Syniti Replicate

Setup Notes for Replicating with IBM® Informix

Version 10.2

Syniti Replicate

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Syniti Replicate

These notes provide essential information for setting up replications using **IBM Informix**. The setup process for a refresh replication can usually be completed using the Syniti Replicate wizards without additional documentation because it does not involve access to the Informix log. For complete details on the setup process, check the *Syniti Replicate User Guide* available from the Management Center **Help** menu or the *Syniti Replicate Setup Guide*, available for download in the Help Center.

This guide describes the setup process using the Log Server Agent option for one-way mirroring and synchronization when replicating data from an IBM Informix database. For mirroring and synchronization replications using Informix as a source, Syniti Replicate offers two approaches:

- **Log Server Agent:** Uses a Windows service and a Log Server component to query the Informix log for increased performance when dealing with large amounts of data.

- **Triggers:** Uses Syniti Replicate triggers installed on the Informix database to log changes (Ask the Technical support team via the Help Center to see if this approach would work in your application and to obtain the separate document *Setup Notes for Transactional Replications with IBM Informix Triggers*.
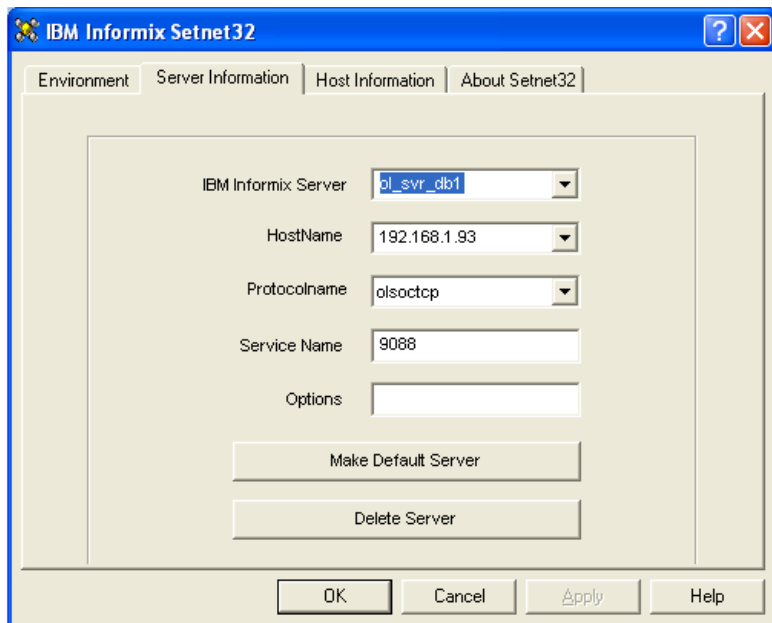
Connection Type

Informix .NET Provider in the latest Informix Client SDK (recommended version 4.10 or above) with the ESQL option.
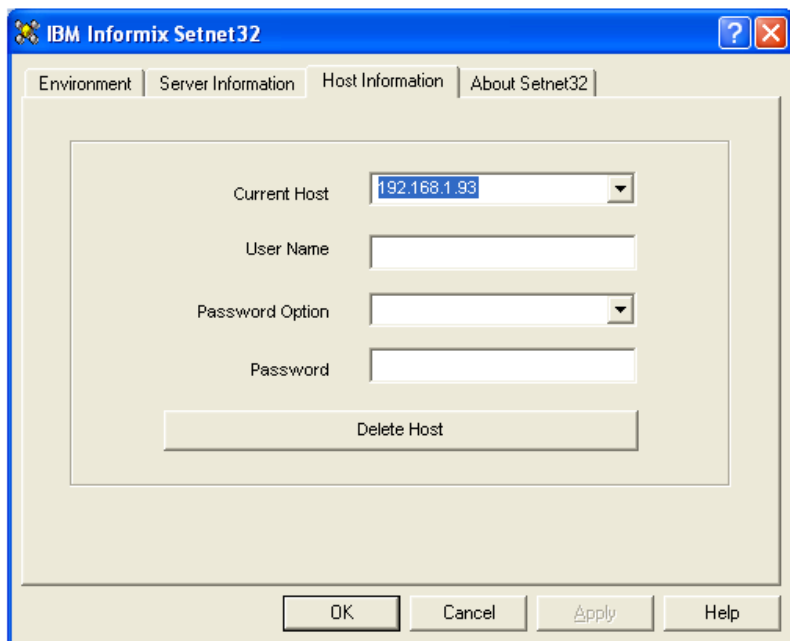**Assembly:** IBM.Data.Informix

Issues with Informix Provider Versions

- There appear to be some issues with later builds/FCs of the Informix 3.70 provider. Version 4.10 or above is recommended.
- There can be only one Informix provider installed the system. If other versions of the provider, such as the one installed with IBM DB2, are installed, uninstall them and restart the system.

1. Run Setnet32 from All Programs-> IBM Informix Client-SDK X.XX

2. Enter the Server Information based on your Informix Login.

3. Click **Apply.**
4. Verify the connection to the database using the ILogin.exe demo. If you are unable to connect, review the issues below to identify errors or to see if you have the correct variables set.

   INFORMIXSERVER Windows System Variable

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The Informix client software requires a default value to be set for INFORMIXSERVER on the client system (i.e. the system where both Syniti Replicate and the Informix client software are installed.) The INFORMIXSERVER environment variable must specify a default database server.

DELIMIDENT Informix Database Variable Setting

Please check if there are space(s) or special characters in the schema or table name.

The variable DELIMIDENT needs to be set to YES (DELIMIDENT=YES) in the Informix database because Syniti Replicate needs to run the following statement with double quotes on the table name when the replication is created.

CREATE TABLE baan."_DBM__TRG_OBJS" (SNAME VARCHAR(32), TNAME VARCHAR(128), TAG INTEGER, MASTERTBL VARCHAR(128))

If the variable DELIMIDENT is not set, the above query fails with a syntax error.

Informix Error Numbers and Descriptions

To look up an Informix error number: when the Informix client software is installed, a Program Group named IBM Informix Connect (or IBM Informix Client SDK) is created.
The program group includes an application called Find Error, with descriptions of all error numbers.

IBM Informix Settings

1. Ask a Database Administrator (DBA) to execute the script syscdcv1.sql that comes with the database to create the database syscdcv. The tables are required by Syniti Replicate.
2. Make sure that the database containing the source data to be replicated was created with logging enabled. In the unlikely event that logging is not enabled, a DBA can use the ondblog utility to change the logging mode (together with the onbar utility to backup the database after the logging mode is changed,)
3. For the user ID that will be used to connect the database from Syniti Replicate, grant CONNECT and DBA privileges both to the source database and to the syscdcv1 database. For example:
   grant connect to "sdruser1"
   grant dba to "sdruser1"
4. Make sure that the user ID is in the informix-admin group.

BLOB and CLOB Datatype Constraints

BLOB and CLOB datatypes are supported when using log-based mirroring with Informix as a source database. BLOB and CLOB datatypes are not supported when Informix is the target database.

Add Source Connection Wizard

Select Provider Screen

Assembly Field

Locate the file IBM.Data.Informix.dll in the installation folder for the Informix .NET Provider.

Set Connection String Screen

Host

Type the IP address of your Informix server.

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Server

Type the name or alias of the instance of the Informix server.

Service

The service name or port number through which the server is listening for connection requests.

Database

The name of the database to which to connect within the server instance.

Protocol

A drop-down list with the default value of olsoctcp. Change the value according to the protocol used between the Informix .NET Data Provider and the database server.

Enable Transactional Replication Wizard

Additional Step for Synchronization Replications

After completing the Enable Transactional Replication wizard, for synchronization replications only, you also need to obtain the user ID number for the user specified in the source connection. This number will be used to edit the _config.ini file for the Windows service that reads the Informix log. To obtain and use the user ID number:

- Stop the Log server Agent Service for Informix
- From the command line, run the program InformixGetUserIDNumber.exe in the Syniti Replicate Install directory:
- InformixGetUserID.exe <informix-server-name> <userid> <password>

    where:

    <informix-server-name> is name of the Informix server as defined in the source

    <userid> the name of the user defined in the source connection

    <password> the password for the user ID

    The application outputs a number which must be manually inserted into the _config.ini file in the folder for the Windows service.

- In the Windows Explorer, from the Syniti Replicate install directory, go to the Windows service folder.
- Edit the _config.ini file and locate the field USER_ID_NUMBER.
- Set the value to the number returned from your call to InformixGetUserIDNumber above.
- Save the file.
- Start the Windows service.