either:

- Right Click and select Tables
- Click the Tables icon on the toolbar
- Select Options|Database|Tables from the menu

The table selection dialog should now appear

🥪 Database Tables						
Database						
Select database tables ava	ilable for synchronising					
	Security Templates					
	Group Members					
Roles	Role Members					
Doc Classes/Sub Classes	Databases/Libraries					
Doc Types	Apps					
Custom 1	Custom 2					
Custom 3	Custom 4					
Custom 5	Custom 6					
Custom 7	Custom 8					
Custom 9	Custom 10					
🔽 Custom 11	🗹 Custom 12					
Custom 29	Custom 30					
Options						
Select All Unselect All	OK Cancel					

#### Note: the options button only appears for slave databases

Select the tables that should be available to be replicated from the primary database.

Note: Some tables can only be replicated together. The program will automatically select the relevant parent table in these instances.

Table	Automatic Selection
Group Membership	Groups
Role Membership	Roles
Apps	Doc Types
Custom2	Custom1
Custom30	Custom29

#### 4.4.2. Options

There are customisable options that can be set for each database. This is where specific fields can be excluded from the synchronisation process. At present only a few fields are available for exclusion. For more requirements please contact support@uclogic.com

iSync Options			<u> </u>
Users	Server valu w users)	e ? )  DOCSI	ERVER2
Doc Class ▼ Synchronise Do	c Class Fie	elds Rea	quired Fiel
	ОК		Cancel

If you do not want to synchronise the File Server field for users make sure this check box is unchecked, this will cause the Alias File Server Field to be displayed. If you do not enter a value in the Alias File Server field, new users added to the slave database will inherit the File Server value from the user in the primary database. If you enter a valid Alias File Server value then new users will get the Alias File Server value when they are added to slave databases. Note: You must manually add the File Server values using the Worksite Database Administration program for all databases. This table is not synchronised with iSync due to the fact that each database will tend to have separate unique file server settings.

🚰 WorkSite Database Management								
Ele Edit Database Manage View Help								
<b>■</b> □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □								
	▼ Look Up	C Beginning with	Contains C Ending with	🗖 🔲 Internal Only 🗖 Egternal Only				
🖃 🛞 WorkSite Databases	File Server Name	🛆 🛛 OS Type	Location	Root Path	NDS Context	Read Only	Enable Flag	Access Method
	DEFSERVER	DOS Drive	C	\imandocs\LONDON		N	Y	%A%D%V
🕵 User	DOCSERVER2	DOS Drive	C	\imandocs2\LONDON		N	Y	%A%D%V
Group								
Roles								
- I type								
Ann Sohun								
PC Locations								
- Client								
Custom3								
Custom4								
Custom5								
- 🛗 Custom6								
Custom7								
- III Custom8								
Custom9								
Custom10								
Custom11								
mil Customiz								
Databases								
The Servers								
Security Templates								
PENZANCE								

If you do not want to synchronise the Doc Class Required field, make sure this check box is unchecked.

#### 4.4.3. Configuring Slave Database Tables for Replication

This process is much the same as for the primary database. Simply highlight the slave database and proceed as described above.

# 5. Scheduler

The scheduler can be used to configure a timed replication event. You can set a specific timed schedule using the days, hours and minutes columns or a repeating schedule based on a time interval. To enable either of these schedules, make sure the Schedule enabled checkbox is checked. If the schedule enabled check box is unchecked a once only synchronise will occur when the service is started.

Only one schedule can be configured and it is applied to the primary database and all slave databases. Disabled databases are excluded from the scheduled event.

To configure the scheduler:

- Click the scheduler icon from the toolbar
- Right click in the database list and select Schedule.
- Use the menu Options|Database|Schedule

#### The Schedule dialog should appear

😵 Primary Da	atabase Sc	hedule	r 🗕 🗖	x	
Database Description	Paris Default I Schedule	e Enabled		_	
C Synchronise every 2 Minutes -					
<ul> <li>Synchronise at</li> </ul>	Haura		Minutes		
Monday Tuesday Wednesday Thursday Friday Saturday Sunday	00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18		00 05 10 15 20 25 30 35 40 45 50 55		
		ОК		Cancel	

Choose the days, hours and minutes for the schedule process to occur. The above example shows a schedule for every day, every hour on the hour.

## 6. Running the iSync Service

The installation process will have created a new service called iSyncService, you may need to alter the service logon settings to make sure it is running under an account that has the ability to run as a service on the server. The service is installed to run under the local service account, which is usually sufficient for most implementations.

iSyncService Properties (I	.ocal Computer)	? ×
General Log On Recove	ery Dependencies	
Log on as:		
<ul> <li>Local System account</li> <li>Allow service to interest</li> </ul>	eract with desktop	
O <u>I</u> his account:		Browse
Password:		1
Confirm password:		1
You can enable or disable	this service for the hardware pr	ofiles listed below:
Hardware Profile		Service
Profile 1		Enabled
	Enable	<u>D</u> isable
	OK Cance	el <u>A</u> pply

You can either start the service from the Windows services application or use the iSync manager toolbar buttons



Click the black arrow to start the service and the black square to stop the service. The green arrow shows the service is running, if the service is not running this becomes a red circle.

# 7. Log Files

A log file called iSyncLog.txt will be generated in the installation directory, usually C:\Program Files\UC Logic\iSyncService

There is also a custom iSync event log that can be viewed using the Windows Event Viewer application.

😽 Event Viewer							
Eile Action View Help							
🔝 Event Viewer (Local)	iSyncLog 1,595	event(s)					
Application	Туре	Date	Time	Source	Cal 🔺		
Security	Information	29/11/2012	17:10:39	iSyncSource	Nor		
System	( Information	29/11/2012	17:10:39	iSyncSource	Noi		
conceptSearching	Information	29/11/2012	17:10:39	iSyncSource	Noi		
	🔅 Information	29/11/2012	17:10:39	iSyncSource	Nor		
Ele Deplication Service	🔅 Information	29/11/2012	17:10:39	iSyncSource	Nor		
	🔅 Information	29/11/2012	17:10:39	iSyncSource	Nor		
Microsoft Office Alerts	🔾 Information	29/11/2012	17:10:39	iSyncSource	Nor		
	🔾 Information	29/11/2012	17:10:39	iSyncSource	Nor		
OSession	🔅 Information	29/11/2012	17:10:39	iSyncSource	Nor		
	🔅 Information	29/11/2012	17:10:39	iSyncSource	Nor		
	🔾 Information	29/11/2012	17:10:39	iSyncSource	Nor		
	🔅 Information	29/11/2012	17:10:39	iSyncSource	Nor		
	🔅 Information	29/11/2012	17:10:39	iSyncSource	Nor		
	🔅 Information	29/11/2012	17:10:39	iSyncSource	Nor		
	🔅 Information	29/11/2012	17:10:39	iSyncSource	Nor		
	🔾 Information	29/11/2012	17:10:39	iSyncSource	Nor		
	🔅 Information	29/11/2012	17:10:38	iSyncSource	Not		
	Information	29/11/2012	17:10:38	iSvocSource	No		

In the event of any problems check the event log and the log file, and make sure you include these with any support questions.