CONTENTS

BRIDGE INSTALLATION OVERVIEW

Installation requires your network administrator to make changes to your firewall and database server. These changes should take no longer than one hour.

Once these changes are made, Informz can perform the tasks to integrate your *iMIS* database with Informz. Our Support and Implementation Teams will guide you through this process.

SQL Server Management Studio must be installed on your database server for many of these steps. It can be downloaded here: http://go.microsoft.com/fwlink/?linkid=65110

TECHNICAL OVERVIEW OF THE INSTALLATION

In order for the Informz and *iMIS* databases to connect, Steps 1 through 3 below must be performed by a technical person experienced with *iMIS* at your organization.

STEP 1: CONFIGURATION DECISIONS

A few questions must be answered to determine the configuration for the *iMIS* bridge:

WHERE ARE THE EMAIL ADDRESSES STORED IN YOUR *IMIS* DATABASE?

Are the email addresses to be used by Informz in the EMAIL field of the **Name** table or the **Name_Address** table?

If the **Name_Address** table is being used, which address type (i.e. work, vacation) should Informz use? To see a list of address types, run this query:

```
SELECT DISTINCT PURPOSE FROM NAME_ADDRESS WHERE PURPOSE <> ''
```

WHICH STATUSES SHOULD INFORMZ USE?

Selecting the proper status(es) keeps inactive or expired members from being used by Informz. Typically, Informz clients choose to integrate only ACTIVE members; however, you may choose any statuses you want.

You can check available statuses by going to *Customers > Set up Tables > General Lookup/Validation* in *iMIS* and selecting "MEMBER_STATUS" from the drop-down list at the top.

SHOULD INFORMZ ACTIVITY INFORMATION BE SENT TO *IMIS*?

Information such as mailing delivery data (opens and clicks), surveys, and ballots is collected by Informz. This information can subsequently be written to *iMIS*. Unsubscribers and permanent bouncing email addresses are automatically sent back to the *iMIS* database. For details, see the Activity Transfer Setup section of this document.

SHOULD MAILINGS BE TRIGGERED FROM INFORMZ BASED UPON ACTIONS IN *IMIS*?

A triggered mailing is a very effective way to send a mailing when data changes in *iMIS*. This could include automatic welcome mailings, dues reminders, and birthday mailings. A trigger, stored procedure, or database job, based on your business needs, would be needed to call one of the bridge stored procedures. For details, see the Triggered Mailing Setup section of this document.

STEP 2: FIREWALL AND DATABASE CHANGES

Informz currently supports a single connection methodology "IPSEC" tunneling also known as site to site VPN.

IPSEC TUNNELING

An IPsec tunnel is a site-to-site VPN connection using IPsec encryption. This configuration requires more lead time than a firewall-to-firewall exception. In addition, there are certain hardware devices and appliances that are available for use on the client side that may preclude Informz from being able to successfully configure a stable IPSEC tunnel. Below is the connection information that Informz requires for an IPSEC tunnel:

- External IP address (This is generally a firewall or router on the perimeter of your network)
- Internal IP address of the SQL Server that hosts the *iMIS* database (This is generally a private IP address.)
- Name, email, and phone number of the client-side Network Engineer configuring the tunnel

The following tunnel encryption settings are suggested and preferred by Informz. Deviations from this configuration may result in extended configuration lead time and/or additional troubleshooting.

- Phase 1 Authentication – IKEv1 Proposal
  - AES 256 -- SHA1 -- DH Group 5
  - Lifetime 86400
- Phase 2 Encryption
  - AES 256 -- SHA1 -- PFS w/ DH Group 5
  - Lifetime 86400
- Secret Pre-Shared Key (Informz will provide a randomly generated PSK)

Once Informz receives all of this information, an Informz Network Engineer will contact your Network Engineer to schedule a time to configure the tunnel. This may take up to one week to schedule.

Informz can only configure its side of the IPSEC tunnel. A Network Engineer from your organization is required to complete the configuration of the tunnel. Informz includes up to one hour of troubleshooting to assist in configuring the tunnel. After that, Informz assistance is available at $200/hour for additional work.

Informz staff is not permitted to access a client's network, nor can Informz be held liable for changes suggested during the troubleshooting process.

After the tunnel is established, any changes made to the tunnel must be coordinated with Informz. A minimum of 72 hours advanced notice is required to ensure the bridge stays operational. Informz provides one hour of support per year for tunnel changes.

CHANGE SECURITY SETTINGS ON YOUR *IMIS* SQL SERVER

In Management Studio (Enterprise Manager for SQL2000), right-click on the server name and select **Properties**.

Click the **Security** tab.

Under *Security > Authentication*, make sure authentication is set to "SQL Server and Windows." If it is not, change the authentication and restart the MSSQL Server service.

Informz does NOT support **Named Instance** database connections (e.g. members.informz.net\sqlexpress). If you are doing **Named Instance**, you need to turn off Dynamic Port IP Addressing in the Configuration Manager and bind the instance to a specific port.

In the SQL Configuration Manager, at the bottom where it says "IP All," remove any numbers in the TCP Dynamic Ports and enter a valid port number in the TCP Port section. This port number should correspond to the port you have chosen in Step 2.1(A). We recommend this for all IP Entries.

Ensure that the **sp_asi_GetCounter2** stored procedure exists. In SQL Server Management Studio (Enterprise Manager for SQL2000), look under the Stored Procedures in your *iMIS* database. If it does not exist, please follow these steps in the *iMIS* software to create it:

- Go to *Utilities > Reports and Queries* on the main menu.
- On the popup window, select **System Setup** from the **Report Types** list.
- Run the **Create sp_asi_GetCounter2 for MS SQL** utility.

CREATE A DATABASE LOGIN FOR INFORMZ

In SQL Server Management Studio (Enterprise Manager for SQL2000), create a login that uses SQL Server Authentication.

Username: informz

Password: Use a password of your choice, but please use a combination of letters and numbers

General Tab: Set the default database of the login to your *iMIS* database.

Server Roles Tab: Do not select any of these.

Database Access Tab (User Mappings): Select your *iMIS* database. Give the login the **public** and **db_owner**** roles on your *iMIS* database.

**After your bridge install is complete, Informz will programmatically remove the db_owner permission from the informz user after applying the minimum required permissions for the bridge. Page 24 of this document shows you the permissions granted to the Informz user. Any other special access (e.g. leveraging custom built SQL views in iMIS for Targeting in Informz) objects will need to have select permissions explicitly granted to them by someone with access to your iMIS database

STEP 3: LET INFORMZ KNOW WHEN COMPLETED

Send an email containing the information below to informzsupport@higherlogic.com.

Subject Line: Client Name – iMIS Integration

Provide the following information in the body of the email:

- Technical Contact who will be setting up your end of the IPSEC tunnel (Name, Phone, Email)
- If the *iMIS* database is hosted (indicate Y/N), provide the name of the Hosting Provider
- Database name for your production *iMIS* database
- Port number
- Database External IP Address
- Internal/Hosted IP (if known)
- The table in *iMIS* containing the email address to be used by Informz (Name or Name_Address)

- If using the Name_Address table, the address type
- The list of statuses to use (e.g. Active)
- iMIS Version
- Password for Informz SQL User

Informz will reach out to the contact specified in email to retrieve the password for the Informz database login, and to configure the IPSEC tunnel connection.

STEP 4: INFORMZ WILL MAKE THE FOLLOWING CHANGES TO YOUR *IMIS* DATABASE

Informz can install the bridge as soon as the following steps are completed:

- Informz has received all of the necessary technical information.
- Steps 1 through 3 above have been completed.
- Informz can access your database server through your firewall to Informz; the bridge install will be completed within 8 weeks. A technical person at your organization should be available in the event of questions or issues.

Informz will make the following changes to your *iMIS* database during the bridge install:

- Create new tables in the *iMIS* database called INFORMZ_CHANGES, INFORMZ_PREFS, INFORMZ_TRIGGERED_EMAILS, INFORMZ_SEQN, and INFORMZ_SQL.
- Add a record to INFORMZ_PREFS which indicates your preferred email address and preferred statuses.
- Add triggers to the NAME and NAME_ADDRESS tables. Each table will have an insert, update, and delete trigger.
- Add the following activity types to the PRODUCT_TYPE table: *iBadEmail, iUnsub, iResub, iCorrect, iOptOut*.
- Add the following stored procedures to the *iMIS* database:
    - `INFORMZ_TRANSFER_INITIAL_SUBS`
    - `INFORMZ_CHANGE_STATUS`
    - `INFORMZ_DROP_TARGET_VIEW`
    - `INFORMZ_CREATE_PERS_SQL_FOR_VIEW`
    - `INFORMZ_SAVE_BAD_EMAIL`
    - `INFORMZ_SAVE_OPT_OUT`
    - `INFORMZ_SAVE_CORRECT`
    - `INFORMZ_SAVE_RESUB`
    - `INFORMZ_SAVE_UNSUBSCRIBE`
    - `GetRecordCount`
    - `INFORMZ_CREATE_VIEW_FOR_TARGET`
    - `GET_TARGET_GROUP_SQL`
    - `GET_ACTIVITY_COUNTER`
    - `INFORMZ_SET_TRIGGERED_EMAIL_STATUS`
    - `INFORMZ_SCHEDULE_TRIGGERED_EMAIL`
    - `INFORMZ_GET_EMAILS_TO_SEND`
- Add the following user-defined functions to the *iMIS* database:
    - `INFORMZ_CLEAN_PHONE`
    - `INFORMZ_COMPARE_TIMES`
    - `INFORMZ_FUNC_PERSONALIZATION`
    - `INFORMZ_IS_SAME_DAY`

- o `INFORMZ_GET_SECONDS_OF_DAY`
- Add one view to the *iMIS* database called `INFORMZ_VIEW_PERSONALIZATION`.
- Change the *iMIS* database role to have full access to both the `INFORMZ_PREFS` and `INFORMZ_CHANGES` tables.

Informz will fill the `INFORMZ_CHANGES` table and sync the Informz database with the *iMIS* database. Informz will also test the connection from the Informz user interface to ensure that data is transferring properly. If all goes as expected, user training can begin.

ONGOING CHANGES TO YOUR *IMIS* DATABASE

After the bridge is installed and Informz users start creating *iMIS* target groups in Informz, the Informz system creates SQL Server views on your *iMIS* database. One view is created for each *iMIS* target group created in Informz. If a target group is deleted from Informz, the corresponding view for that target group is dropped from the *iMIS* database. All Informz views created in the *iMIS* database are named with the prefix *GetInformzTarget*.

WHAT CAN AFFECT YOUR INFORMZ FOR *IMIS* BRIDGE?

After your bridge is installed, the connection between your Informz account and your *iMIS* database may occasionally go down, or your Informz and *iMIS* databases may not sync. The list below provides troubleshooting ideas to reestablish the bridge as soon as possible:

Things To Check	Resolution
The password for the Informz login expired.	Contact Higher Logic Support with the new password.
The external IP address (or port) of your *iMIS* database server has changed.	Contact Higher Logic Support with the new IP address (or port).
The name of your *iMIS* database has changed.	Contact Higher Logic Support with the new name of your *iMIS* database.
Your *iMIS* database has been moved to a different server.	The login Informz uses to connect to your *iMIS* database may have been 'orphaned.' In SQL Management Studio: Verify that the Informz user is listed in BOTH security folders: • One at the *iMIS* database level (security > users) • One at the server level (security > logins) If the user is missing from either, please create the user there with **db_owner** and public access to the new *iMIS* database. (It may error when you try to create, but a refresh shows it listed.) Then execute this ms stored procedure to 'unorphan' the Informz user: **EXEC sp_change_users_login 'Update_One', 'informz', 'informz'** You will know the problem has been fixed if you are able to successfully log in to SQL server Management Studio as the Informz user.

If the connection goes down at the time of mailing publication, the mailing will not be sent. The Informz Support Team is automatically notified and can resend the mailing manually.

If you receive errors when trying to send mailings or sync, a Bridge Repair page is accessible under the Admin menu in Informz. Clients using non-numeric IP addresses (e.g. mail.informz.net), as well as some IPSEC clients, may not be able to use this page. Other clients can use this page to troubleshoot and fix their bridge connections.

You should communicate to Informz users in your organization any time your Internet connection is down or the *iMIS* database server is unavailable. This ensures they are not logged into Informz or trying to publish mailings at those times.

ONGOING SUPPORT

For technical support or questions after your bridge install has been completed, please contact Higher Logic Support.

ACTIVITY TRANSFER SETUP (OPTIONAL)

Activity information from Informz can be written directly back to your *iMIS* database. This is useful in enabling your *iMIS* users to view mailing, survey, and ballot results in *iMIS*. This data can also be used with Crystal Reports and other querying and reporting tools. The procedure below gives step-by-step instructions for creating the user-defined tables and their associated tab windows in *iMIS*. Some small changes are required to your *iMIS* database to enable activity transfer.

It is up to your organization to decide which activities to send from Informz to the *iMIS* database. You can select to send back mailing data, survey data, ballot data, or all types of data. Based on what type of data you want sent back, follow the steps below.

Note: Steps 2 and 3 must be done in your *iMIS* software by an *iMIS* user logged in with the MANAGER!SA login.

STEP 1: CLEARING OUT DATA

To make sure the tables get created properly, this step eliminates remnants of previous attempts that may have been made to setup these tables.

Inside SQL Management Studio, open a query window connected to your *iMIS* database. Execute the following script:

```
if exists (select * from sysobjects where name = 'informz_mailings')
    BEGIN
    drop table informz_mailings
    END

GO

if exists (select * from sysobjects where name = 'informz_surveys')
    BEGIN
    drop table informz_surveys
    END

GO

if exists (select * from sysobjects where name = 'informz_ballots')
    BEGIN
    drop table informz_ballots
    END
```

STEP 2: CREATING USER-DEFINED TABLES

Depending on which type of activity data you want sent back to your *iMIS* database, create one or both of the user-defined tables below. To create a user-defined table, follow these steps:

1. Click *Customers* at the top.
2. Go to *Set up Module > General* on the left.
3. Click the **Additional Windows** button.
4. Click the **Define Tables** button.
5. Click the **New** button at the top.
6. Enter the appropriate table name (see below).
7. For "System," select **Membership**.
8. For "Access Method," select **ID**.
9. Check the **Multiple Instances Allowed** checkbox on the right.
10. Use the **Insert Line** button to add fields to the table. For each user-defined table, the fields and their associated parameters are listed below.

Important Note: Make sure to name the tables and columns (fields) using the exact names and data types as specified below. If the names are not identical, the transfers cannot be performed properly.

Table Name: INFORMZ_MAILINGS

Field Name	Prompt	Type	Length
MAILING_ID	Mailing ID	Int	
MAILING_NAME	Mailing Name	Char	255
PUBLISH_DATE	Publish Date	DateTime	
DELIVERED	Delivered	CheckBox	
OPENED	Opened	CheckBox	
CLICKED	Clicked	CheckBox	

Table Name: INFORMZ_SURVEYS

Field Name	Prompt	Type	Length
SURVEY_ID	Survey ID	Int	
SURVEY_NAME	Survey Name	Char	255
DATE_STARTED	Date Started Survey	DateTime	
COMPLETED	Completed Survey	CheckBox	
DATE_COMPLETED	Date Completed Survey	DateTime	
VALUE_1	Value 1	Char	500
VALUE_2	Value 2	Char	500
VALUE_3	Value 3	Char	500

Table Name: INFORMZ_BALLOTS			
Field Name	Prompt	Type	Length
BALLOT_ID	Ballot ID	Int	
BALLOT_NAME	Ballot Name	Char	100
STARTED	Date Ballot Started	DateTime	
SUBMITTED	Date Votes Submitted	DateTime	
CONFIRMED	Date Votes Confirmed	DateTime	

Table Name: INFORMZ_ENGAGEMENT			
Field Name	Prompt	Type	Length
SCORE_NAME	Score Name	Char	255
SCORE_DESC	Score Desc	Char	2000

Table Name: INFORMZ_LEAD			
Field Name	Prompt	Type	Length
SCORE_NAME	Score Name	Char	255
SCORE_DESC	Score Desc	Char	2000

Table Name: INFORMZ_PERSONA			
Field Name	Prompt	Type	Length
SCORE_NAME	Persona Name	Char	255
SCORE_DESC	Persona Desc	Char	2000

Table Name: INFORMZ_WEB_TRACK			
Field Name	Prompt	Type	Length
WEB_TRACK_TYPE	Web Track Type	Char	20
PAGE_URL	Page Url	Char	2000
PAGE_TITLE	Page Title	Char	2000
HTTP_USER_AGENT	HTTP User Agent	Char	1000
IP_ADDRESS	IP Address	Char	45
BROWSER_NAME	Browser Name	Char	100
SESSION_DURATION	Session Duration	Int	
NUM_PAGES	Num Pages visited	Int	
CREATE_DATE	Create Date	DateTime	

Table Name: INFORMZ_WEB_TRACK			
Field Name	Prompt	Type	Length
COUNTRY_NAME	Country Name	Char	255
VIEW_DURATION	View Duration	Int	
ORDERID	Order ID	Char	255
SKU	Sku	Char	255
ITEM_NAME	Item Name	Char	255
ITEM_CATEGORY	Item Category	Char	255
PRICE	Price	Money	18 (length) 2 (Dec)
QUANTITY	Quantity	Int	
EVENT_CATEGORY	Event Category	Char	255
ACTION	Action	Char	255
VALUE	Value	Char	255

- Click the **Save** button when the fields have been added to the tables.
- Click the **Create/Update Server Table** button.
- Click the **Auto-Create Window** button.

ADDITIONAL NOTES ABOUT USER-DEFINED TABLES

You will set up user-defined tables through the *iMIS* Desktop application. This will ultimately create the tables in the *iMIS* database. Once the writebacks are enabled in Informz, database jobs will run to move the data appropriately. Data will then be pushed to *iMIS*. Note that if a table is set up incorrectly, the writeback data will not appear in *iMIS*.

STEP 3: AUTO-CREATE AND ACCESS KEYWORDS

When auto-create is used, the tab window data for a user-defined table is editable when viewing a customer profile. Since the data in these tables is automatically transferred from Informz, *iMIS* users should not edit the data. To prevent users from editing data in the user-defined tab windows, create access keywords for the tables using the following steps:

1. Click *Customers* at the top.
2. Go to *Set up tables > General lookup/validation* on the left.
3. Look in the table list to see if there is a table called ACCESS_KEYWORDS already created.
4. If the ACCESS_KEYWORDS table doesn't exist, select *(New Table)* from the table list. Enter "ACCESS_KEYWORDS" for the table name and click the **Save** button.
5. If the ACCESS_KEYWORDS table already exists, select it from the list.
6. Click the **New** button at the top.
7. In the Code box on the right, enter "INFORMZ_MAILINGS." In the Description box, enter "Informz Mailings."
8. Click the **Save** button at the bottom.

Repeat steps 4 through 6 for INFORMZ_SURVEYS or INFORMZ_BALLOTS, if applicable.

STEP 2 (CONTINUED): DISPLAY USER-DEFINED TABLES IN CUSTOMER PROFILE

The needed access keywords to the user-defined tables are created using the following steps:

1. Go to *Set up module > General* on the left.
2. Click the **Additional Windows** button.
3. Click the **Define Windows** button.
4. Select INFORMZ_MAILINGS from the "Current Windows" list.
5. To the right of the "Access Keywords" box, click the **Find** button.
6. On the "Available" list, double-click **INFORMZ_MAILINGS**. This will move it over to the "Selected" list. Click the **OK** button.
7. Click the **Save** button at the bottom.

Follow steps 4 through 7 for the INFORMZ_SURVEYS or INFORMZ_BALLOTS, if applicable.

STEP 4: ADD TABS TO CUSTOMER PROFILE

This step needs to be performed on each *iMIS* user's *iMIS* installation to allow viewing Informz data in *iMIS*.

1. Click *Customers* at the top.
2. Click *Manager Customers* on the left.
3. Right-click anywhere in the top-right of the screen (i.e. on the Profile tab) and select *Edit Tab Preferences* from the popup menu.
4. The new user-defined table(s) is listed in the "Other Available Detail Tabs" list. Select each table from that list and click the left arrow to move the table over to the "Visible Detail tabs" list.
5. Click the **Save** button.
6. Close and re-open *iMIS* for the changes to take effect.

STEP 5: ENABLE AD HOC REMOTE QUERIES

Ad hoc remote queries must be enabled in order for Informz to transfer data into the user-defined tables. Go to the "SQL Server Surface Area Configuration" tool and follow these steps:

1. Click the *Surface Area Configuration for Features* link.
2. On the new window that appears, click *Ad Hoc Remote Queries* on the left.
3. On the right, check the **Enable OPENROWSET and OPENDATASOURCE support** checkbox.
4. Click the **OK** button.
5. Close the "Surface Area Configuration" tool.
6. This is the command line option for setting the above settings:

```
EXEC sp_configure 'show advanced options', 1

GO

RECONFIGURE

GO

EXEC sp_configure 'Ad Hoc Distributed Queries', 1

GO

RECONFIGURE
```

STEP 6: TURN ON THE FEATURE

After the previous steps have been completed, please contact Higher Logic Support. They will turn on the feature inside your brand.

TRIGGERED MAILING SETUP (OPTIONAL)

Email publishing can be triggered in Informz as a result of an actions occurring within the *iMIS* database. This **Triggered Mailing** feature has many applications, such as sending out welcome mailings to new members when they are added to *iMIS* or sending confirmation mailings after someone registers for an event.

Because of the many possible applications, some database programming is required to enable and use the Triggered Mailing feature. The procedure below explains how to enable this feature. There is a development guide for this piece later in this document.

If you are using SQL Server 2005, please ensure that the "SQL Server Browser Service" is running on your database server.

Ad hoc remote queries also must be enabled. To do this on your database server, go to the "SQL Server Surface Area Configuration" tool and follow these steps:

1. Click the *Surface Area Configuration for Features* link.
2. On the new window that comes up, click *Ad Hoc Remote Queries* on the left.
3. On the right, check the **Enable OPENROWSET and OPENDATASOURCE support** checkbox.
4. Click the **OK** button. Close the "Surface Area Configuration" tool.

Once these two features are enabled in SQL Server, please contact Higher Logic Support to enable the feature in Informz.

TRIGGERED MAILING DEVELOPMENT TIPS (OPTIONAL)

STORED PROCEDURE: INFORMZ.INFORMZ_SCHEDULE_TRIGGERED_EMAIL

The ID of the mailing you want to trigger will be used by **Informz_Schedule_Triggered_Email** to send the mailing to a particular *iMIS* Name ID. This stored procedure should be called from whatever process triggers the email to go out (i.e., a form is completed on client's web site, an order record is added to client's *iMIS* database, a member registers for a particular event, etc.).

Syntax:

```
EXEC informz.INFORMZ_SCHEDULE_TRIGGERED_EMAIL

@mailing_id,

@name_id,

@date_to_send,

@add_if_already_exists
```

Parameters:

This stored procedure takes four parameters:

Parameter Name	Parameter Type	Description
@mailing_id	Int	ID of the mailing you want to trigger Informz to send. Higher Logic Support can walk you through where to retrieve this in the UI.
@name_id	Varchar; length=10	ID, from the *iMIS* Name table, of the person you want to send the email to.
@date_to_send	Datetime	The exact date and time you want Informz to send the email to this person.
@add_if_already_exists	Bit; possible values: 0 or 1	Indicates whether you want to schedule this email for this person if a record with that same @mailing_id and @name_id already exists, but hasn't been scheduled in Informz yet. The default value for this parameter is zero (0), which indicates not to schedule the same email to this person multiple times.

Return Code Values:

0 (success), 1 (failure)

The most likely cause of an error is that the ID sent into the @name_id parameter doesn't exist in the NAME table.

Result Sets:

No result sets are returned from this stored procedure.

Example:

```
DECLARE @nRet int
EXEC @nRet = informz.INFORMZ_SCHEDULE_TRIGGERED_EMAIL
222222,
'11111',
'5/1/2006 10:00 AM',
1

If (@nRet = 0) begin
      Print 'Successful'
End
Else begin
      Print 'Error'
End
```

TABLE: INFORMZ.INFORMZ_TRIGGERED_EMAILS

This table is used by the Triggered Mailing feature to store the list of the Mailing IDs and Name IDs of emails waiting to be scheduled in Informz, emails that have already been scheduled successfully in Informz, and emails that were not scheduled in Informz because of an error.

The TRIGGER_STATUS field in this table indicates the status of the email. The possible values for the TRIGGER_STATUS field are as follows:

TRIGGER_STATUS	Description	Resolution
0	New record; hasn't been scheduled in Informz yet.	No error occurred.
6	Record successfully processed and scheduled in Informz	No error occurred.
100	Mailing ID does not exist on brand.	The mailing ID could not be found in the Informz account. Verify that the Mailing ID is valid by checking in the UI as shown by Higher Logic Support.
101	Mailing ID has been deleted from Informz.	The mailing has been deleted in Informz. To continue using this Mailing ID for a triggered email, undelete the mailing in Informz.
102	Mailing ID not scheduled in Informz.	The mailing was not scheduled as a triggered mailing in Informz, or the triggered mailing status was removed from the mailing. Reset the mailing's trigger status.
103	Subscriber not found in Informz.	The Name ID could not be found in the Informz database. This could be because the EMAIL field on the NAME record is empty or NULL, or the NAME.STATUS field contains a status not selected for this client's bridge install.
104	Subscriber is unsubscribed from Informz.	Informz attempted to schedule the mailing to the subscriber, but the subscriber was unsubscribed. Therefore, Informz cannot send the email to this person.
105	Subscriber not in target group at time of mailing	The subscriber was not listed as being in the target group when the mailing was published.

A process should be established whereby this table is checked periodically for records with a TRIGGER_STATUS >= 100. Once the error has been resolved (e.g. mailing has been scheduled correctly after receiving error 102), the TRIGGER_STATUS field of that row can be set to zero (0) to allow Informz to attempt to schedule the email again.

Note: If a record has TRIGGER_STATUS = 0 and the "date to send" has already passed, Informz processes the mailing immediately.

IQA TARGETING SETUP (OPTIONAL)

The Intelligent Query Architect (IQA) is a great tool to create Informz Target Groups within *iMIS*. Once this feature is enabled, new IQA queries placed in the Informz folder in *iMIS* automatically appear in Informz.

DATABASE SETUP

Prior to setup, please verify with your database administrator that "read access" has been provided to the Informz user for the following tables: Hierarchy, HierarchyRoot, and DocumentMain. Also ensure that "execute access" has been provided to this scalar function: **asi_DocumentPathFromHierarchyKey**. This access is required in order for the integration to function properly. If the Informz database user has been granted the **db_owner** role on the *iMIS* database, those permissions are already applied.
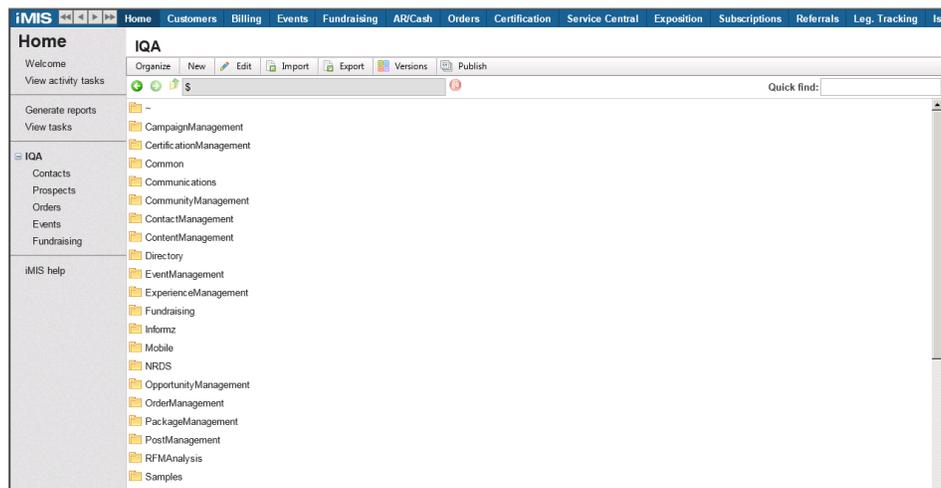
CREATING IQA QUERIES FOR INFORMZ

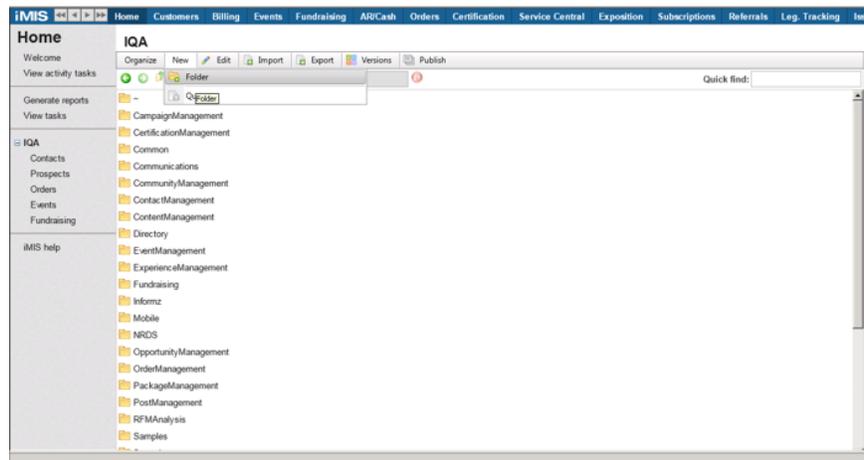Please be aware of the following with regard to creating IQA queries to be used by Informz:

- Only queries saved into the Informz folder in IQA are visible to Informz as a Target Group.
- Each query should return just the ID field. The column name for the field should be ID in all capital letters. You may need to alias the column in IQA to accomplish this.
- Including fields other than ID slows down performance. Please remove these fields.
- Personalization is accomplished by the current features in Informz. Additional fields in the query cannot be used for personalization.
- IQA queries created for targeting <u>CANNOT</u> be parameterized. In other words, these need to be stand-alone queries that do not require values to be provided at runtime.
- Counts from IQA do not always match the "net number" that Informz ultimately displays for the Target Group for many reasons:
  - Some members may not have the same *Preferred Status* used by the Informz brand.
  - An invalid email address could be in the member record.
  - The member record might not have an email address.
  - The subscriber may have previously unsubscribed.

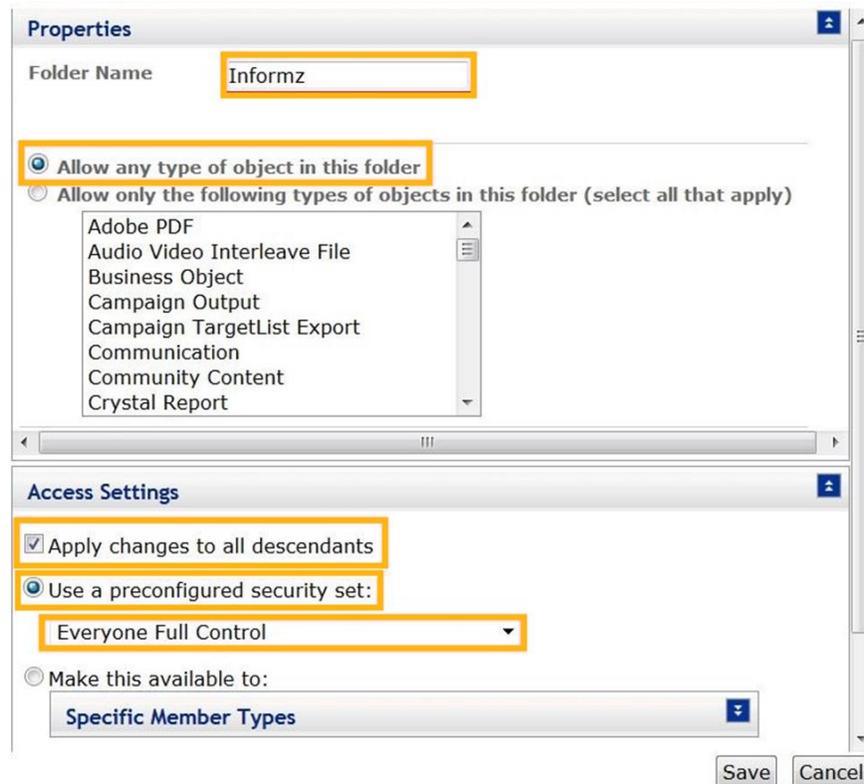### STEP 1: CREATE THE INFORMZ FOLDER IN IQA

Go to the IQA section within *iMIS*.

Click *New > Folder*.

A pop-up window appears. Enter the name as "Informz" and set permissions on the Informz folder **exactly as shown in the image below**. Then click the **Save** Button.

The folder called *Informz* now displays in the list.
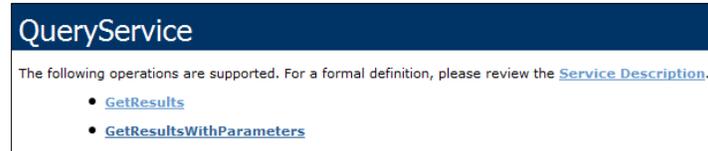
STEP 2: FIND THE URL TO THE QUERY SERVICE

The URL for the Query Service *iMIS* Web Service is required for this feature to work. This page enables the communication between Informz and the IQA query results. Your *iMIS* Administrator should be able to provide this. (Informz does not have access to this information.) This URL is one that Informz can access externally. An internal URL that only members of your network can access will not work for this feature.

The URL will most likely look something like this:

http://www.[Association Domain].org/iMIS15/AsiCommon/services/query/queryservice.asmx

To test the URL, enter it into a web browser. If the page appears that matches the image below, it is configured correctly:

STEP 3: SECURE THE QUERYSERVICE WEB SERVICE

The QueryService Web Service gives an administrator access to query results for a specific query or for the default query (if the document folder is specified).

Security for these web services is set in the web.config file, which defaults to the following location (in Windows):

C:\Program Files (x86)\ASI\iMIS\Net\

To use the IQA target groups, set the web.config file value of the AppSetting key secureQueryWebService to "false." This ensures that you can run the queries properly.

(By default, the web.config file value of the AppSetting key secureQueryWebService is set to "true." When this value is "true," only authenticated users with the SysAdmin role can access or run queries through the QueryService Web Service. When this value is set to "false," anyone can access or run queries through this web service)

STEP 4: CONFIGURE YOUR FIREWALL

For clients unable to make the web service publicly available, you can instead opt to grant firewall exceptions for our servers on ports 80 and 443. The Informz IP range responsible for connecting with IQA is: **205.201.40.0 /29**

 For customers using the Canadian data center, the Informz IP range responsible for connecting with IQA is: **205.201.45.0 /29**

STEP 5: CONFIGURE INFORMZ

Log in to Informz using an authorized user with *Administrator* privileges. Select *Administration > System Settings* from the menu. (For some users, the *Administration* menu is simply *Admin*.)
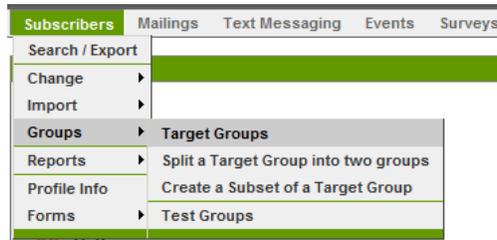

Find the section titled **Integration Information**. If you do not see it, contact Higher Logic Support. Higher Logic Support can add the IQA Extension to your account.

Enter the URL to the queryservice.asmx web service. (**NOTE:** This needs to be a URL that is accessible from the Internet.) Also, check the **Is Active** checkbox.

STEP 6: TEST THE CONNECTION

Log out of Informz and go back to *iMIS* IQA. Create a new query in the Informz folder. Log back into Informz and go to the **Target Groups** page (*Subscribers > Groups > Target Groups*).

Select *iMIS* **IQA** in the "Target Types" box. If everything is properly configured, new IQA queries placed in the Informz folder in IQA now display in Informz. To refresh this list, click the **Update Target Groups** button.

The list is also refreshed upon logging out and logging in again.

The connection can also be tested outside of the Target Group area. Select *Administration > Setup > Bridge Configuration* from the menu and then select *Check Connection*. Successful results look like the image below:

TROUBLESHOOTING GUIDE

If an error occurs when setting up your bridge connection, please check the following issues below. If your connection is still not working, please contact an *iMIS* representative or Informz Support at BridgeSupport@informz.com.

Issue: Informz cannot connect to your database.

Answer: This problem can be the result of a change having been made that affects the IPSEC tunnel connection with Informz. If our IT department is unable to see the tunnel as being up/open on your end, you will need to be prepared to furnish a network engineer/IT representative to help them figure out what might have changed.

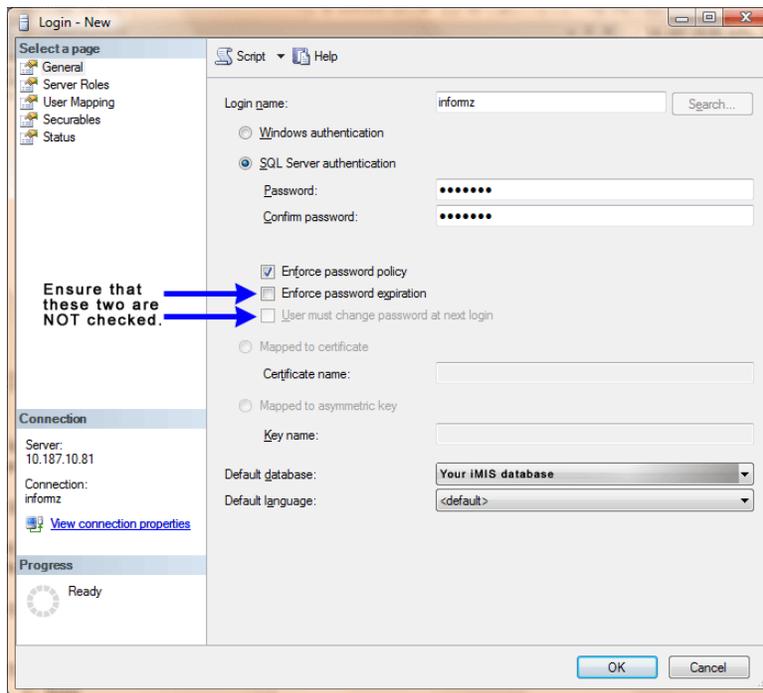**Issue**: Informz can connect but cannot login to your database

Possible solutions:

       Verify that the user "informz" and the password provided have been set-up in SQL server, not in *iMIS*.
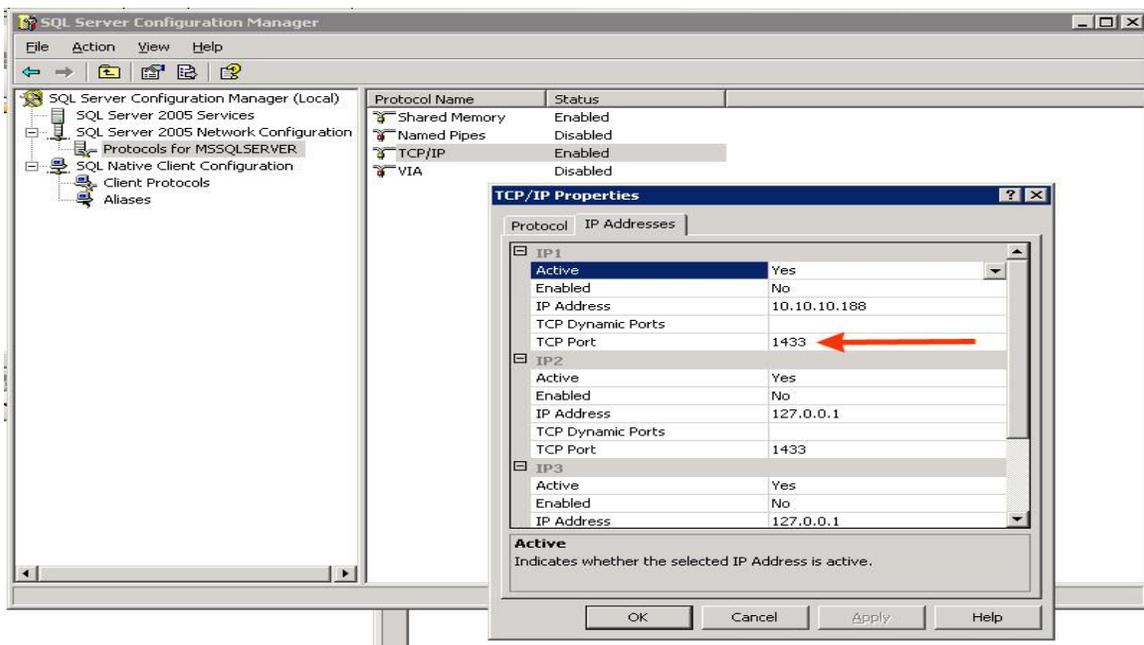
       Ensure that this was done in the Security section at the machine level and not at the database level in SQL Enterprise manager/SQL Management Studio. See image below.

Ensure the username "informz" is lowercase, the password did not automatically expire, and the user is not required to change the password at next login. See the image below.

Ensure the database is listening to the same port that Informz is connecting. See image below.

Look at the SQL server logs for failed login attempts. Look up the status number with Microsoft. See instructions below:

>Go to: C:\Program Files\Microsoft SQL Server\MSSQL.1\MSSQL\Log

>Search in the ERRORLOG file for "informz" or "Login failed for user 'informz'." You should see something like this:

>>2007-11-17 21:38:40.21 Logon   Login failed for user 'informz'. [CLIENT: 10.187.10.16]

>>2007-11-17 21:38:40.21 Logon   Error: 18456, Severity: 14, State: 8.

If you do not find them, then Informz is trying to log in to a different SQL database. You should look to determine if additional databases are located on that server.

Assuming that you do find this error in the log, you need to find the value for the 'State' on the 2nd line. In the example above, "State 8" indicates the authentication failed because the user provided an incorrect password. The most common error states and their descriptions are provided in the following table:

ERROR STATE	ERROR DESCRIPTION
2 and 5	Invalid userid
6	Attempt to use a Windows login name with SQL Authentication
7	Login disabled and password mismatch
8	Password mismatch
9	Invalid password
11 and 12	Valid login but server access failure
13	SQL Server service paused
18	Change password required

Issue: You do not wish to provide **db_owner** rights to the Informz login.

Answer: Step 2.4.e in the bridge requirement document says you need to set up the informz login to have **db_owner** authority - this allows the creation of the required tables, etc. If you do not wish to do this, Informz can provide you with a script to run to install the bridge yourself.

The form at http://www.informz.com/imis-info still needs to be completed. Once Informz has received the *iMIS* information, Informz can create the scripts and send those to you. After running the scripts, you will need to provide the informz login with the rights listed below. After doing this, please contact Informz Support to finish the bridge installation.

PERMISSIONS REQUIRED FOR THE INFORMZ LOGIN

SELECT permissions

    NAME

    NAME_ADDRESS

    NAME_FIN

    MEET_MASTER

    ORDERS

    ORDER_MEET

    ORDER_LINES

    CERT_REGISTER

    CERT_PROGRAM

    PRODUCT_TYPE

    PRODUCT

    APPEAL

    CAMPAIGN

    ORG_CONTROL

    GEN_TABLES

    COUNTRY_NAMES

    STATE_CODES

    MEMBER_TYPES

    TERMS

    UD_TABLE

    UD_FIELD

    All user-defined tables

    All INFORMZ views

SELECT and INSERT permissions

    ACTIVITY

SELECT and UPDATE permissions

    COUNTER

Full Access (SELECT, INSERT, UPDATE, DELETE) to

    INFORMZ_CHANGES table

    INFORMZ_PREFS table

EXEC permissions

    sp_asi_GetCounter2 stored proc

    All INFORMZ stored procs

    All INFORMZ functions

CREATE PERMISSIONS

The informz login will also need `CREATE VIEW` and `CREATE PROCEDURE` permissions on the *iMIS* database. Those permissions can be granted using these statements:

```
GRANT CREATE VIEW to informz
GRANT CREATE PROCEDURE to informz
```

QUESTIONS?

If you have any technical questions on this document, please contact Higher Logic Support.