



## *Scribe Insight Tutorials*

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# 1. Overview

To help you get started using Scribe Insight, try the tutorials included in this guide. The first two tutorials highlight the major features of the Scribe Workbench. They will show you how to:

- Create database connections
- Configure the source and target
- Link source and target data fields
- Set up insert and update steps to control the data migration
- Save your work as a Data Translation Specification (DTS) file
- Test and run the DTS
- Identify and fix errors using the Transaction Error Report

The second two tutorials will introduce you to some of the features in Scribe Console. Use these tutorials to learn how to:

- Create a collaboration
- Create and run an integration process within the collaboration
- Add a rejected rows table to your DTS file
- Add a data view for the rejected rows table
- Add a monitor and an alert

Throughout this guide you will find references to advanced functionality that is not included in the tutorials. For more information, see the Scribe online help and User Guide.

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✘ This document may be updated from time to time. To be sure you have the latest document, check <https://openmind.scribesoftware.com/download/ScribeInsightTutorial>. The revision date is included on the title page.

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The tutorials involve migrating account, address, and contact data from a source text file to a target SQL Server database and then creating a collaboration that allows you to run the DTS file automatically and monitor the run for errors.

Use Scribe Workbench to create DTS files that contain data mappings, parameters, and settings that define a data migration or integration process. You can save DTS files and use them as templates for future migration or integration projects.

A DTS file includes the following information:

- Connection information for the source and target data stores.
- Steps that define the data processing logic to be used when the DTS file is run.
- Formulas that link source fields to target fields, set constant values in target fields, or allow for lookups and matching.
- Formulas used for conversion, parsing, or conditional import of selected source fields.

A *collaboration* is a set of Integration Processes, related files, and reports. Collaborations allow you to organize Integration Processes into meaningful abstractions of business processes.

## Requirements

- **Scribe Insight 7.0 or higher** – The Scribe Insight Workbench must be installed before you can use these tutorials. For information about installing Scribe Insight, see the [Scribe Insight Installation Guide](#), which you can download from the Scribe website.
  - ✦ The screenshots and step-by-step instructions in the tutorials assume you are using Insight 7.0.2. While you can use these tutorials with earlier versions of Insight, it may be confusing because of changes to functionality and to the user interface.
- **Scribe Sample Text** – Installing Scribe Insight automatically installs the sample text files in C:\Program Files\Scribe\Samples\Textdata and creates the **Scribe Sample Text** ODBC Data Source Name.
- **Scribe Sample SQL Server database** – When installing Insight, you have the option to install the SCRIBESAMPLE SQL Server database and create the corresponding ODBC DSN Scribe Sample.

If the sample database is not installed (you will not see the ODBC DSN), you need to install it before starting the tutorial:

1. Navigate to the Scribe program folder.
2. Double-click InternalDB.exe to open the Scribe Internal Database Maintenance Utility.
3. Click the **Sample Database** tab.

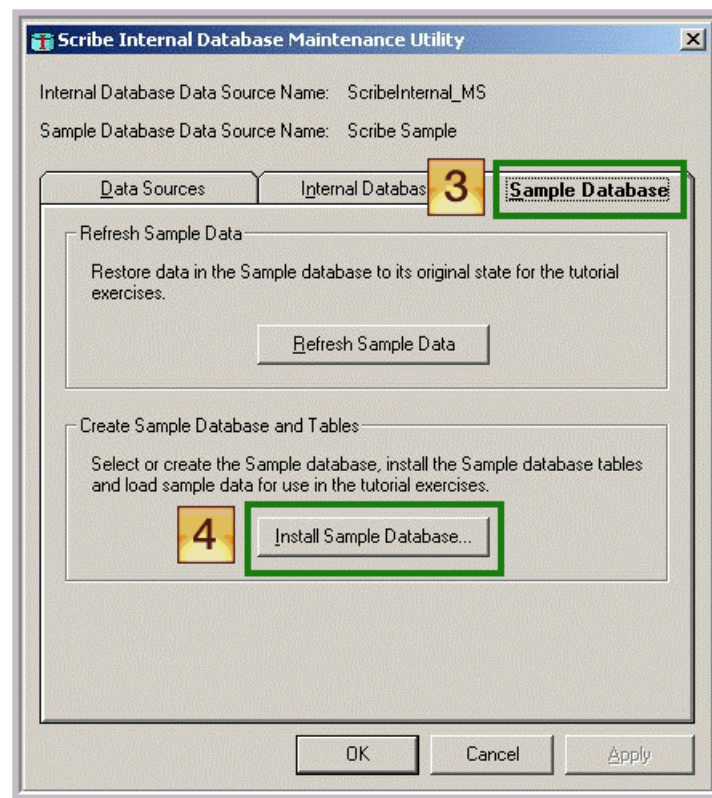


Figure 1. Scribe Internal Database Maintenance Utility

4. Click **Install Sample Database**, and follow the prompts to create the database.

- 
- ✦ If you previously ran the tutorial and put data into the sample database, click **Refresh Sample Data** to delete that data and restore the sample database to its original, empty state.
- 

### Other Prerequisites

After you install Scribe Insight and make sure the sample database is available, there are still a couple of tasks you need to do before beginning [Tutorial 3: Creating an Integration in Scribe Console](#) on page 36:

- Make sure your Console is configured correctly, following the directions in the *Scribe Insight Installation Guide*. When configuring the security settings (on the File Management tab of the Security pane under Administration), ensure that SCRIBEDEMO has, at a minimum, access to the following folders in the Scribe directory:
  - \Collaborations
  - \Samples
  - \Templates
  - \Tracing
  - \Utilities

For example:

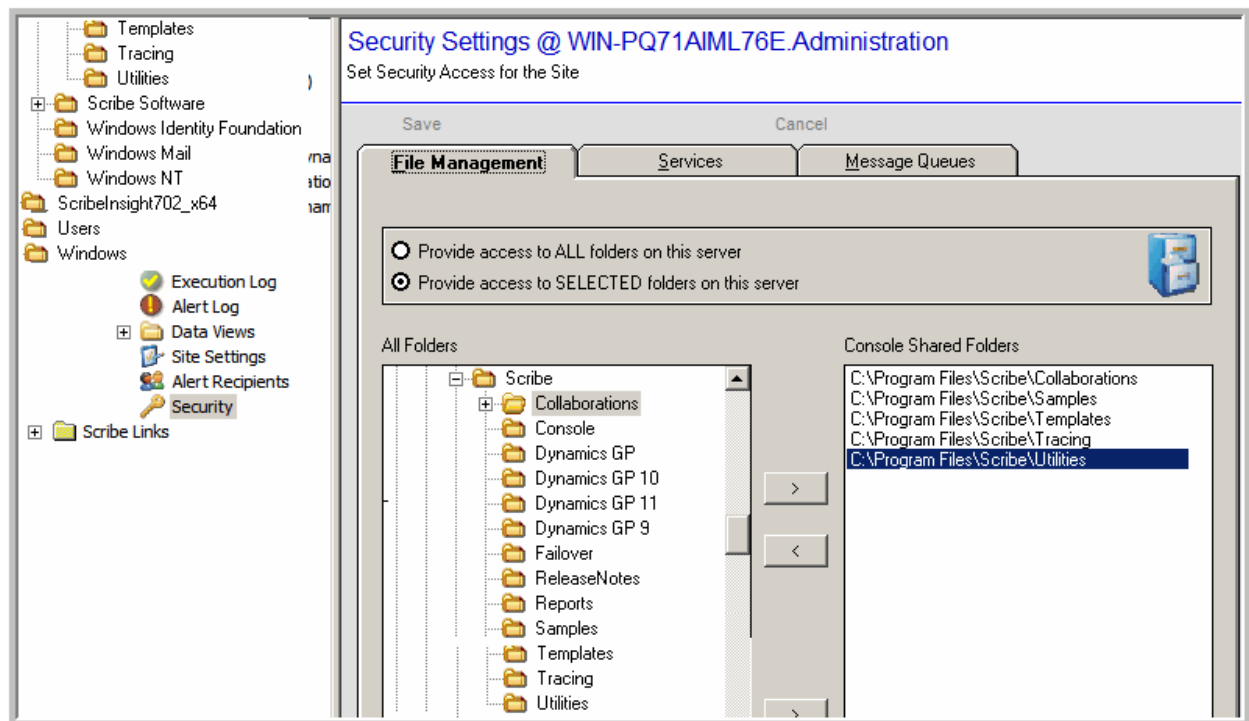


Figure 2. Console Security Settings

- For the Console tutorials (beginning with Tutorial 3), the Accounts.dts file must be available. DTS files are created in Scribe Workbench to store the information required to migrate or integrate data between source and target data stores.

- For Scribe Insight 6.5.2 or earlier releases, you need to create the Accounts.dts file, following the instructions in [Tutorial 1: Migrating Account Information](#) on page 7.
- For Scribe Insight 7.0 or later releases, you can either create the Accounts.dts file, as described above, or you can use the Accounts.dts file that is included with the Scribe installation. The default location for the Accounts.dts file is C:\Program Files\Scribe\Samples\Tutorials\Accounts.dts.

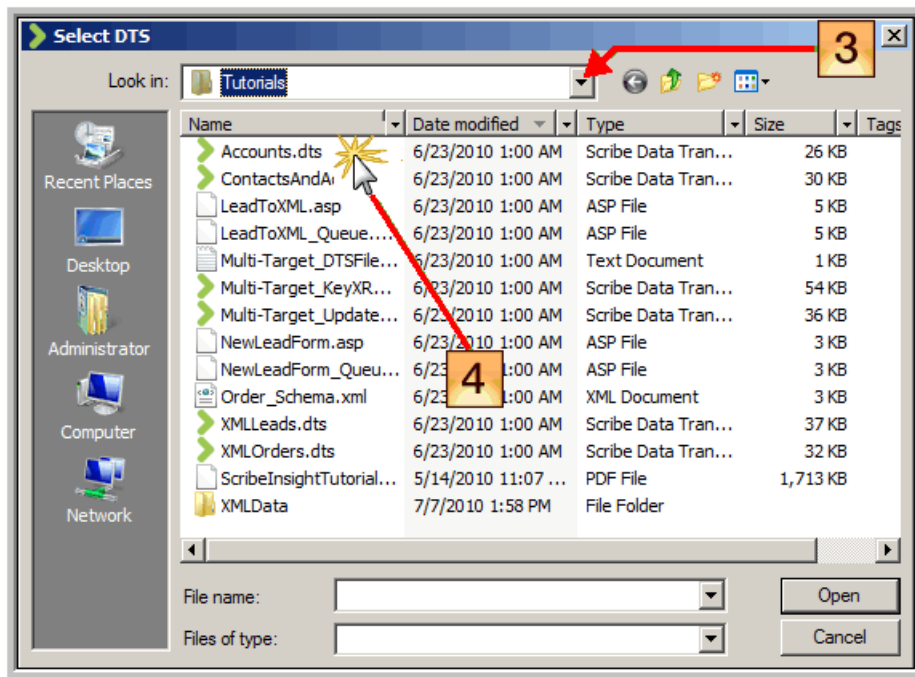
If you use the Accounts.dts file included with the installation, you will need to reconnect the Scribe Sample database.

- ✘ This step is only required if you use the Accounts.dts file included with the installation. You should not need to reconnect if you created your own Accounts.dts file as described in the Tutorial guide.

The features that require you to reconnect are new to Insight 7.0.

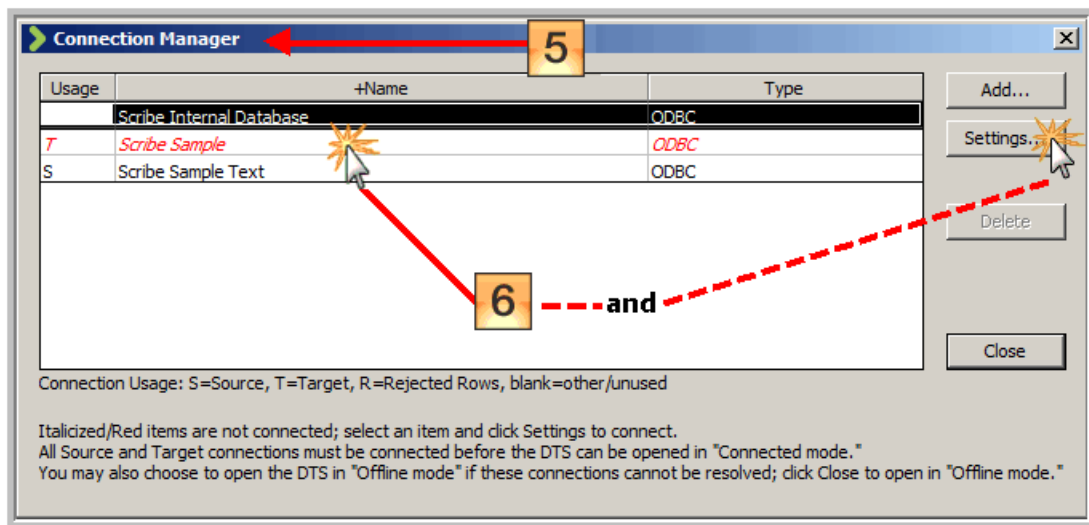
➤ **To reconnect to the Scribe Sample database:**

1. Open Scribe Workbench.
2. From the File menu, click **Open** to open the Select DTS dialog box.
3. Browse to Scribe>Samples>Tutorials>Accounts.dts:



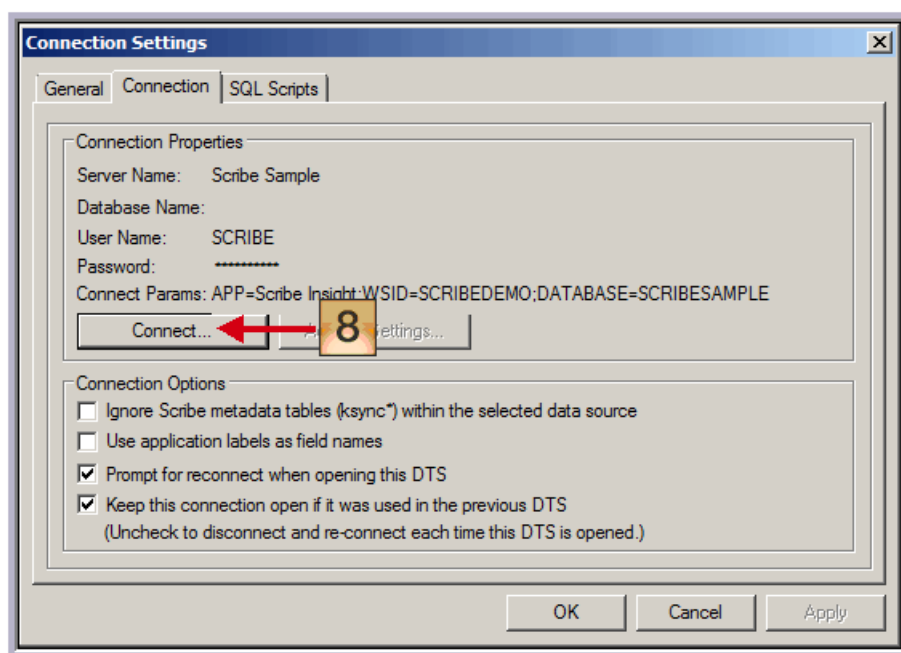
**Figure 3. Select DTS dialog box**

4. Double-click on Accounts.dts to open it.
5. The Connection Manager displays. Note that Scribe Sample displays in red italics, which indicates that it is currently disconnected:



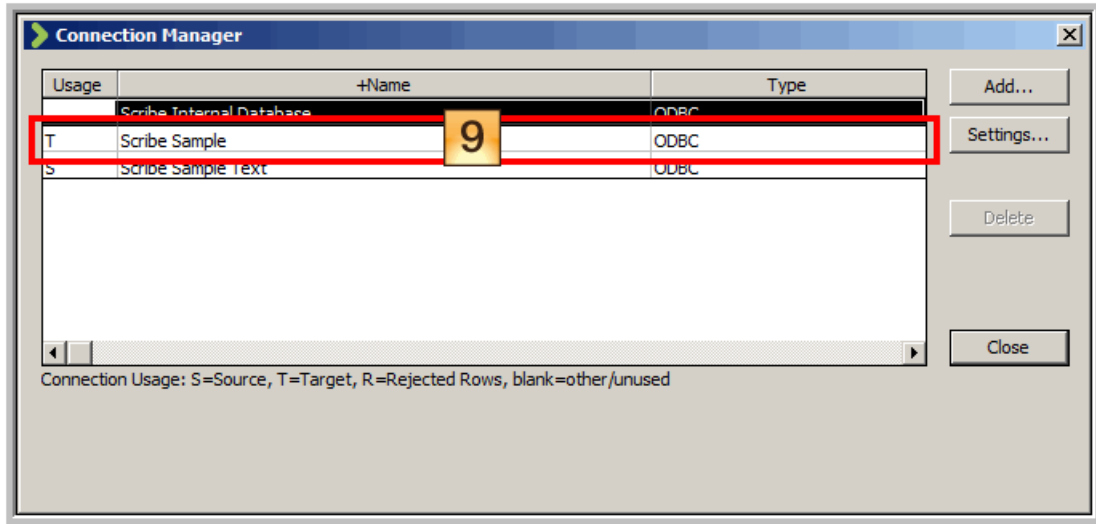
**Figure 4. Connection Manager with disconnected data store**

6. Select Scribe Sample from the Connection Manager and click **Settings**, which will open the Connection Settings window.
7. Click the **Connection** tab:



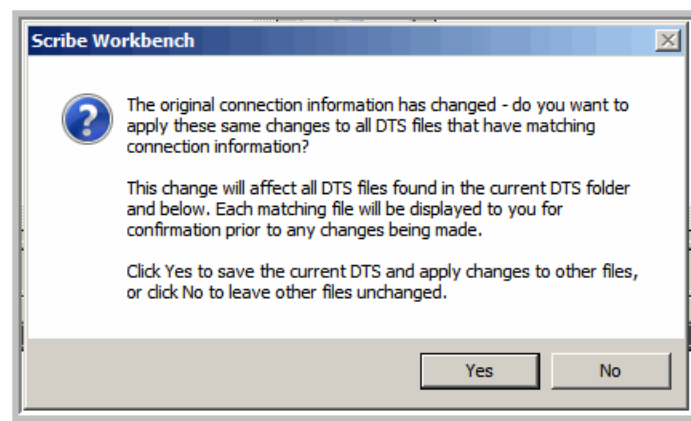
**Figure 5. Connection tab**

8. Click **Connect**, and in the Password text box of the SQL Server Login dialog box, enter the default Scribe password (integr8!), and click **OK**. Click **OK** again to close the Connection Settings dialog box.
9. Scribe Sample now displays in black, which indicates that you have successfully reconnected, and the Accounts.dts file is ready to use:



**Figure 6. Connection Manager with reconnected data store**

10. Close the Connection Manager and, if requested, click **Yes** to globally update the connection.



11. Accounts.dts now displays. From the File menu, save the changes to Accounts.dts and then exit out of Scribe Workbench.

## 2. Tutorial 1: Migrating Account Information

### *Objectives*

In this tutorial, you will:

- Connect to the source text file and target SQL Server database
- Map fields from the Leads table in the source to the Account table in the target
- Save your setup as a DTS file
- Run the DTS to see if the migration is working
- Review and fix any errors
- Run the DTS again to verify that your fix worked

To get started with this tutorial, open the Start menu, select **Scribe** and then select **Scribe Workbench**.

The Scribe Workbench main window displays:

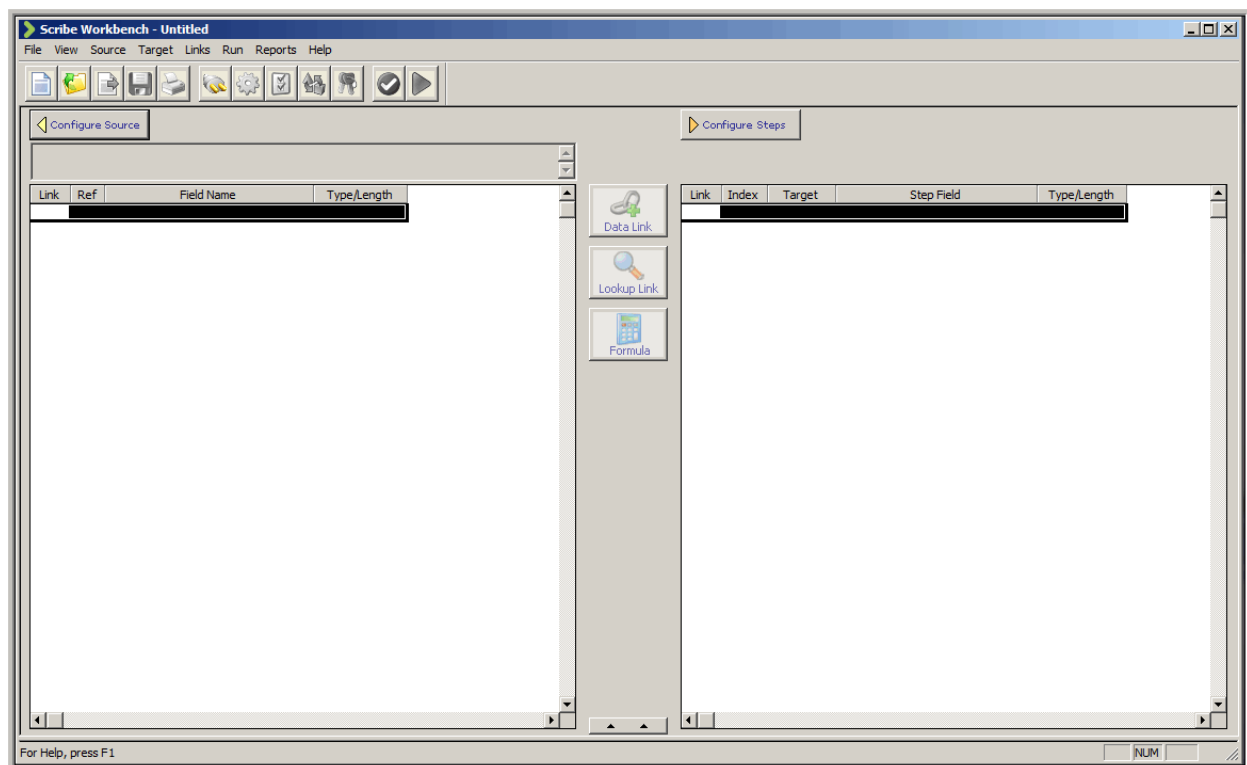


Figure 7. Scribe Workbench main window


## One: Create your connections

The first step in creating a DTS file, is to specify your connection. For any data integration or migration, you need a source, which contains the data you want to move, and one or more targets. If you decide later that you need more connections, you can add them at any time.

For this tutorial, you'll create two connections, one for the source and one for the target. You will configure the connections after you create them.

- ✘ The Connection Manager is new to Insight 7. If you used a previous version of Insight, you will find that the steps involved in starting a DTS file have changed.

### ► To select your connections for this tutorial:

1. In the Scribe Workbench main window, click the **Connections** button () or select **Connections** from the View menu. The Connection Manager dialog box displays:
2. Click on **Add** to open the **Add a Connection** dialog box.

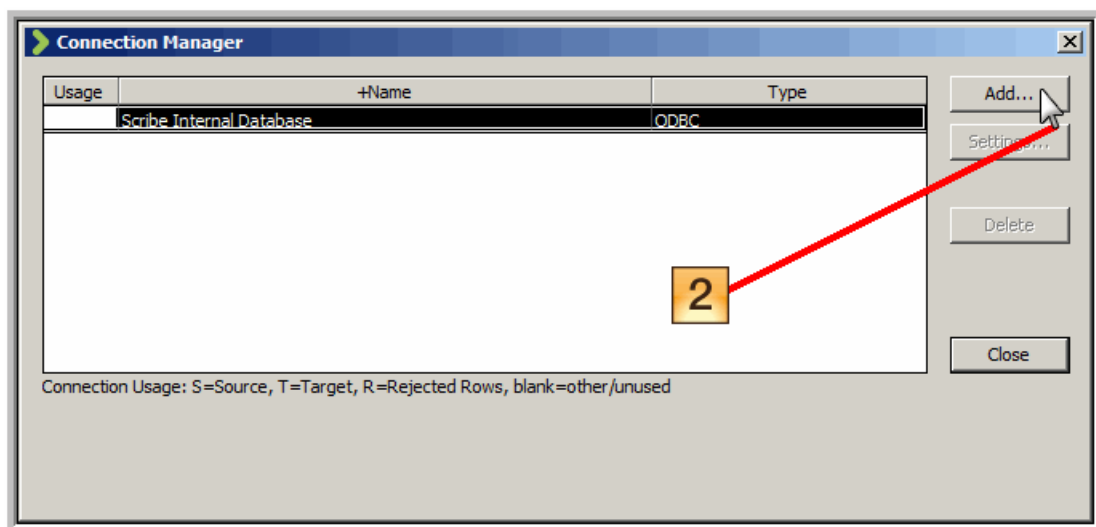


Figure 8. Connection Manager dialog box

3. Click on **ODBC Data Sources** to expand the tree, and select **Scribe Sample Text**. This is the connection you will use for the source in the DTS file:

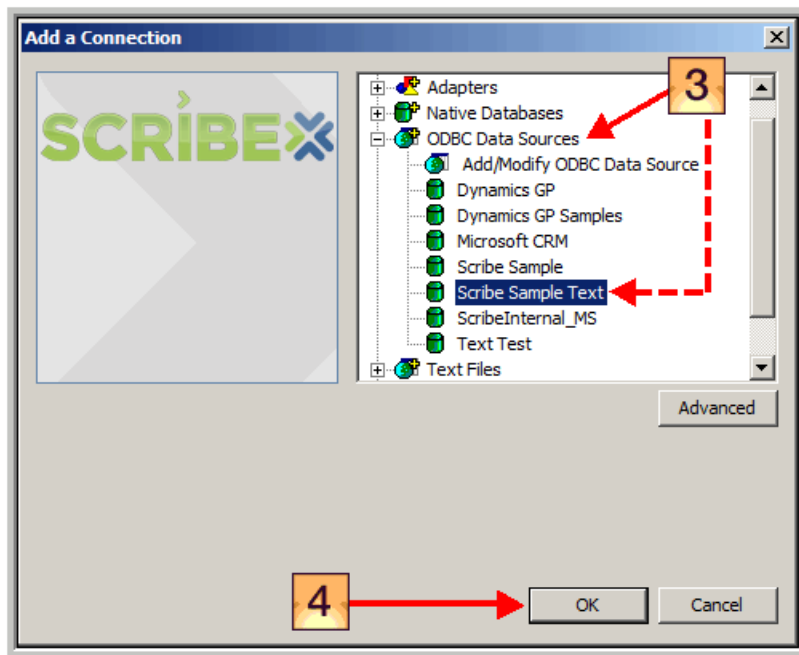


Figure 9. Add a Connection dialog box

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✘ The list of data sources included in this tree depends on your specific environment. For example, in your working environment, you might have only a few ODBC data sources displayed.

---

4. Click **OK**. The Connection Settings dialog box displays with the Connection name filled in on the General tab.
5. Click **OK** to save the connection and close the dialog box.

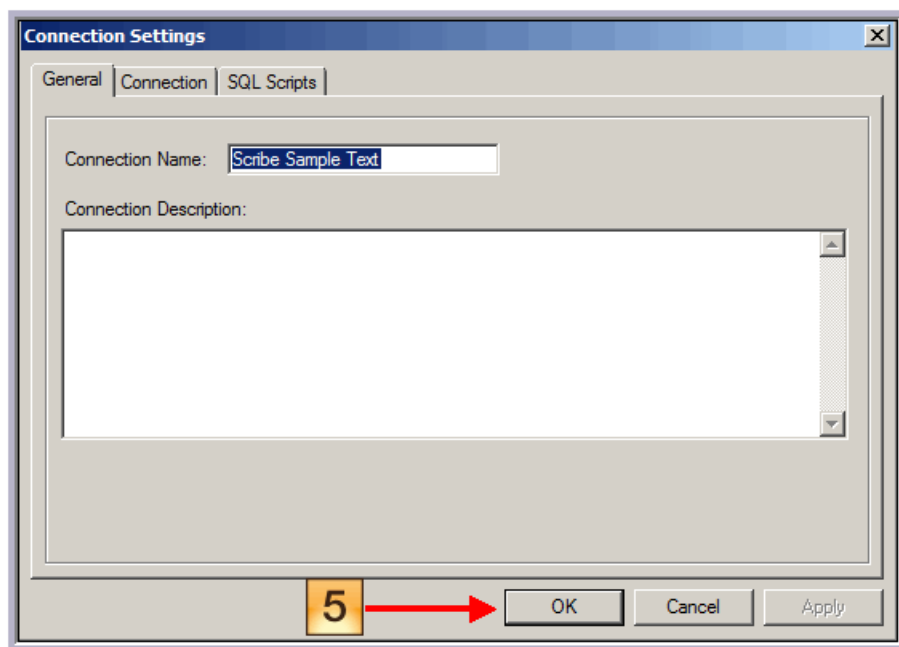


Figure 10. Connection Settings property sheet

- From the Connection Manager, click **Add** again. Select ODBC Data Sources again and then select **Scribe Sample**. This will be the target connection in your DTS file.

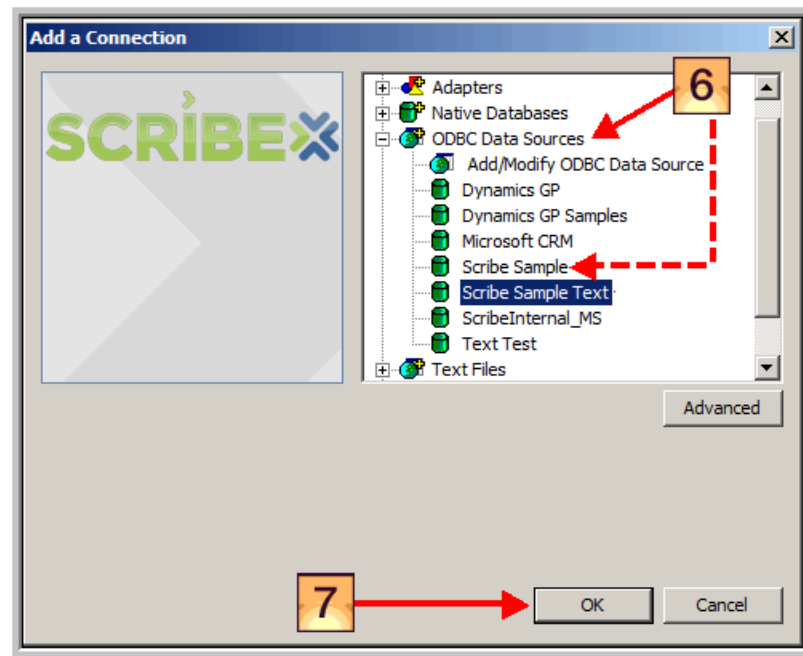


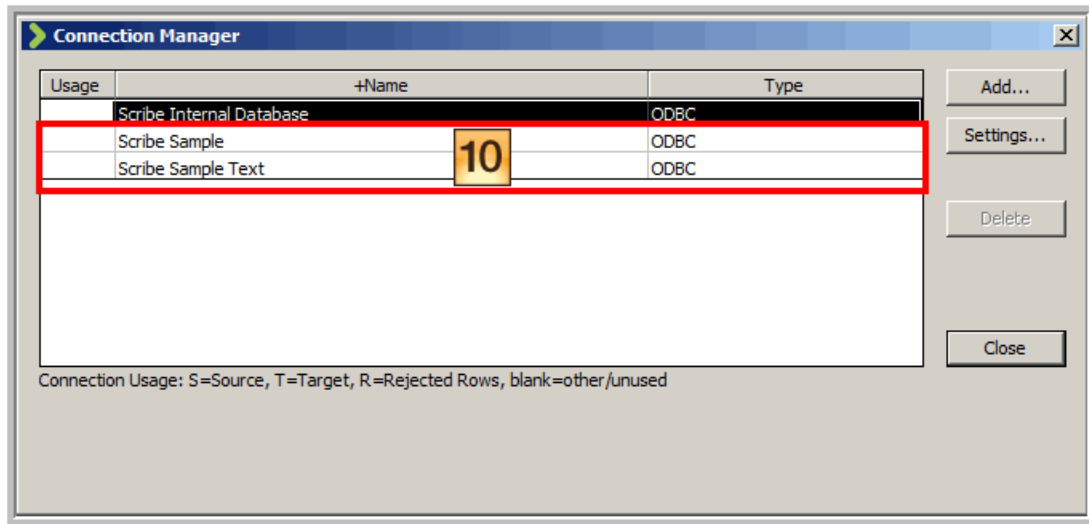
Figure 11. Add a Connection dialog box

- Click **OK**. If the SQL Server login dialog box displays.



Figure 12. Login to the SQL Database

- Enter the logon ID **SCRIBE** and password **integr8!**.
- Click **OK**. The Connection Settings dialog box displays. Again, you can click **OK** to close the Connection Settings dialog box.
- The Connection Manager displays with the Scribe Sample and Scribe Sample Text connections:



**Figure 13. Connection Manager dialog box**

11. Click **Close** to close the Connection Manager.

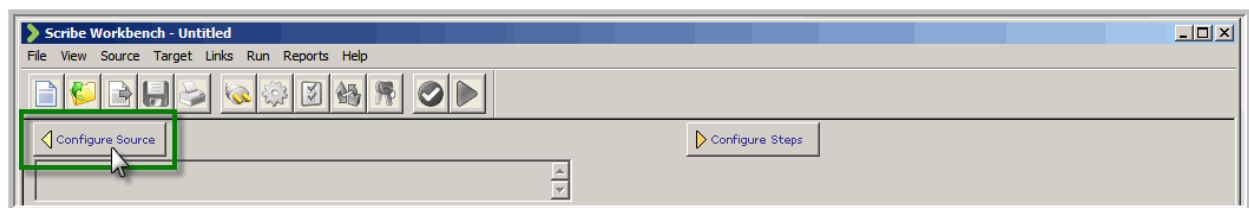
### *Two: Configure the source*

The next step is to configure your source connection. In this tutorial, you will select Scribe Sample Text as the source and select a single table. The source is defined as a data set; that is, a group of rows and columns. The data set can be any of the following:

- A single table
- Multiple tables joined via a SQL query
- A single text file
- The result of a SQL query
- Results returned from a stored procedure
- An adapter object or related adapter objects

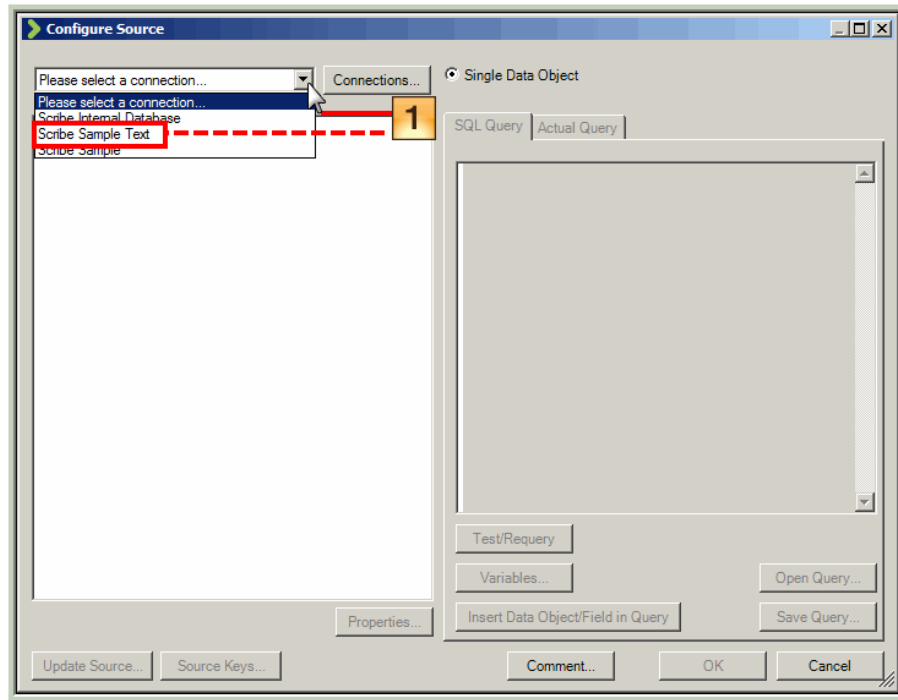
#### ➤ **To configure the source:**

1. From the Scribe Workbench main window, click **Configure Source** to display the Configure Source dialog box.



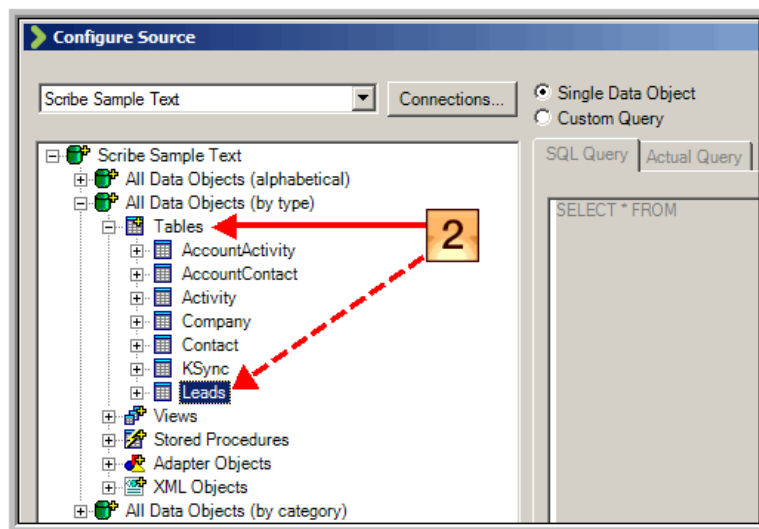
**Figure 14. Selecting Configure Source**

2. Click on the **Connections** drop-down and select **Scribe Sample Text**.



**Figure 15. Configure Source dialog box**

3. In the Configure Source Data Objects Explorer, expand **Tables**, then select **Leads**.



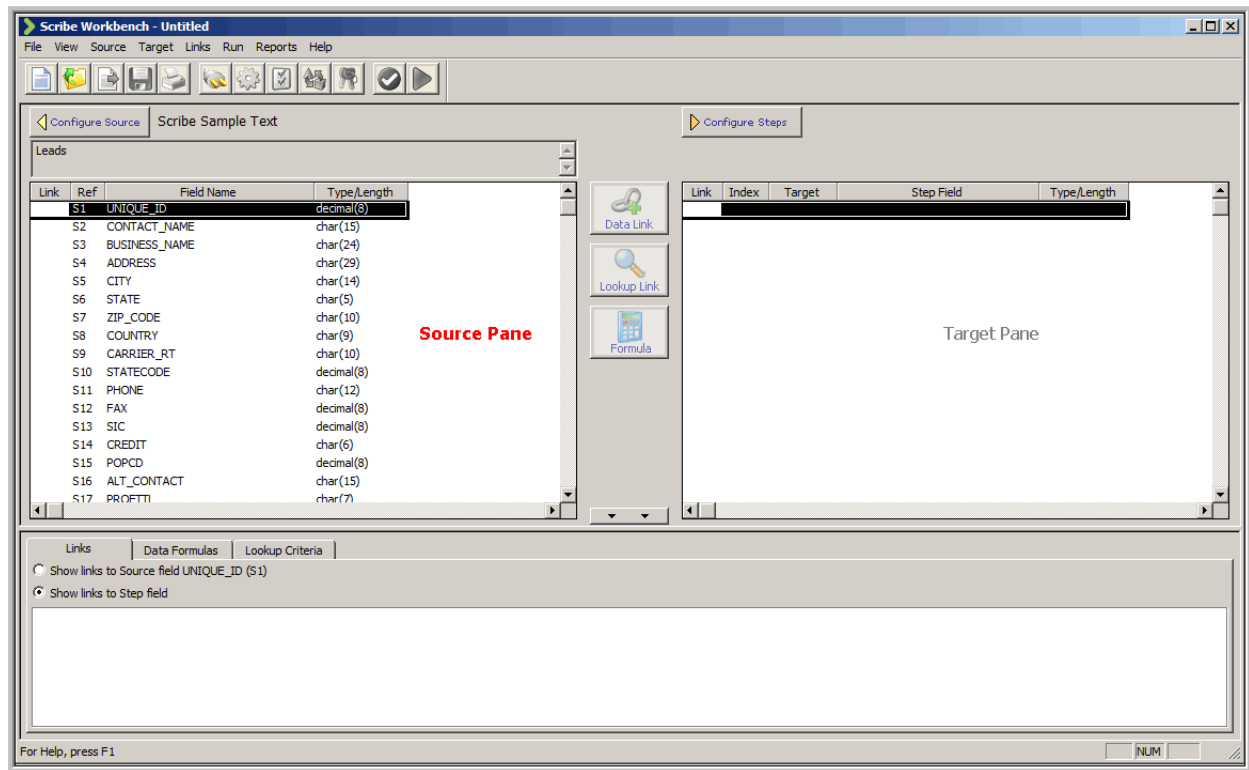
**Figure 16. Selecting the Source Table**

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✘ Note that once you click **Tables**, the Custom Query button displays in this dialog box. For this tutorial you will use a single table as the source data object. However, a powerful feature of the Scribe Workbench is the variety of sources that can be configured. Sources can include the results of any valid SQL query statement, which you can create if you select the Custom Query button.

---

4. Click **OK**. The list of source data fields displays in the source pane.



**Figure 17. Scribe Workbench Displaying Leads Fields in Source Pane**

- ✘ Each field has an associated reference number (the REF field). You'll use this reference number later when you work with functions and formulas.

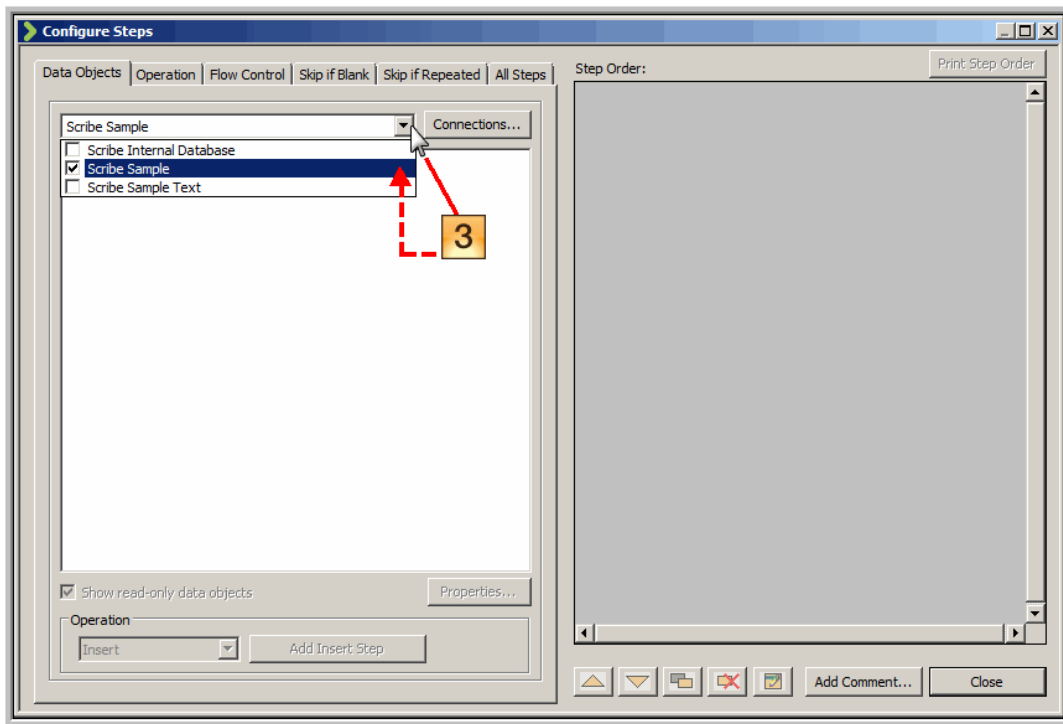
### *Three: Configure the target steps*

Next, you need to configure the target, that is, the location to which you integrate the data. You can select one or more targets. In this tutorial, you will select one target.

In addition, as you will see in the next tutorial, each target can have multiple steps.

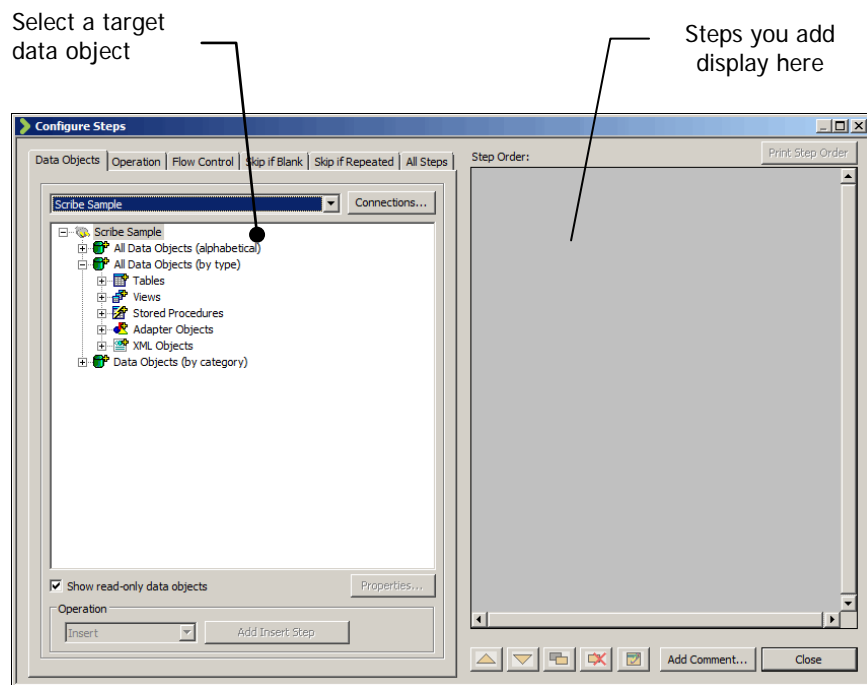
#### ➤ **To configure the target steps:**

1. From the Workbench main window, click **Configure Steps** to display the Configure Steps dialog box
2. The Configure Steps dialog box displays:



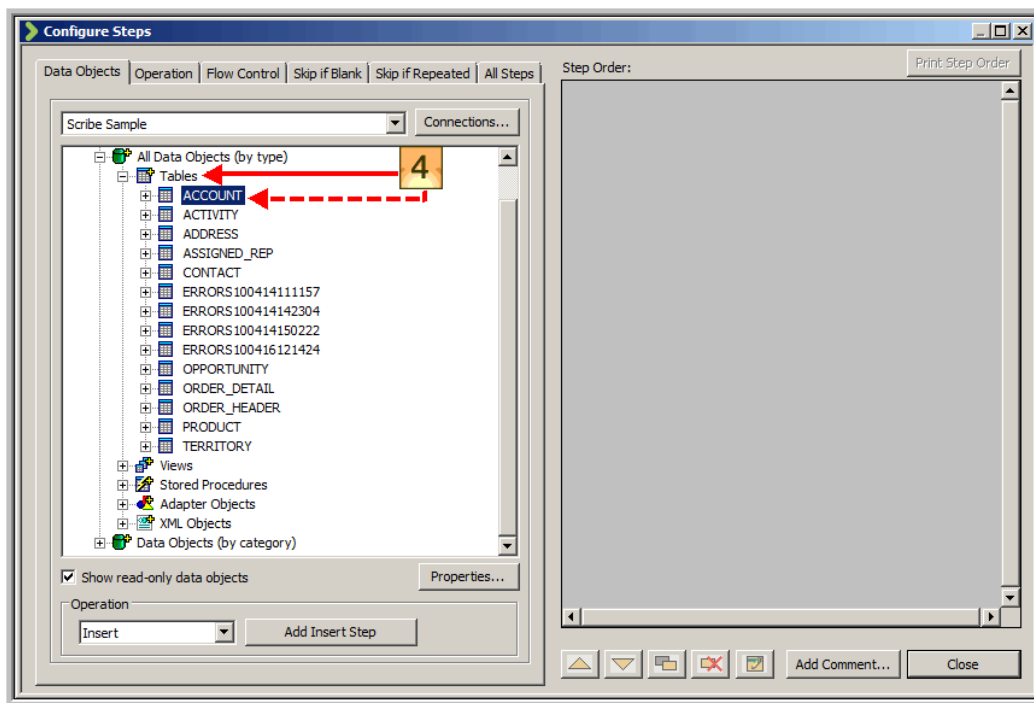
**Figure 18. Configure Steps dialog box – Selecting a connection**

3. Click the **Connections** drop-down and check **Scribe Sample**. This is the target connection we'll use for this tutorial. Press **Enter** to close the Connections drop-down and begin configuring the target steps.



**Figure 19. Configuring Steps dialog box – Configuring steps**

- Use Configure Steps to define the steps to include in the integration. A step is an operation that is performed on a target data object. Steps are performed once for each source row.
  - To define each step, first select a target data object and then define the operation to perform on it. For this tutorial, we'll select the Accounts table to integrate the leads data from the source to the Accounts table in the target SQL database.
  - As you add steps, each step is listed in order in the Step Order pane on the right side of the Configure Steps dialog box. When you run the job, Scribe Workbench performs the steps in the order they appear here.
  - Steps can be performed on tables, views, stored procedures, XML objects and adapter objects. The default step operation is "Insert" (that is, insert the source record in the target). You can select a different operation from the Operation drop-down list.
4. On the Data Objects tab of the Configure Steps dialog box, expand **Tables** and then select the **ACCOUNT** table.

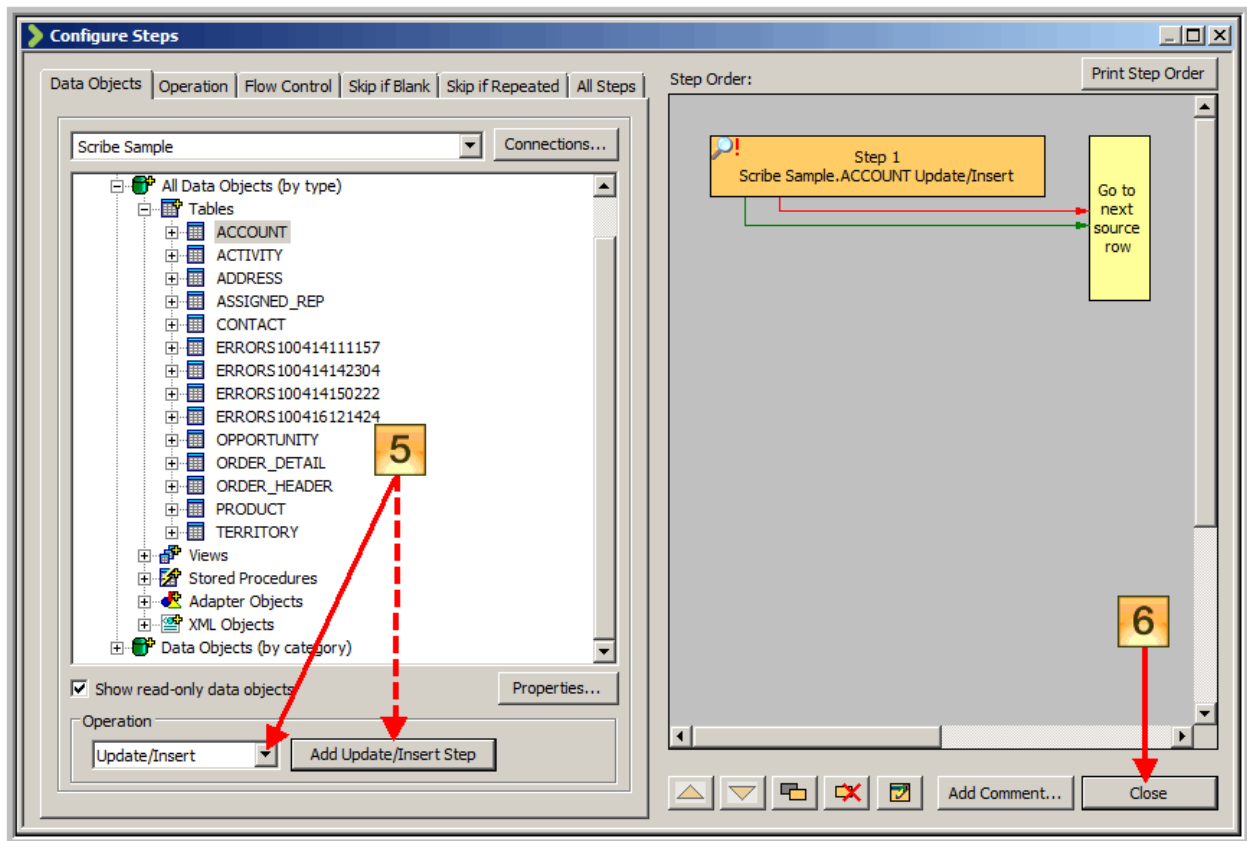


**Figure 20. Selecting a Table from the SQL Database**

5. From the bottom of the pane, select Update/Insert from the Operation drop-down list at the bottom of the pane, and click **Add Update/Insert Step**.



Make sure you select Update/Insert, and not Insert/Update. The difference between the two is explained in the *Insight User Guide*.



**Figure 21. First step displayed in Configure Steps dialog box**

6. Click **Close** to close the Configure Steps dialog box. The main window displays again, in which you can view the fields from the ACCOUNT table of the Scribe Sample database in the target pane:

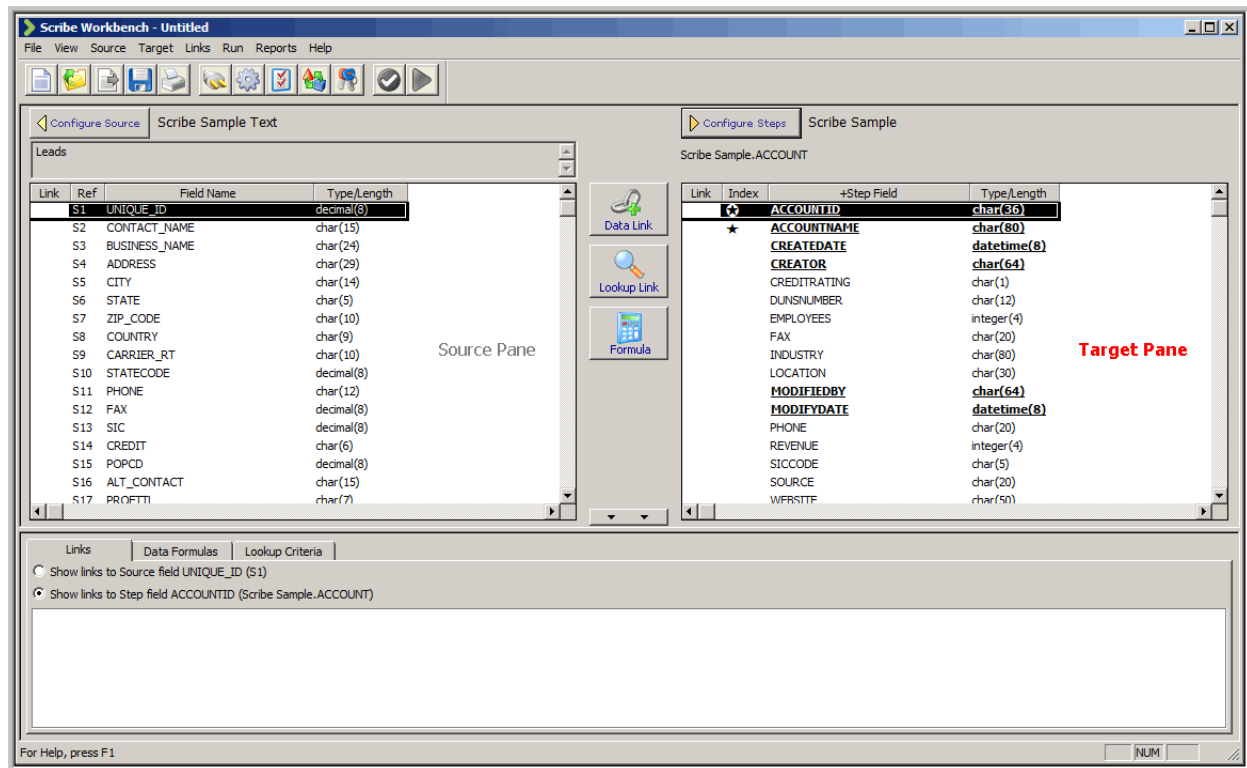



Figure 22. Main Window containing field Link information from source and target

#### Four: Create data links between source and target fields

At this point, you need to create data links to map the source fields to the target fields. Data links allow you to set values on target fields. One or more source fields can be linked to one or more fields in the target. For example, you might want to link a CONTACT\_NAME field that contains a full name in the source to both ContactFirstName and ContactLastName in the target.

##### ► To create Data Links:

1. In the source field list, select the field UNIQUE\_ID (Source Reference number S1).
2. In the target field list, select the field XREF.

3. Click the **Data Link** button () located between the two panes or select **Add Data Link** from the Links menu.

4. Create the following additional Data Links:

- PHONE to PHONE
- BUSINESS\_NAME to ACCOUNTNAME

5. Open the Data Formulas tab at the bottom of the Workbench main window to see the data formulas you have created so far.

#### Five: Add a function

Next, to ensure that the Account ID is always unique, we'll add the GUID function to the ACCOUNTID field in the target. In our tutorial example, the ACCOUNTID is a required field in

the target and we need to ensure that it is set to a unique number whenever we insert a new record. Insight indicates that the field is required because the field name is denoted in bold and underlined in the target pane. The GUID() function generates a unique number.

---

✘ If you are connecting to a Scribe adapter, the adapter will automatically generate unique IDs.

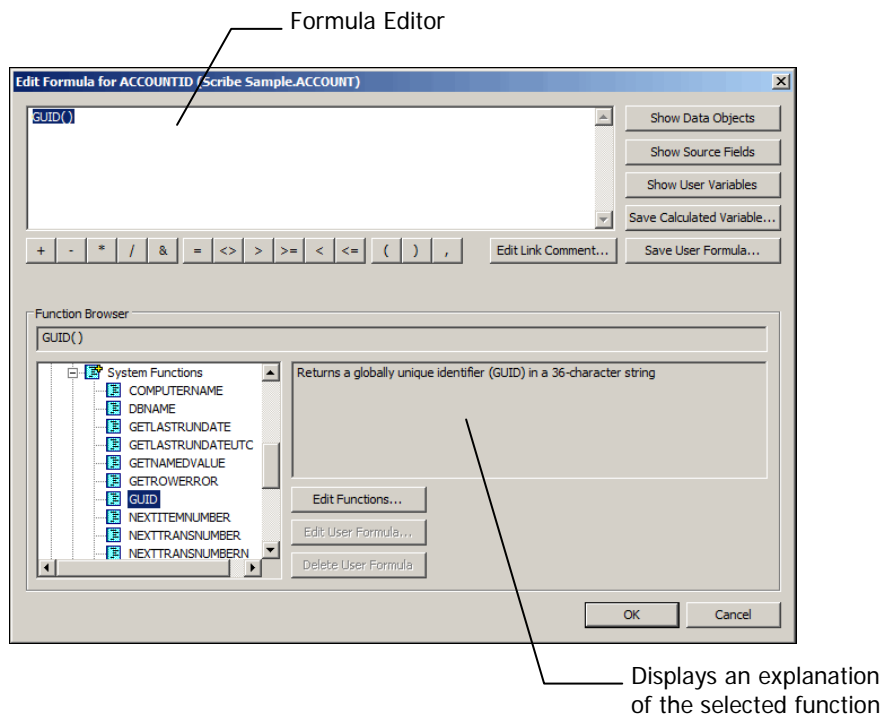
---

➤ **To add a function:**

1. In the Target pane on the right side of the Workbench, select **ACCOUNTID**.

2. Click the **Formula** button (  ).

3. The Edit Formula window displays.




**Figure 23. Edit Formula dialog box**

4. In the Function Browser, expand Functions by Category, then System Functions, and then double-click on **GUID** in the functions list. The GUID function is added to the Formula Editor.

5. Click **OK** to close the Edit Formula window. The GUID() formula now displays in the Formula column of ACCOUNTID row of the Data Formulas tab.

---

✘ If the Links tab does not display, click the splitter button (  ) to display the Links, Data Formulas, and Lookup Criteria tabs.

---

- ✘ The Function Browser contains over 180 functions that you can use to create formulas. Both simple and complex formulas (such as formulas that combine multiple functions and logical IF statements) are. If you create your own formula, you can save it under a user-defined name to use in future DTS files. Once you save a formula, it is included in the Function Browser under the category User Defined Formulas.

Since we are working with an Update/Insert step, we want to ensure that the ACCOUNT ID is assigned only when a new account is inserted. By default, an Update overwrites (that is, updates) data every time you run a job. In this case, using an Update/Insert step, we want a new ACCOUNTID to be generated only when a new account is inserted. When an existing account is updated, we want the ACCOUNTID field to remain unchanged.

6. Change the overwrite status of the ACCOUNTID field:
  - a. From the Data Formulas tab, notice the Overwrite field.
  - b. Move your mouse to the asterisk (\*) in the row of the Data Formulas pane where Step field = ACCOUNTID.
  - c. Double-click on the asterisk to turn off the overwrite feature. If an insert is done, the data link is used; if an update is done, the data link will not be used. We turn overwrite off because we do not want the GUID function to generate a new value for ACCOUNTID if it updates a target record.

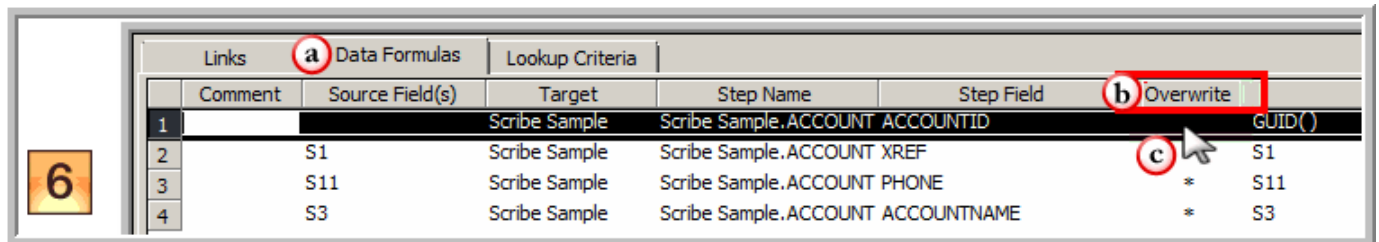


Figure 24. Overwrite indicator

- ✘ In general, you want to turn off Overwrite from any field you are using as a lookup link whenever you are performing an Update/Insert or an Insert/Update step.
- ✘ For Insight 7 and later, the name of the target connection is included in the step name. This provides more information in multi-target DTS files.


### Six: Create a lookup link

Lookup links allow you to define the match criteria when using seek, update, or delete steps. In this example, we will create a lookup link between the UNIQUE\_ID field in the source and the XREF field in the target. This link will be used by the update/insert step we just created to locate the account to be updated.

Because there is a data link between UNIQUE\_ID and XREF, you will be inserting the UNIQUE\_ID from the source into the XREF field in the target. If you run the DTS file more than once, you can use the value inserted into XREF as a way to match source records to target

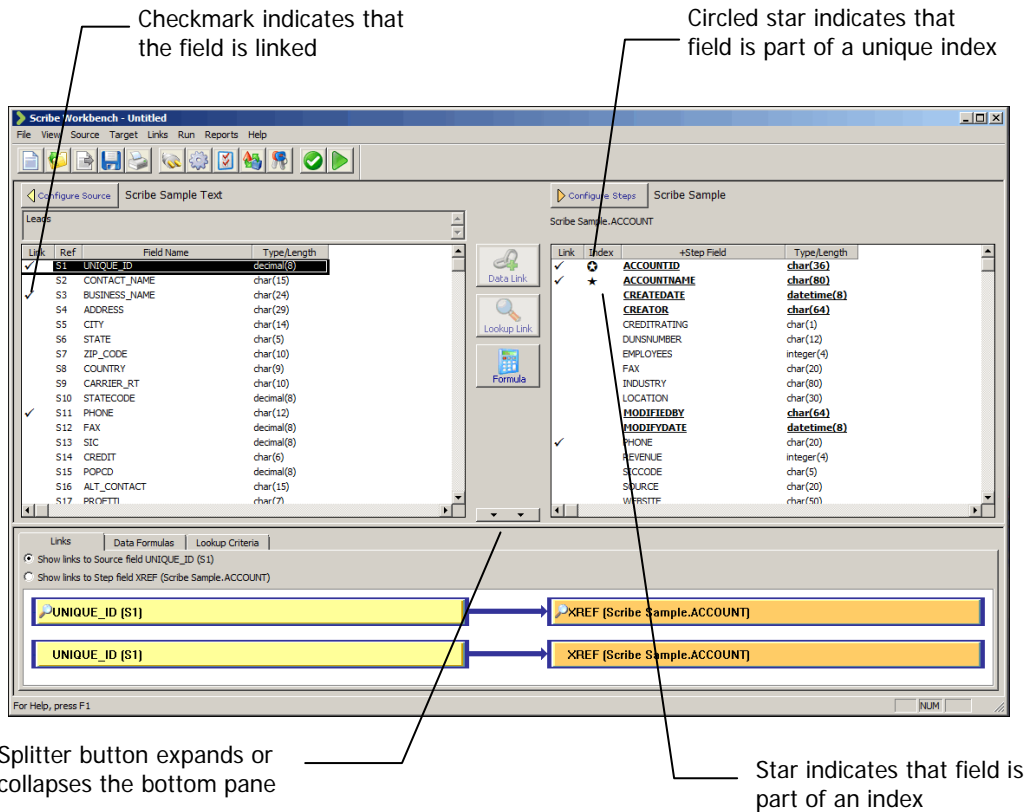
records, thus allowing you to know which target records to update. The lookup link between these same two fields does the matching for you.

► **To create a lookup link:**

1. Create a Lookup Link. This lookup link will help find matching records in the target for the update part of the update/insert step:
  - a. In the source pane, select UNIQUE\_ID again.
  - b. In the target pane, select the field XREF.
  - c. Click the Lookup Link button (  ).

2. When you are done, select **UNIQUE\_ID** from the source field list, and **Show links to source field** from the **Links** tab at the bottom of the Workbench main window.

Checkmarks are displayed in both the target field and the selected source field to indicate that the two database fields are linked. As soon as you create a link, a graphical display of the link displays automatically in the Links tab.



**Figure 25. Linked source and target fields**

## Seven: Test the data

In this step, use the Test window to preview of the results of your job, row by row, without actually writing any rows to the target connection. You can also browse the source data and verify links and formula results.

### ► To test your data:

1. On the Scribe Workbench toolbar, click **Test Job** (🟢), or select **Test** from the Run menu, to display the Test window.

The left side of the window shows the source field names (a) and values (b). In the right side of the window, you can view the Data Links (c), Lookup Links (d), and Step Results (e) for each record.

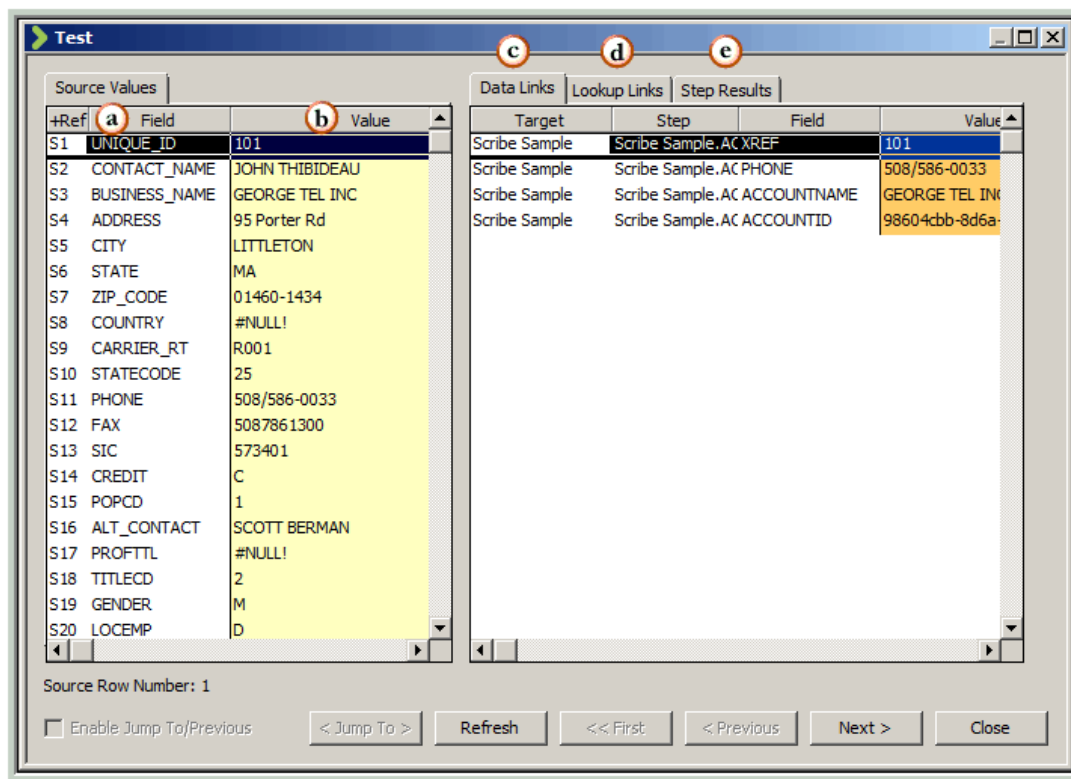


Figure 26. Test window

2. Click **Next** to scroll through each of the source rows.
3. When you view the records in the Test window, notice that the business names are all uppercase. While that may be fine for your source data, it's unattractive when, for example, printing addresses and is easily changed.
4. Click **Close** to close the Test window.

Before you actually run the job, let's change the business names to mixed case.

### ► To change a field property:

1. In the Workbench main window, open the Data Formulas tab.
2. In the Data Formulas tab, double-click on the **ACCOUNTNAME** row to open the Data Formulas window.

- In the Function Browser, expand the Text functions within Functions by Category, and then double-click the **PROPER** function from the TEXT category.
- Click **OK** to close the Edit Formulas window, then make sure that PROPER(S3) appears in the Formula column next to ACCOUNTNAME.

Links	Data Formulas	Lookup Criteria					
Comment	Source Field(s)	Target	Step Name	Step Field	Overwrite	+Formula	
1		Scribe Sample	Scribe Sample.ACCOUNT	ACCOUNTID		GUID()	4
2	S3	Scribe Sample	Scribe Sample.ACCOUNT	ACCOUNTNAME	*	PROPER(S3)	
3	S1	Scribe Sample	Scribe Sample.ACCOUNT	XREF	*	S1	
4	S11	Scribe Sample	Scribe Sample.ACCOUNT	PHONE	*	S11	

**Figure 27. Data Formulas pane, ready to run**

- Save the DTS as Accounts.dts. If Accounts.dts already exists in the ..\Scribe\Samples\Tutorials\ directory, you can replace it.
- If you test the job again, you will notice that the company names are in mixed upper and lower case.

### *Eight: Run the job*

Now, try running the job..

#### ➤ To run your job:

- Click the **Run** icon, or select **Run Job** from the Run menu. When the Run Complete window displays, you should notice that you have 15 successful inserts, but one failed insert.

Operations	Successful	Failed	Skipped
Inserts:	1	0	0
Updates:	15	0	0
Deletes:	0	0	0
Seeks:	0	0	0
Procedures:	0	0	0
<b>Total:</b>	<b>16</b>	<b>0</b>	<b>0</b>

Successful Row      Failed Row

**Figure 28. Run Complete window**

- To figure out why one row failed, click **Transaction Errors** in the Run Complete window to open the Transaction Errors report.
- In this case, you do not need to do any sorting or filtering. Click **View Report** from the Transaction Errors Report Setup window.

- Note that the failure is caused by a blank account name.

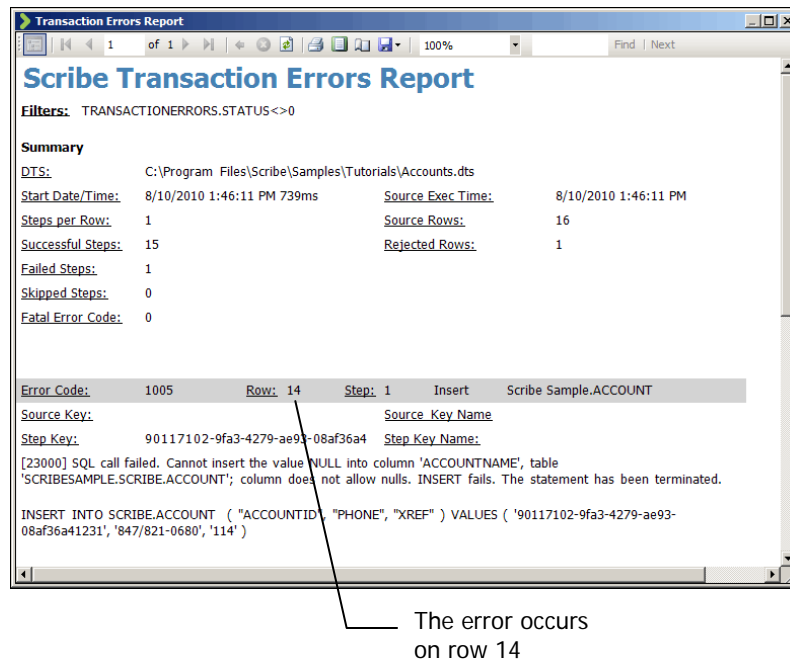


Figure 29. Transaction Errors Report

- Close the report and then close the Run Complete window.

### Nine: Find Your errors

We know, from looking at the Transaction Errors report, that the error is on row 14. Run Test again to see the exact record in which the error occurs.

#### ► To see the errors:

- Click the **Test Job** button.
- When the Test window displays, click **Next** until source row 14 displays.
- When you examine the record, you'll notice that the value of ACCOUNTNAME is #NULL!.

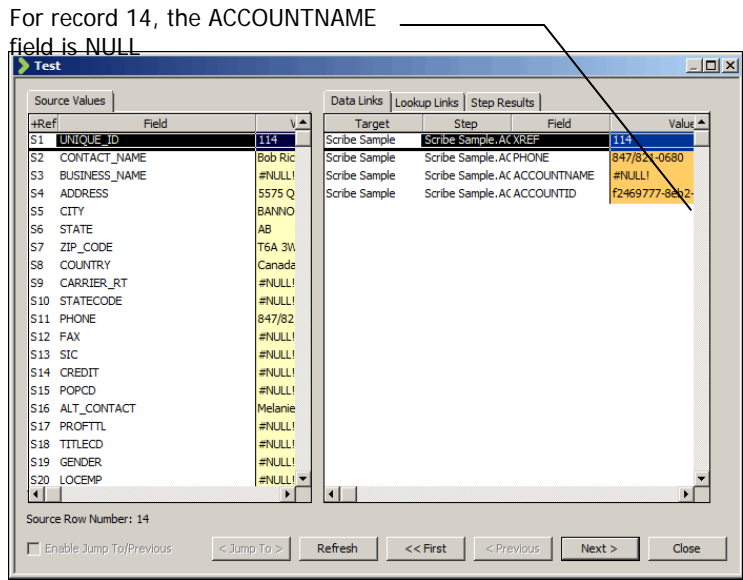


Figure 30. Test window showing ACCOUNTNAME error

4. Close the Test window.

### Ten: Correct the DTS

In running the job, we discovered that the job cannot insert a null value into the account name. One solution is to add error checking and handling to the ACCOUNTNAME field. This is easily done through the Edit Formula window.

#### ➤ To correct a formula:

1. From the Data Formulas pane, select ACCOUNTNAME and open the Edit Formula window.
2. In the Edit Formula pane, enter the following formula (note that PROPER(S3) is already displayed in the text box):

```
IF( ISERROR( S3 ) , "Unknown"&S1 , PROPER( S3 ) )
```

This formula checks the BUSINESS\_NAME (Ref S3) field of each row. If the field is null, it changes the null to "Unknown" plus the UNIQUE\_ID from the source before inserting it into ACCOUNTNAME. This way, we know the account name was not provided in the source data and we can relate it back to the source data with the UNIQUE\_ID.

Links	Data Formulas	Lookup Criteria				
Comment	Source Field(s)	Target	Step Name	Step Field	Overwrite	+Formula
1		Scribe Sample	Scribe Sample.ACCOUNT	ACCOUNTID		GUID( )
2	S3,S1,S3	Scribe Sample	Scribe Sample.ACCOUNT	ACCOUNTNAME	*	IF(ISERROR(S3), "Unknown"&S1, PROPER( S3 ))
3	S1	Scribe Sample	Scribe Sample.ACCOUNT	XREF	*	S1
4	S11	Scribe Sample	Scribe Sample.ACCOUNT	PHONE	*	S11

Figure 31. Data Formulas pane – corrected formula

3. Save the DTS file.

### *Eleven: Test the DTS*

Use the Test Window again to verify your mappings and to see if your formulas and functions are returning the expected values. For example, make sure that the target ACCOUNTNAME is correct (that is, for record 14, the value in ACCOUNTAME field is Unknown114).

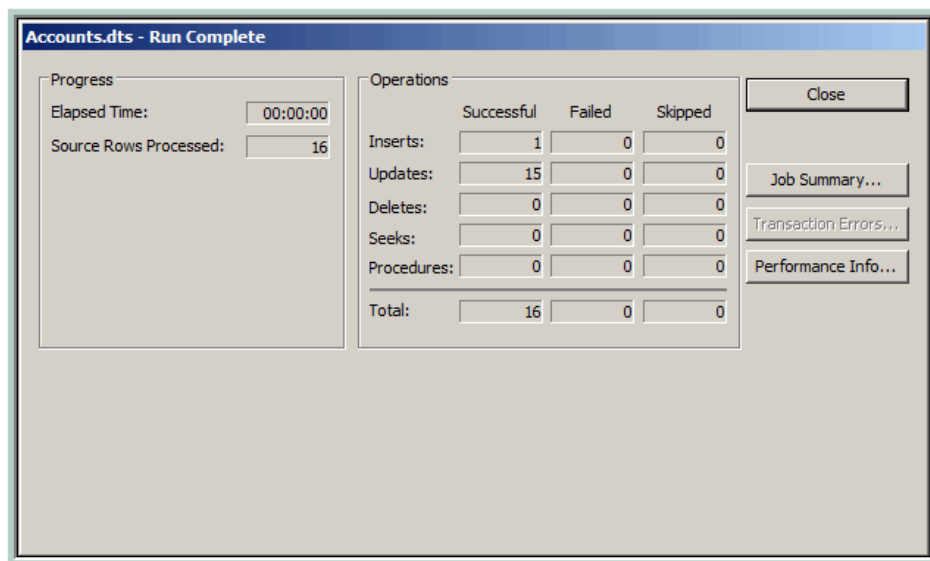
### *Twelve: Re-run the job*

Now that you changed the DTS file to check for and fix null business names, run the job again.

#### ► To re-run the job:

1. Click the **Run** button.

This time, the Run Complete window should show that you have 1 insert (the corrected row, for which the ACCOUNTNAME will read Unknown114), and 15 updates. Because of the lookup link between UNIQUE\_ID and XREF, the other 15 rows are updated rather than inserted again.



**Figure 32. Run Complete dialog box**

2. To close the Run Complete window, click **Close**.

This completes the first tutorial. You can proceed to the second tutorial in the following section to learn more about the Scribe Workbench.

---

✘ Tutorial 2 assumes that Tutorial 1 has correctly populated the Scribe Sample database. Without this data, Tutorial 2 will not run correctly.

---

## 3. Tutorial 2: Creating a DTS File with Multiple Steps

This tutorial requires that you have completed Tutorial 1. If you skipped Tutorial 1, you may be unfamiliar with some of the concepts discussed here. In addition, the DTS file created here is dependent on data that was integrated at the end of Tutorial 1.

### *Overview of this tutorial*

The concepts introduced in this tutorial include:

- Creating a multiple-step job
- Using the update operation and lookup links
- Using the SKIPSTEP function

To get started with this tutorial, we want to create a new DTS. If the DTS file from the first tutorial is still open, save it and on the **File** menu, click **New**.

### *One: Add connections*

As in the first Tutorial, your first step is to add connections for the source and target.

#### ➤ **To add the connections for this tutorial:**

1. From the Connection Manager, click **Add**.
2. As with the first tutorial, add **Scribe Sample Text** and **Scribe Sample** from the ODBC Data Sources.



For Scribe Sample, remember that the login ID is **SCRIBE** and the password is **integr8!**

3. Click **Close** to close the Connection Manager.

### *Two: Configure the source*

#### ➤ **To configure the source**

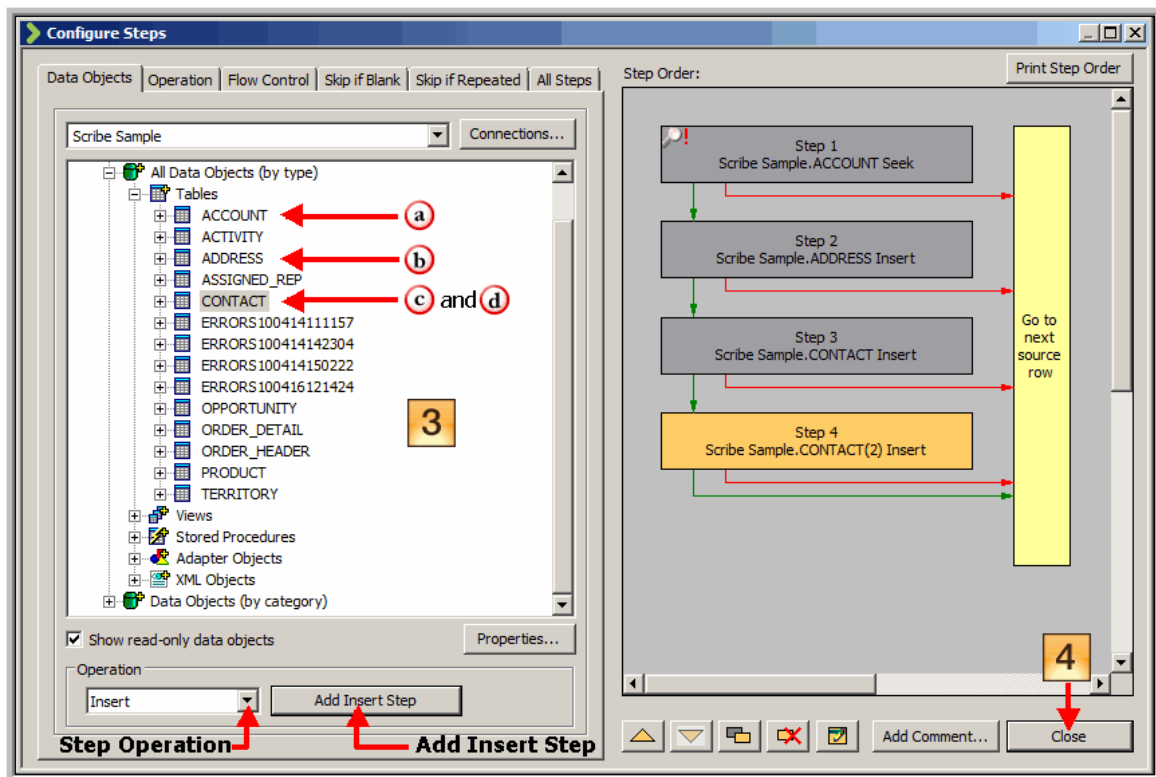
1. Click **Configure Source** and then selected Scribe Sample Text as the source connection.
2. In the Configure Source dialog box's database tree, expand **Tables** then select **Leads**.
3. Click **OK** to close the Configure Source dialog box.

### *Three: Configure the target*

#### ➤ **To configure the target:**

1. Click **Configure Steps**.
2. Select Scribe Sample as the target connection.
3. Add the following steps:
  - a. Select the ACCOUNT table and add a Seek step.

- ✘ A Seek step uses lookup links to find rows in the target connection.
- b. Select the ADDRESS table and add an Insert step.
  - c. Select the CONTACT table and add an Insert step
  - d. Select CONTACT again and add another Insert step.
- 
- ✘ The source data has a contact and alternate contact. We want two CONTACT insert steps so our DTS file will create a contact record in the target for the contact, and for the alternate contact when one exists.



**Figure 33. Configuring multiple target steps**

4. Click **Close** to close the Configure Steps window.

#### *Four: Add a pre-operation step flow control formula*

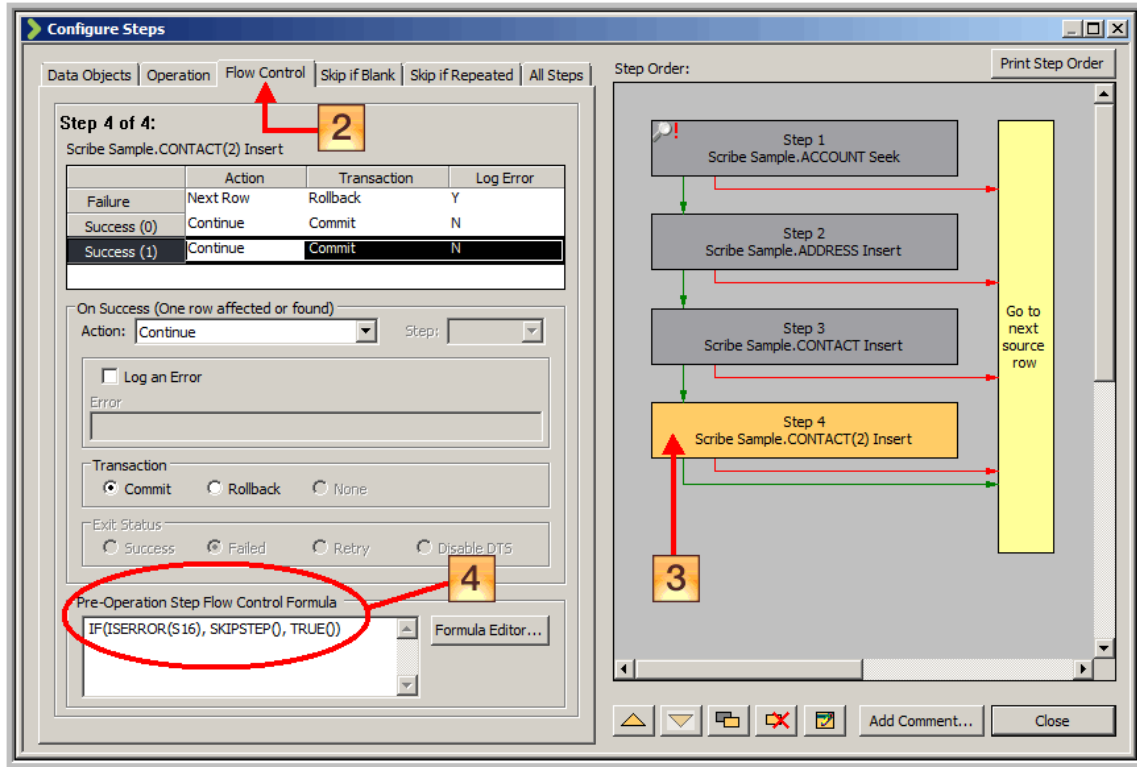
If you look at the fields in the Source pane, you will notice that there is both a CONTACT\_NAME field (Ref number S2) and an ALT\_CONTACT field (Ref number S16). Sometimes the ALT\_CONTACT field is null. If there is a row for which the ALT\_CONTACT field is null, we want to skip the CONTACT Insert step that is associated with ALT\_CONTACT. For this, we'll add a pre-operation step flow control formula on the second CONTACT step.

#### ➤ **To add a step flow control formula:**

1. On the Target menu, click **Configure Steps**.
2. On the left side of the dialog box, the Configure Steps window should open to the Flow Control tab. If it does not, select the Flow Control tab.
3. In the Step Order pane, select **Step 4, Scribe Sample.CONTACT(2) Insert**.

- In the Pre-Operation Step Flow Control Formula text box, enter the following formula:  
`IF(ISERROR(S16), SKIPSTEP(), TRUE())`

This formula checks to see if there is a null in field S16 (that is, ALT\_CONTACT). If ALT\_CONTACT is null, the SKIPSTEP function causes the step to be skipped. If ALT\_CONTACT is not null, the step is executed and the value in ALT\_CONTACT is inserted into the target.



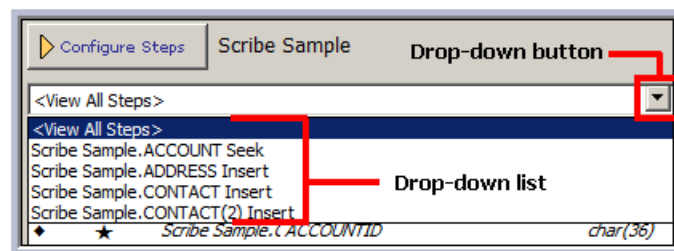
**Figure 34. Adding a pre-operation step flow control formula**

- Click **Close** to close the Configure Steps window.

### *Five: Create a lookup link*

The next step is to create a lookup link. The lookup link on the ACCOUNT Seek step allows you to find a matching account in the target before inserting new contacts.

You will notice that the Configure Steps pane in the main Workbench window has a drop-down list that allows you to select the step that you want to configure:



**Figure 35. Selecting the step to configure**

- 
- ✘ For DTS files with multiple targets, an additional drop-down allows you to select a single target to view.
  - ✘ For Insight 7 and later, the name of the target connection is included in the step name.
- 

The first link we want to create is a lookup link on the ACCOUNT Seek step.

➤ **To create a lookup link:**

1. From the Configure Steps drop-down list, select **Scribe Sample.ACCOUNT Seek**.
2. Create a lookup link between UNIQUE\_ID in the source and XREF in the target. Because a Seek step does not insert data, notice that you cannot create a data link.

### *Six: Create data links and formulas*

Now, create the data links, along with formulas to process the data before it is inserted.

➤ **To create the needed data links and formulas:**

1. From the Configure Steps drop-down list, select **Scribe Sample.ADDRESS Insert**.
2. Create the following data links:
  - a. ADDRESS (in the source) to ADDRESSLINE1 (in the target)
  - b. CITY to CITY
  - c. STATE to STATE
  - d. ZIP\_CODE to ZIP
  - e. COUNTRY to COUNTRYCODE
3. From the Data Formulas tab, add the following formulas:
  - a. To ensure that the address is for this company is unique, add the GUID() system function to ADDRESSID.

- 
- ✘ Because you have not created a data link to a source field for the ADDRESSID target field, to add a formula, select ADDRESSID in the target pane and click the **Formula** button between the source and target panes.
- 

- b. To format the address and city names to be in mixed case, add the PROPER function to ADDRESSLINE1 and CITY
- c. And finally, let's make sure that we have the correct country code. To the COUNTRYCODE field, add the following formula:

```
IF( ISERROR(S8), "US", DBLOOKUP(S8, "Scribe Internal Database", "COUNTRY", "COUNTRYNAME", "COUNTRYCODE" ) )
```

This formula performs a database lookup if the country code is null. If it is null, the country code is set to the default value of "US".

- 
- ✘ For Insight 6.5.2 and earlier, replace "Scribe Internal Database" with "I". Beginning with Insight 7.0, Scribe allows you to name the database for lookup tables.
- 

If the country code is not NULL, the DBLOOKUP function takes the value from S8, and uses the connection to the SCRIBEINTERNAL database to perform a database

lookup. For this function, we use a table stored in the "Scribe Internal Database". The DBLOOKUP function does a select from the COUNTRY table where the COUNTRYNAME field is equal to the value in S8. DBLOOKUP then returns the value from the COUNTRYCODE field in the matching row.

In SQL , the formula would be similar to:

```
SELECT COUNTRYCODE FROM COUNTRY WHERE COUNTRYNAME =
(value from S8)
```

4. Next, select **CONTACT Insert** from the Configure Steps drop-down list and create the following data links:
  - a. CONTACT\_NAME to CONTACTNAME
  - b. CONTACT\_NAME to FIRSTNAME
  - c. CONTACT\_NAME to LASTNAME
5. As with the Address ID, we want to ensure that the CONTACTID is unique. In addition, the CONTACT\_NAME (source ref number S2) field in the source needs to be split into two fields; the FIRSTNAME and LASTNAME. However, just to make sure we have the name right, we'll insert the whole contact name too. To make these changes to your data:
  - a. Create a formula to add the GUID() function to CONTACTID.
  - b. Add the PROPER() function to CONTACTNAME.
  - c. For the FIRSTNAME and LASTNAME fields, you want to parse contact name, and change the case to mixed case. For FIRSTNAME, add the following formula:
 

```
PROPER ( PARSENAME ( S2 , " F " ) )
```
  - d. Do the same for LASTNAME, but enter an "L" rather than an "F":
 

```
PROPER ( PARSENAME ( S2 , " L " ) )
```
6. Finally, select **CONTACT(2) Insert** from the Configure Steps drop-down list and configure the data links for the **CONTACT(2)** step similar to how you configured the data links for the CONTACT step. For CONTACT(2), be sure to use the source field ALT\_CONTACT, (S16), in your data links and formulas.
7. When you are done, set the Configure Steps drop-down list back to <View All Steps>. The Data Formula tab should be similar to the following.

Links	Data Formulas	Lookup Criteria				
Comment	Source Field(s)	Target	Step Name	Step Field	Overwrite	+Formula
1		Scribe Sample	Scribe Sample.ADDRESS	ADDRESSID	*	GUID()
2		Scribe Sample	Scribe Sample.CONTACT	CONTACTID	*	GUID()
3		Scribe Sample	Scribe Sample.CONTACT	CONTACTID	*	GUID()
4	S8,S8	Scribe Sample	Scribe Sample.ADDRESS	COUNTRYCODE	*	IF(ISERROR(S8), "US", DBLOOKUP(S8, "Scribe Internal Database", "COUNTRY", "COUN"))
5	S2	Scribe Sample	Scribe Sample.CONTACT	CONTACTNAME	*	PROPER(S2)
6	S4	Scribe Sample	Scribe Sample.ADDRESS	ADDRESSLINE1	*	PROPER(S4)
7	S5	Scribe Sample	Scribe Sample.ADDRESS	CITY	*	PROPER(S5)
8	S16	Scribe Sample	Scribe Sample.CONTACT	FIRSTNAME	*	PROPER(PARSENAME(S16, "F"))
9	S16	Scribe Sample	Scribe Sample.CONTACT	LASTNAME	*	PROPER(PARSENAME(S16, "L"))
10	S2	Scribe Sample	Scribe Sample.CONTACT	FIRSTNAME	*	PROPER(PARSENAME(S2, "F"))
11	S2	Scribe Sample	Scribe Sample.CONTACT	LASTNAME	*	PROPER(PARSENAME(S2, "L"))
12	S16	Scribe Sample	Scribe Sample.CONTACT	CONTACTNAME	*	S16
13	S7	Scribe Sample	Scribe Sample.ADDRESS	ZIP	*	S7

Figure 36. Completed target configuration

- ✦ In the Data Formulas tab, you can sort columns by double-clicking on the column header. In this example, the Formula Field has been sorted alphabetically. Alternatively, select **Sort** from the **View** menu; then select **Data Links** to display the sort options you can choose on this tab.

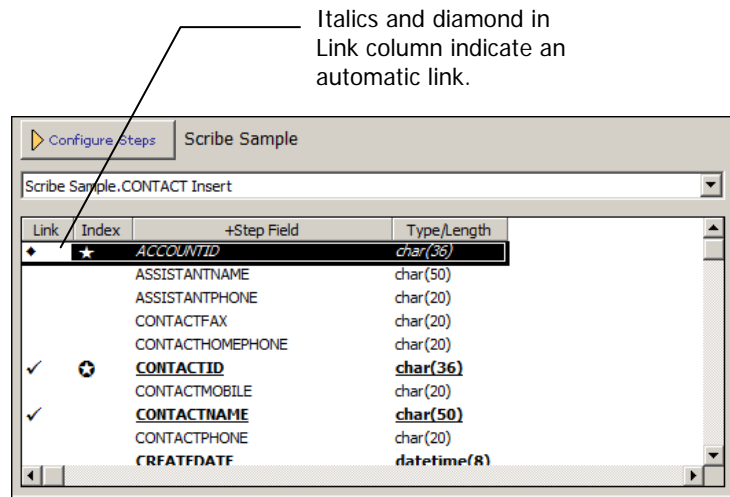
8. Save the DTS as ContactsandAddresses.dts. If this file already exists in the ..\Scribe\Samples\Tutorials\ directory, you can overwrite it.

### *Seven: Check the automatic foreign key assignment*

Insight automatically fills in values for fields when indicated by the relationships between tables or objects. In our example, since Insight has determined that the ACCOUNT table and the CONTACT table are related by the ACCOUNTID field, it automatically fills in the ACCOUNTID in the CONTACT table when a contact is inserted.

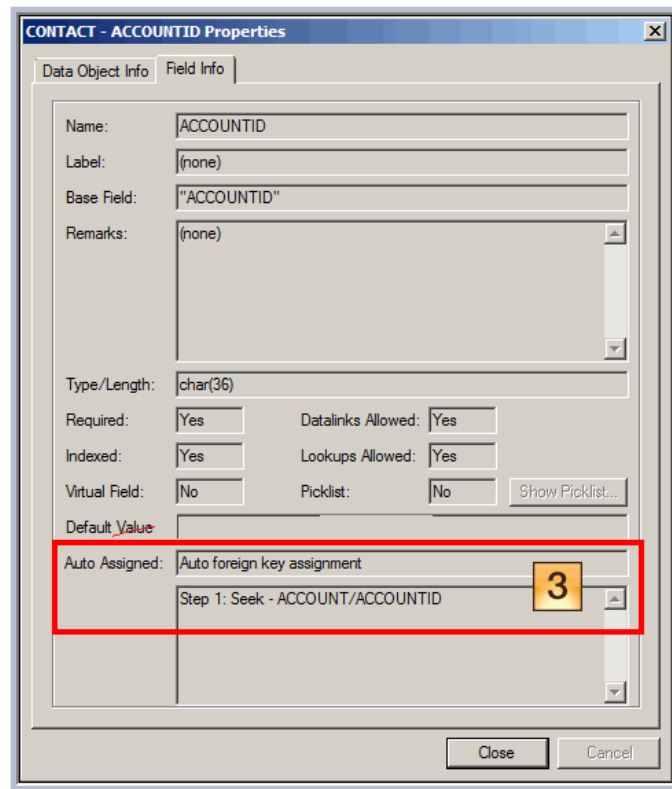
#### ➤ To see how the automatic foreign key assignment will work:

1. Select **CONTACT Insert** from the Configure Steps drop-down list.



**Figure 37. Automatic links**

2. Right-click on ACCOUNTID and select **Field Properties** from the shortcut menu to display the Properties window.



**Figure 38. ACCOUNTID Properties Window**

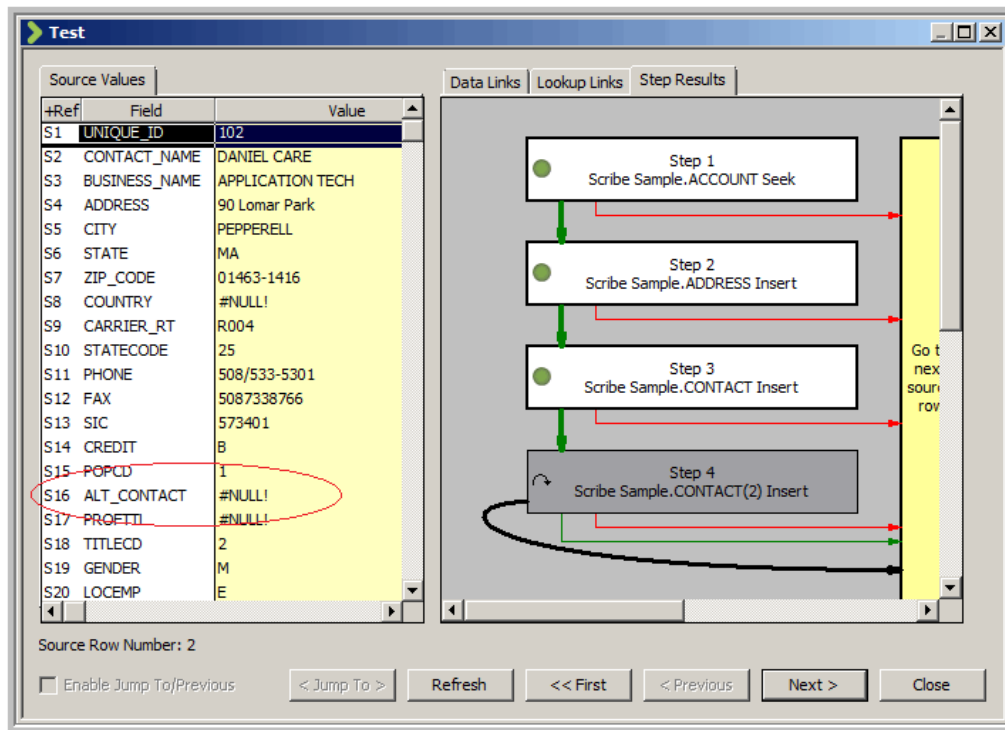
3. Note that there is an *Auto foreign key assignment* on where the value for the ACCOUNTID field in the CONTACT step will be inherited from Step 1, which is a Seek on ACCOUNT for this example. This is how Insight automatically fills in the foreign key to a parent table.
4. Close the ACCOUNTID Properties window.

### ***Eight: Test the job***

Now you can test your job.

#### **► To test the job:**

1. Click **Test Job**.
2. Go to record 2 and select the **Step Results** tab.



**Figure 39. Test –Step Results tab**

- Note that in the Source Value pane, the ALT\_CONTACT field is null. In the Step Results tab, Step 4 is grayed out and arrows indicate that this Insert step is skipped (but that steps 2 and 3 are inserted).
- Check the next record (record 3), which does have an alternate contact to see how the step results are different.

---

✘ In this tutorial, the **Jump To** and **Previous** buttons are unavailable. While these functions are supported by many Scribe adapters, they are not supported by the ODBC text driver.

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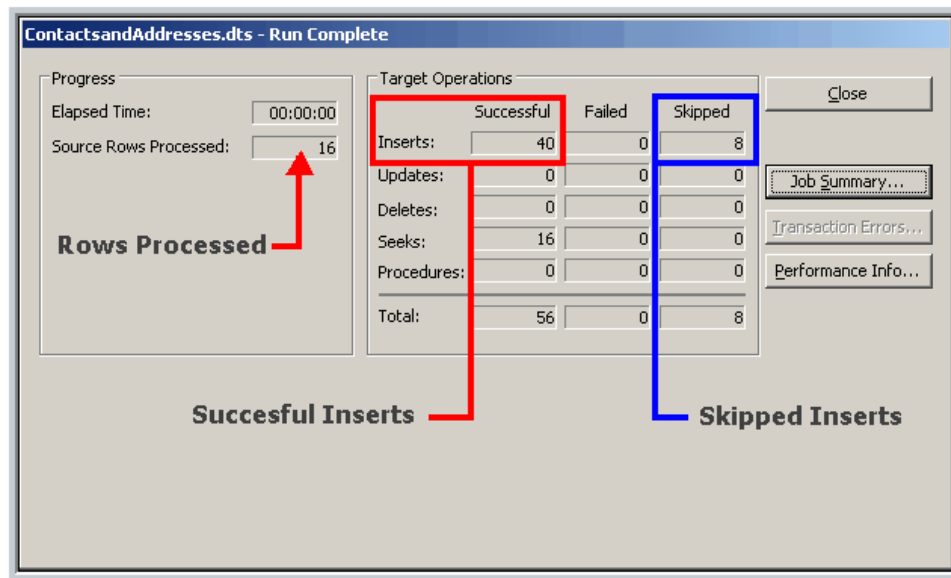
- If you check the Lookup Links tab, you will notice that this DTS uses a single lookup link that you created during the ACCOUNT Seek step.
- When you are done, close the Test window and save the DTS.

### *Nine: Run the Job*

Once you are satisfied that the data is correct, you can run the job.

#### ➤ **To run the job:**

- Click **Run Job** on the menu bar or select **Run Job** from the Run menu.
- When the job finishes, the Run Complete window displays:



**Figure 40. Run Complete Window**

- Note that the window shows that there were 16 rows processed, with 40 successful inserts and 8 skipped inserts.

✘ If your results show 16 successful, 16 failed, and 16 skipped records, then you probably did not run Tutorial 1 first (or you refreshed the database before starting this tutorial). Complete Tutorial 1 before you run Tutorial 2 to get the correct results.

- If you go back to the Test window and view all the source rows, you'll note that there are 8 records for which ALT\_CONTACT is null, which matches the number of skipped records.

### *Ten: Look at Your Data*

One way to check your data is to use Microsoft SQL Server Management Studio™.

- Open Microsoft SQL Server Management Studio.
- Open the SCRIBESAMPLE database and select and open the CONTACT table.
- In the CONTACT table, you will notice that there are 24 rows.

This is because there were 16 primary contacts and 8 alternate contacts. The CONTACT table only has a CONTACTNAME field, and does not differentiate between the types of contacts. Therefore, your design requires you to create a new record for each contact, whether it is primary or alternate.

- In addition, as discussed earlier, the ACCOUNTID field has also been inserted.
- And finally, remember that we assigned the GUID function to the CONTACTID for both the primary (CONTACT) and alternate (CONTACT 2) steps. Look at the records for John Thibideau and Scott Berman. You'll notice that the CONTACTIDs are different, but the ACCOUNTID is the same.

6. Going back to the Test window, you can see that John Thibideau is the primary contact for George Tel, Inc., and Scott Berman is the alternate. Therefore, the ACCOUNTID has correctly been assigned to both contacts.

### *What's next*

Congratulations! You've successfully completed the Workbench tutorials! At this point, you should be ready to apply what you learned to your own data integration scenario. Use the *Scribe Insight User Guide* and the *Scribe Insight Online Help* for reference as you create your own DTS files.

The tutorials you just completed have provided an introduction to Scribe Workbench. If you want to learn more about using Scribe Console, continue on to the next tutorials.

At any point, you can re-run either tutorial. However, before you do, you need to refresh the sample database to ensure you get the correct results.

To reset the sample database:

1. Navigate to the Scribe program folder.
2. Double-click on the **InternalDB.exe** file to open the Scribe Internal Database Maintenance Utility.
3. Click on the **Sample Database** tab.
4. Click **Refresh Sample Data** to reset the sample database for the tutorials.
5. Click **OK** on the Refresh Complete dialog box.
6. Click **OK** to close the window.

The sample database has been returned to its original state.

## 4. Tutorial 3: Creating an Integration in Scribe Console

### *Introduction*

The purpose of this tutorial is to show you how to use Scribe Console to create a simple integration. For this tutorial, let's say a tab-delimited text file is automatically delivered to the Scribe site every evening at 9 pm. This file contains customer account data which is used to update the existing account data in a SQL Server database.

Your job is to create an integration that will run every night at 10 pm. It will add new customer data, update changed information, and leave existing, unchanged data alone.

For the Console tutorials, the Accounts.dts file must be available. DTS (data translation specification) files are created in Scribe Workbench to store the translation settings for migrating or integrating data between source and target data stores.

- For Scribe Insight 6.5.2 or earlier releases, you need to create the Accounts.dts file, following the instructions in [Tutorial 1: Migrating Account Information](#) on page 7.
- For Scribe Insight 7.0 or later releases, you can either create the Accounts.dts file, as described above, or you can use the Accounts.dts file that is included with the Scribe installation. The default location for the Accounts.dts file is C:\Program Files\Scribe\Samples\Tutorials\Accounts.dts.

If you use the Accounts.dts file included with the installation, you will need to reconnect the Scribe Sample database. See [Other Prerequisites](#) on page 3 for more information.

### *Objectives*

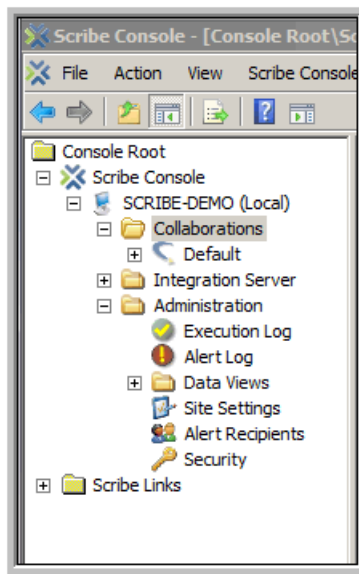
In this tutorial, you will:

- Create a new collaboration
- Add a time-based integration process
- Check the DTS file from Scribe Console.
- Run the integration

### *One: Create a collaboration*

#### ► **To create a new collaboration:**

1. Open Scribe Console from your desktop or from the **Start** menu.
2. Browse through the console tree to the Collaborations folder:

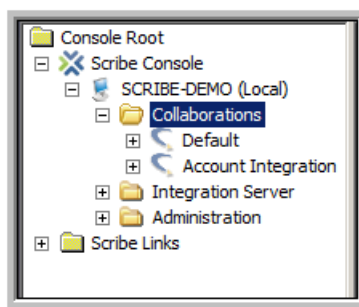


**Figure 41. Collaborations Folder in the Console Tree**

3. Left-click on the Collaborations folder to select it, and then right-click to open the pop-up menu right-click again on **New Collaboration** to open the New Collaboration Wizard.
4. Click **Next** to start the New Collaboration Wizard.
5. In the **Collaboration Name** text box enter Account Integration.
6. For now, that's the only information we need, so click **Finish** to create your new collaboration and close the New Collaboration Wizard.

When you save a new collaboration, the New Collaboration Wizard creates a folder in the Collaborations root directory with the same name that you specified in the **Collaboration Name** field of the New Collaboration Wizard.

7. Click on the Collaborations folder again to see that Account Integration has been added:



**Figure 42. Account Integration in the Console Tree**

Before you add an Integration Process to a new collaboration, you must move (or copy) any existing related DTS files (and their auxiliary files) from their current location into this new collaboration folder.

- Use Windows Explorer to move Accounts.dts from its original location (the default is C:\Program Files\Scribe\Samples\Tutorials\Accounts.dts) to ..\Scribe\Collaborations\Account Integration:

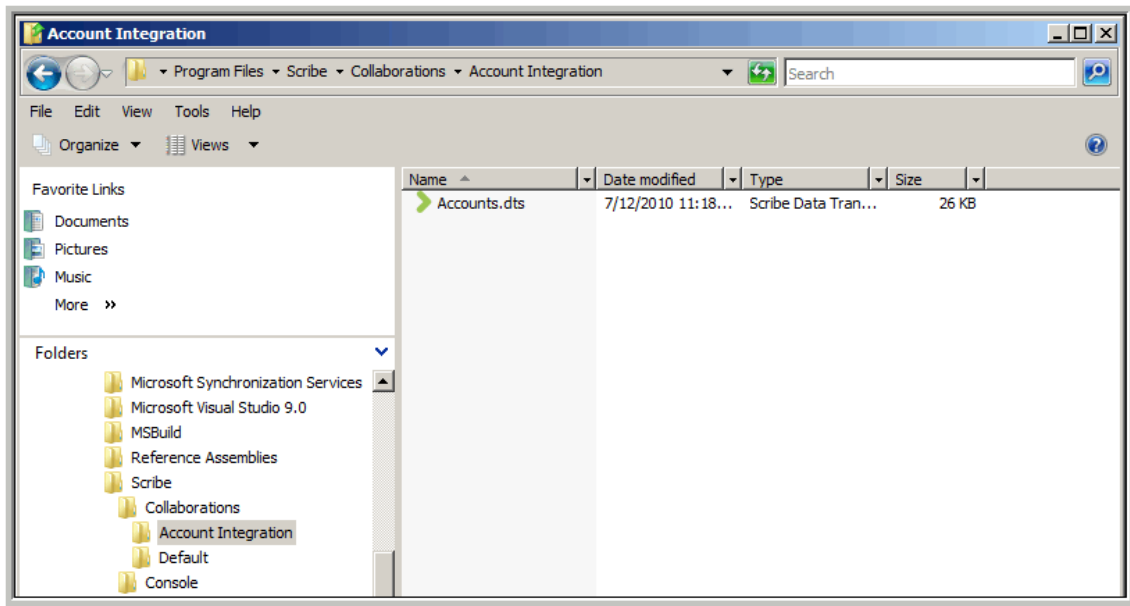


Figure 43. Windows Explorer – Account Integration

### *Two: Add an integration process*

Now that you've created your Collaboration, the next step is to add a time-based integration process.

#### ➤ Adding an integration process

- In the Collaboration folder, click on **Account Integration**, and then click on **Integration Process**. The Integration Processes pane displays:

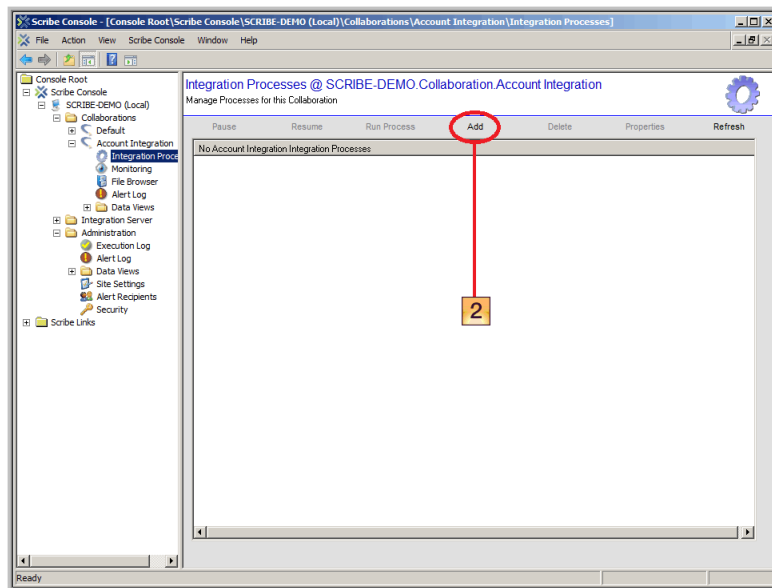
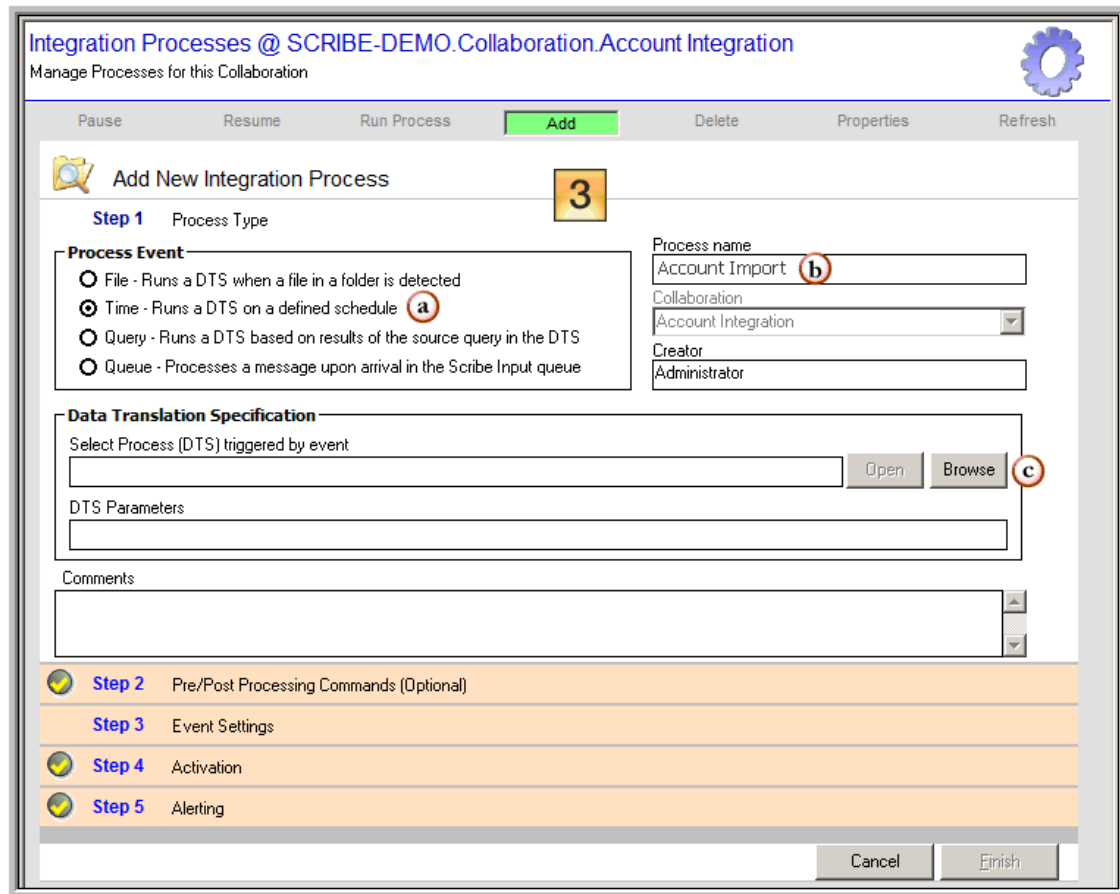


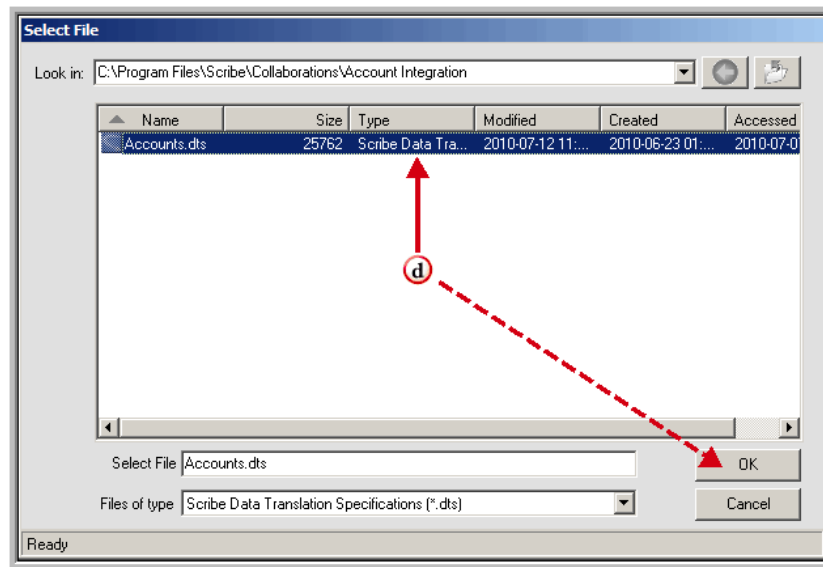
Figure 44. Integration Process pane

2. Click **Add** to start the Add New Integration Process Wizard:



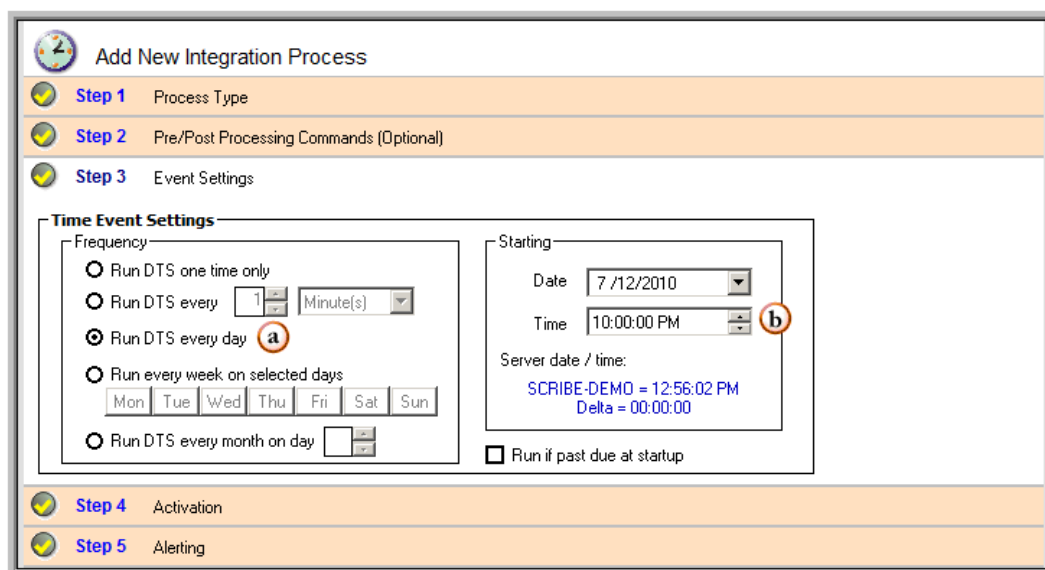
**Figure 45. Integration Process Wizard – Step 1**

3. As we discussed earlier, we know that we want the integration to run every evening at 10 pm. Therefore, this is a time-based event. In Step 1, let's begin to create the integration:
  - a. Under Process Event, click Time to create a time-based event.
  - b. In Process name, enter Account Import.
  - c. Under Data Translation Specification, click Browse to select the DTS file you want to use. The Select File dialog box displays:



**Figure 46. Step 1 – Select File dialog box**

- d. Select Accounts.dts and click OK.
4. Since we don't have any DTS parameters to add, click on **Step 2**.
5. We are not going to add any pre- or post- processing commands, so you can click on **Step 3, Event Settings**. Keep in mind that more information about the Integration Process Wizard is available in the *Scribe Insight Online Help*.
6. In Step 3, we will define exactly when, and how often, we want to run our new integration:
  - a. Under Time Event Settings, select Run DTS every Day.
  - b. Under Starting, change the time to 10:00:00 PM.



**Figure 47. Step 3 – Event Settings**

✘ The settings available in Step 3 depend on the Process Event type you selected in Step 1.

7. Click **Step 4, Activation**. We don't want to activate it quite yet, so under **Status**, select **Paused**.

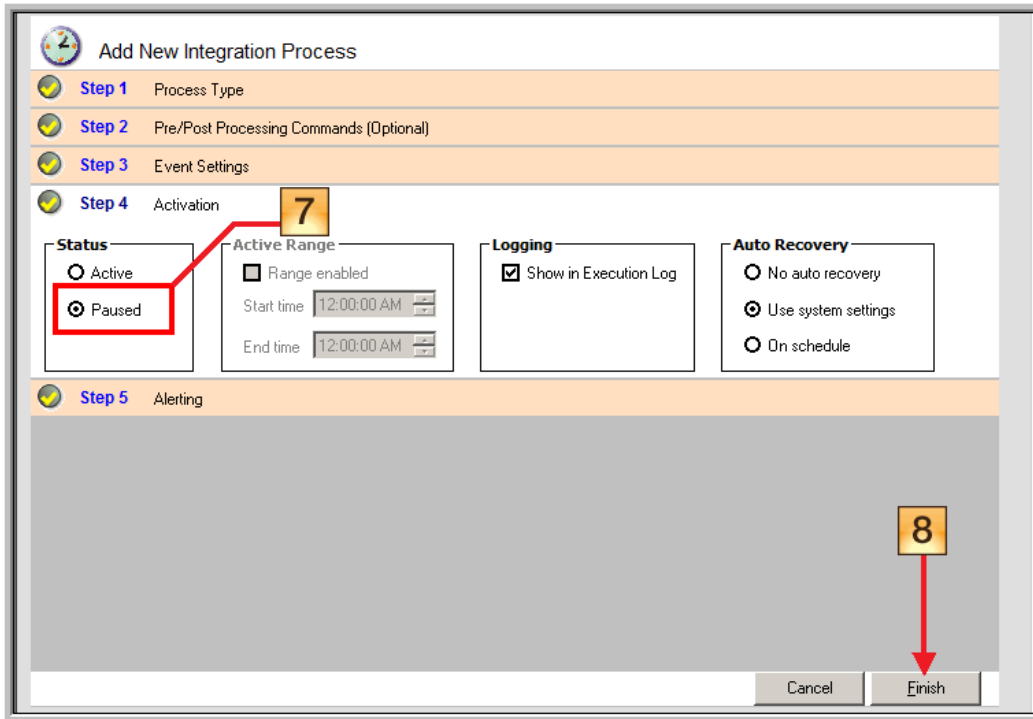


Figure 48. Step 4 - Activation

8. At this point, we won't make any changes to the alerts, so we can skip Step 5 and click **Finish**.
9. You've just created your first time-based integration process! Let's continue to the next step.

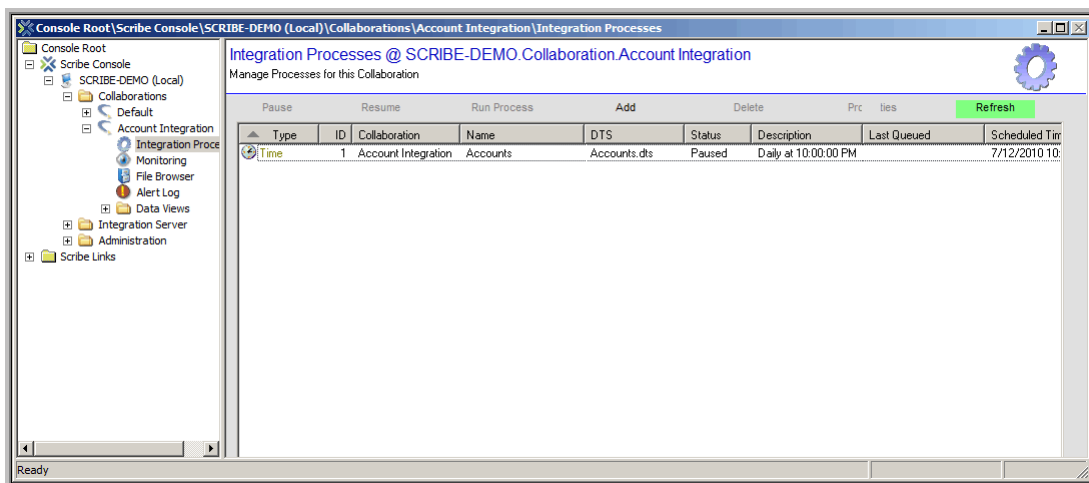


Figure 49. Time-based Integration Process

### Three: Prepare the Scribe Sample database

Before you start the first integration, you want to make sure that the Scribe Sample database (the target) is empty. That way, when the integration runs for the first time, it will be able to insert the records from the Scribe Sample Text data store.

To clear the database, we'll use the InternalDB.exe Scribe utility.

#### ► To prepare the Scribe Sample database:

1. In the ..\Scribe\ folder, find and double-click on InternalDB.exe to open the Scribe Internal Database Maintenance Utility.
2. Click the Sample Database tab:

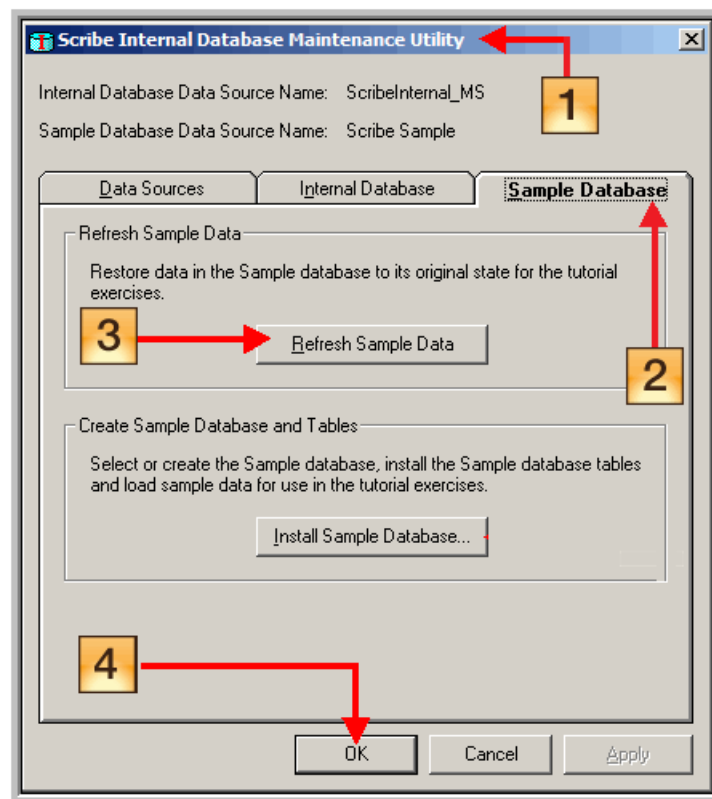


Figure 50. Scribe Internal Database Maintenance Utility (Steps 1-5)

3. Click **Refresh Sample Data** to clear the contents of the Sample database.
4. At the Refresh complete! notice, click **OK**, then click **OK** again to close the utility.

### Four: Check the DTS file

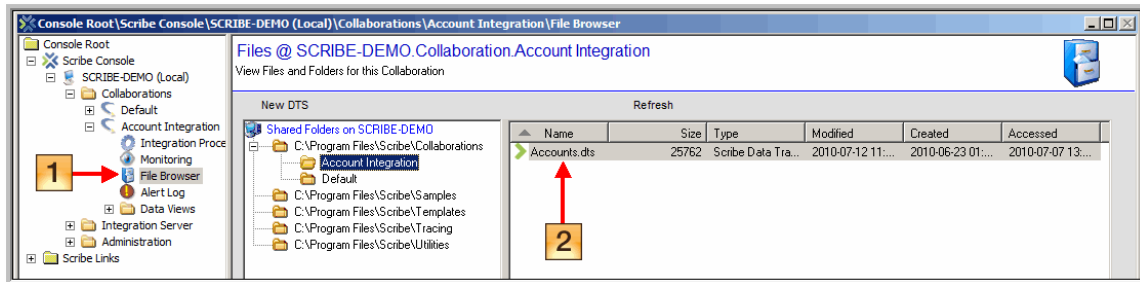
Before you run the integration, let's see what the DTS file will do. Remember that a DTS file (that is, a Data Translation Specification) is a file created in Scribe Insight that contains the instructions, including data transformation rules, to perform an integration or migration.

You can open and examine the DTS file either directly from Scribe Workbench, or from within Scribe Console, which opens Workbench for you.

- ✘ If you created this DTS file, following the instructions in [Tutorial 1: Migrating Account Information](#), then you already know what's in it, so you can skip this step.

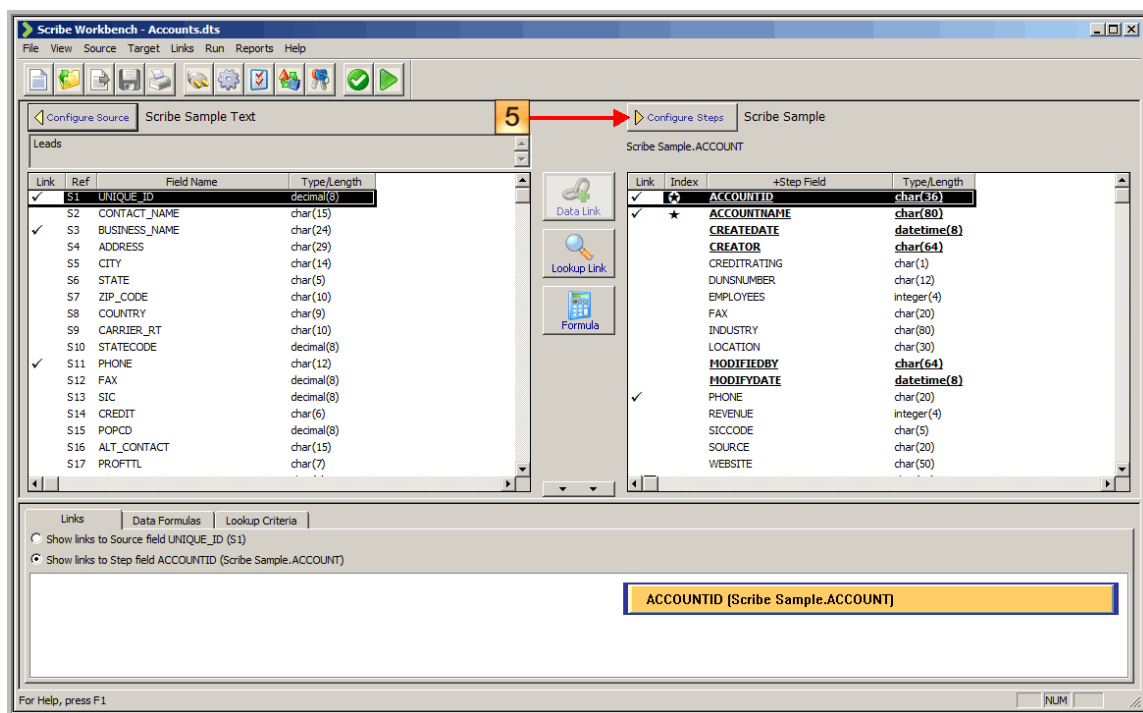
➤ **To examine the DTS file:**

1. From Scribe Console Collaborations folder, open the File Browser under Account Integration:



**Figure 51. Collaborations File Browser**

2. Double-click on **Accounts.dts** in the browser pane.
3. The Accounts.dts file opens in Scribe Workbench:

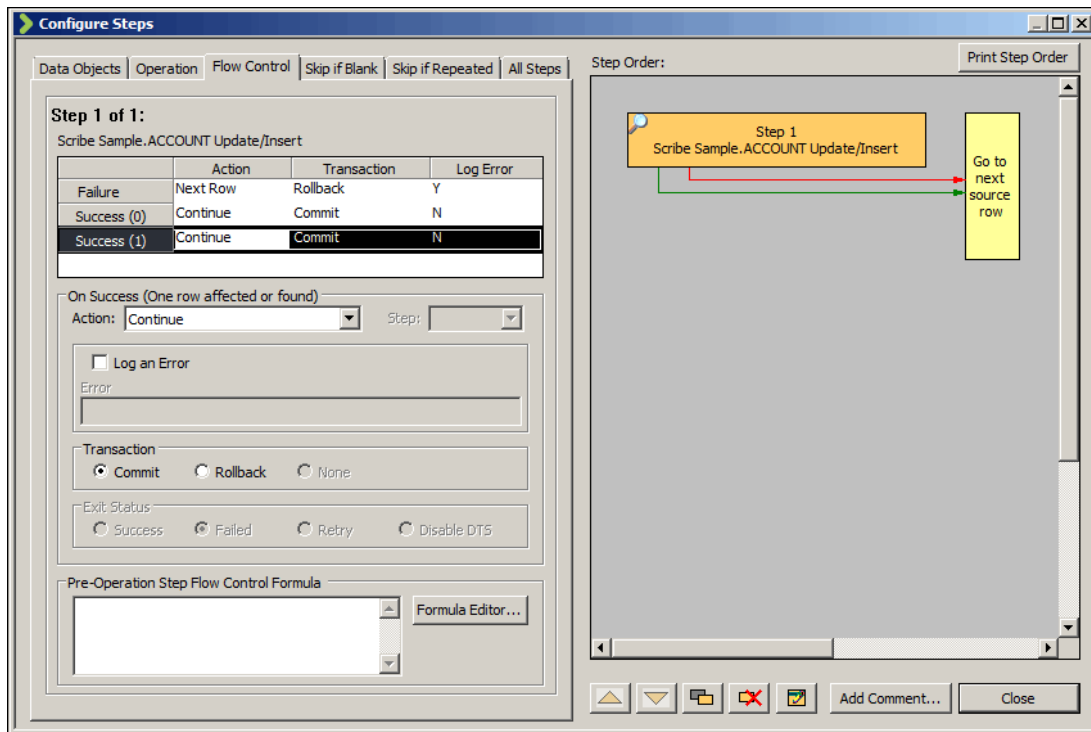


**Figure 52. Accounts.dts file**

4. As we discussed in the Prerequisites section of this guide (see [Figure 6. Connection Manager with reconnected data store](#), this DTS file integrates data from the Scribe Sample Text source to the Scribe Sample target.

- 
- ✦ The figures in this tutorial are based on Insight 7. If you are using Insight 6.5.2 or earlier, you will notice some differences in the Insight interface. However, except for the Connection Manager, most of the instructions are the same.
- 

- To see what this DTS file does, we first want to examine the steps. Let's start by looking at the target steps. From the Insight main window, click **Configure Steps** (for Insight 6 users, **Configure Target**) to open the **Configure Steps/Configure Target** dialog box.



**Figure 53. Configure Steps dialog box**

- In the Step Order pane, you will see that the DTS contains a single Update/Insert step into the Account object.
- Close the Configure Steps dialog box and click on the **Data Formulas** tab in the main window:

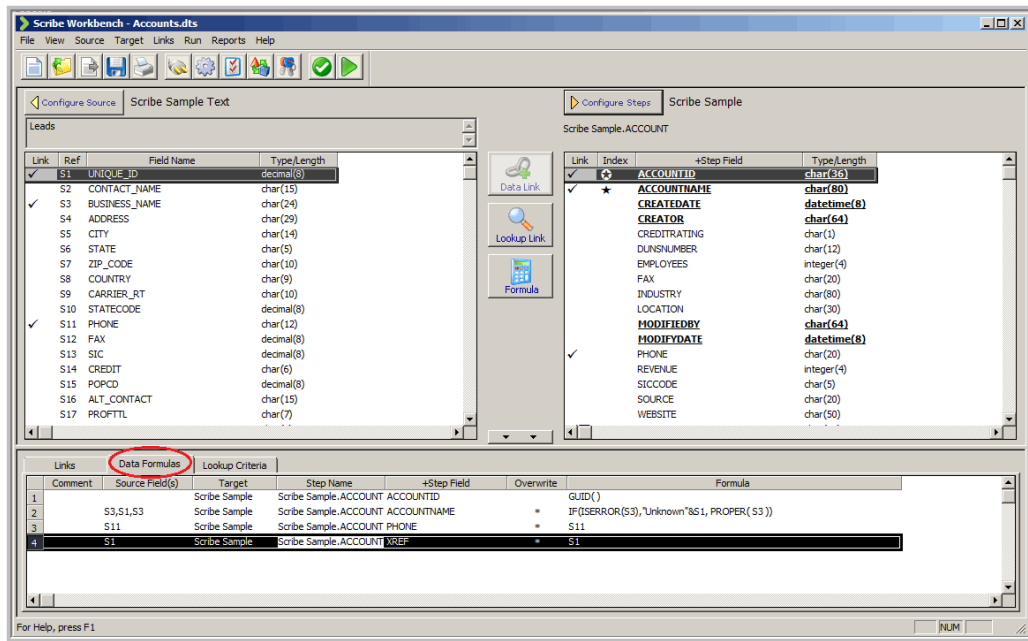


Figure 54. Data Formulas tab

- Whenever you have an update step, a lookup link is required. This allows Insight to look up the record that it needs to update. For an Update/Insert operation, Insight looks up the record and updates it if it exists, and inserts it if it is not already in the target.



If you look at the Data Formulas tab, you will see that there is a link between source field 1 (S1), which is called UNIQUE\_ID, and the XREF field in the target.

- Scroll the target pane down to view XREF. You will see that there are two links between UNIQUE\_ID and XREF, both a data link and a lookup link:

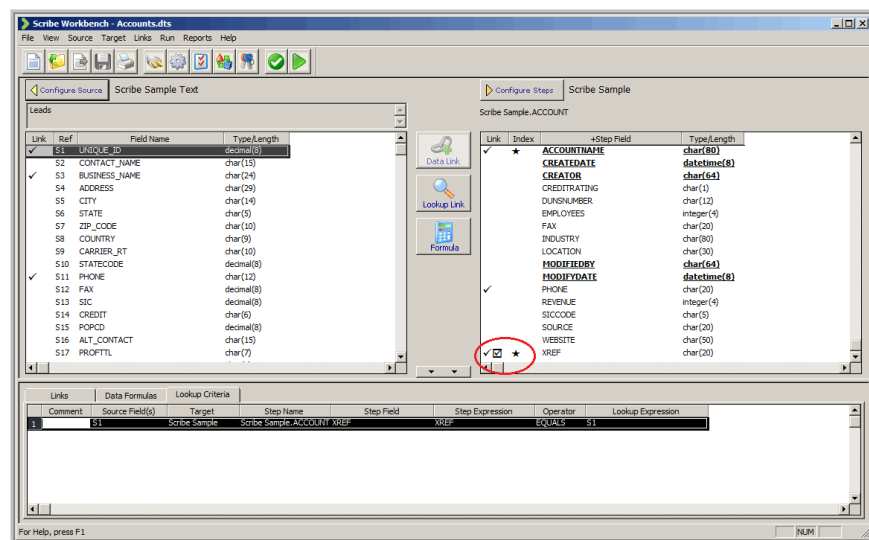


Figure 55. Lookup Criteria tab

In addition, the link is shown in the Lookup Criteria tab.

- Now, close Scribe Workbench. Since you haven't made any changes to the DTS file, you don't need to save it first.

### Five: Run the integration

When you created the Integration Process, you added a time-based event that runs every night. However, we want to test the integration without having to wait until 10 tonight. In this exercise, you'll learn how to run an integration even when the event criteria are not met.

#### ► To run your new integration:

- In Scribe Console, browse to Integration Processes in Account Integration under the Collaborations folder.
- In the Integration Processes pane, you will see that the status of Account Integration is currently paused:

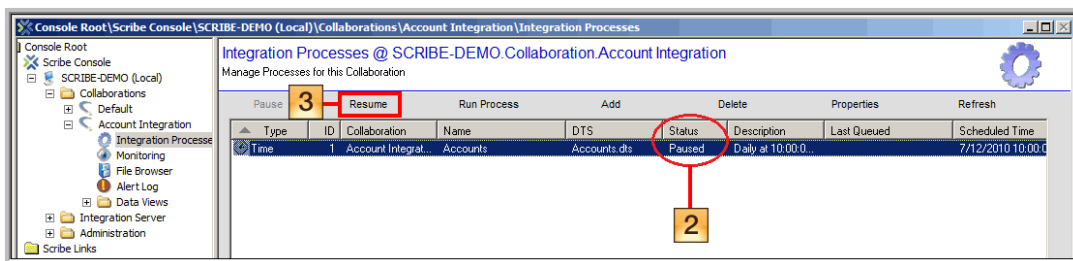


Figure 56. Paused integration process

- Click **Resume**. The integration process is now queued and scheduled to run at 10 pm tonight:

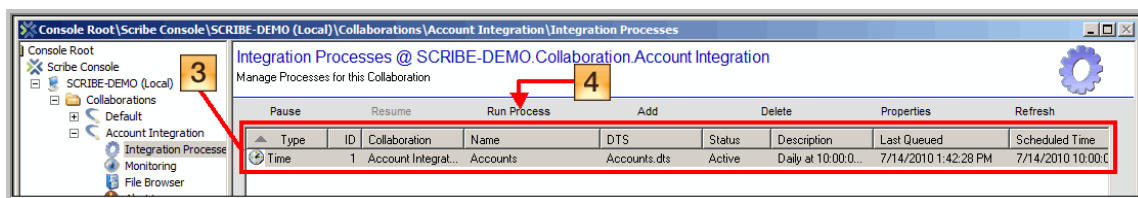
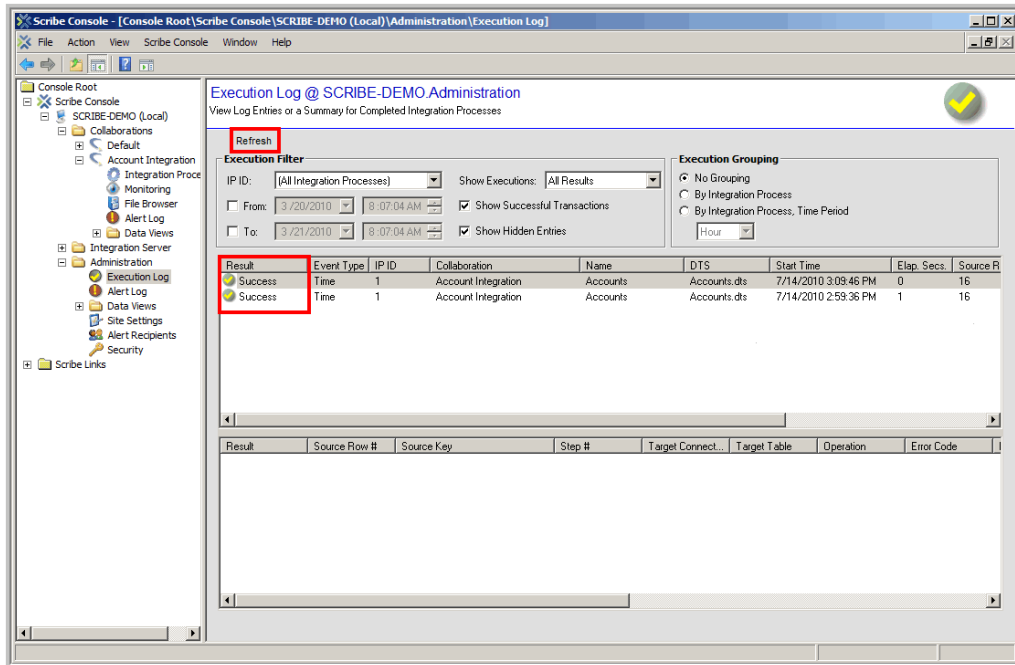


Figure 57. Queued integration process

- At this point, you can force the integration process to run. Select the process and click **Run Process**.
- You can check the Execution Log to make sure that your integration ran. Browse to the **Execution Log** in Administration and click **Refresh**. You should see **Success** under the Result column, and 16 under the Source Rows column; which tells you that 16 source rows were successfully inserted into your target.



**Figure 58. Execution Log**

6. Once you've gotten to this point, your integration is done.
7. You can stop here, or continue to the next tutorial.

# 5. Tutorial 4: More Console Techniques

## Introduction

The previous tutorial provided an introduction to Scribe Console and showed you how to create and run a simple integration. In this tutorial, we'll show you some other tools and techniques to help you use Scribe Console efficiently.

Before you begin this tutorial, you need to have completed [Tutorial 3: Creating an Integration in Scribe Console](#), beginning on page [36](#).

For this tutorial, we are going to change the DTS file to introduce an error. While this is not something you would normally do, it will allow you to see what happens as we create a method for handling errors in your real data. This tutorial will walk you through the process of creating a monitor that tracks errors during the DTS run, move the failed data into a rejected rows table, and create a data view that allows you to see rejected rows.

## Objectives

In this tutorial we will:

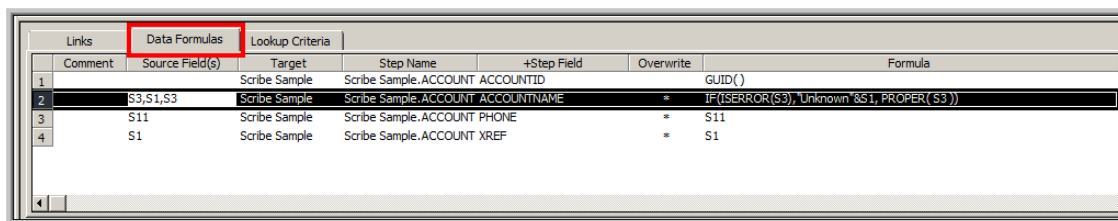
- Create a Rejected Rows table in the Scribe Internal database
- Create and run a monitor
- Create a data view
- Check the data view, monitor, and alerts

## One: Introduce an error in the DTS file

To show you how to process errors using Insight, we need to break the DTS file. Let's start by opening the Accounts.dts file we used in tutorial 3.

### ➤ To change the DTS file:

1. If Scribe Console is not already open, open it.
2. Open the Accounts.dts file in Scribe Workbench from the File Browser in the Console.
3. From the Workbench main window, open the Data Formulas tab and select the line that contains the formula `IF(ISERROR(S3), "Unknown"&S1, PROPER( S3 ))`:



Links	Data Formulas	Lookup Criteria					
Comment	Source Field(s)	Target	Step Name	+Step Field	Overwrite	Formula	
1		Scribe Sample	Scribe Sample.ACCOUNT	ACCOUNTID		GUID()	
2	S3,S1,S3	Scribe Sample	Scribe Sample.ACCOUNT	ACCOUNTNAME	*	IF(ISERROR(S3), "Unknown"&S1, PROPER( S3 ))	
3	S11	Scribe Sample	Scribe Sample.ACCOUNT	PHONE	*	S11	
4	S1	Scribe Sample	Scribe Sample.ACCOUNT	XREF	*	S1	

Figure 59. Data Formula tab

If you remember, we created this formula to display a message in the target when the BUSINESS\_NAME field in the source is empty (as well as change the name of the business from all capital letters to initial caps).

4. Double-click on the formula to open it in the Formula Editor:

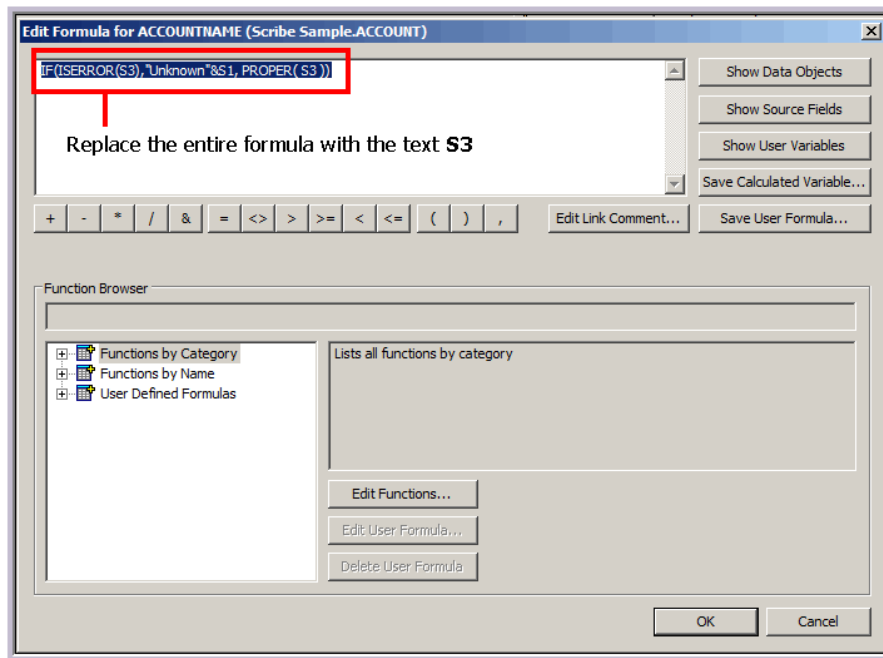


Figure 60. Formula Editor


5. Replace the entire formula with the text **S3**. This deletes the formula but still retains the data link between BUSINESS\_NAME in the source and ACCOUNTNAME in the target.
6. Save the DTS file.

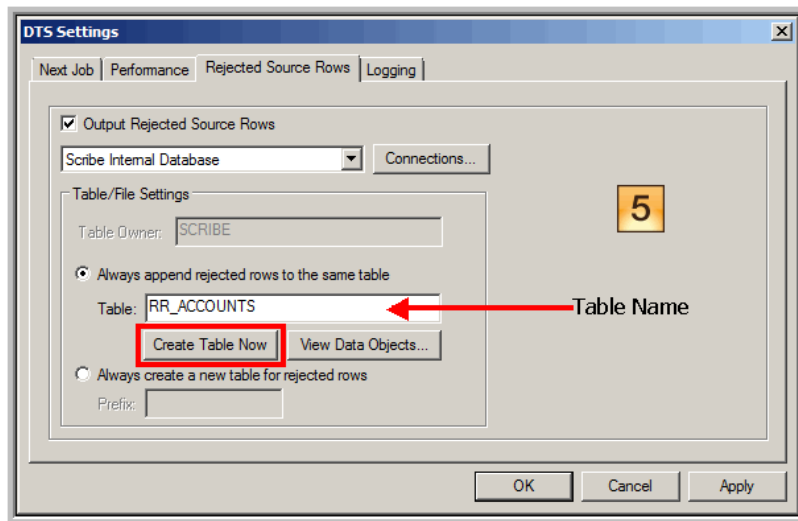
### *Two: Create the Rejected Rows table*

If we want to track data rows that are flagged by Insight as having errors, we need a place to put these rows. In Insight, these are called Rejected Rows; that is, the row contains data that causes Insight to reject an insert or update.

To see which rows have been rejected, you need to create a table for them – that's the next step. To hold the rejected rows, we'll create a table called RR\_ACCOUNTS in the Scribe Internal Database.

#### ► To create a Rejected Rows table:

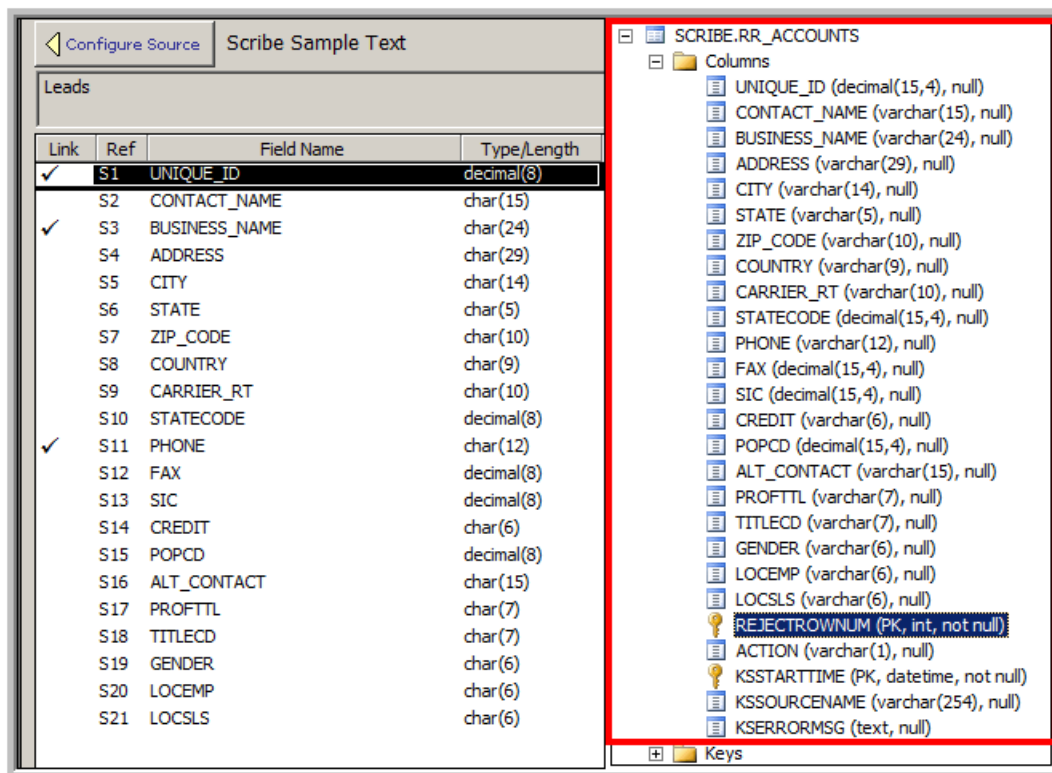
1. From Scribe Workbench, open the DTS Settings dialog box; either click the DTS Settings icon () from the toolbar or select **Edit Settings** from the Run menu.
2. Open the Rejected Source Rows tab.
3. Check the **Output Rejected Source Rows** box. You will see that Scribe Internal Database is the default connection. For most purposes, you can use this table to store rejected rows tables.
4. Select **Always append rejected rows to the same table**.
5. For the table name, enter *RR\_ACCOUNTS* and then click **Create Table Now**. Click **Yes** to save your changes before creating the table, and then click **OK** to close the **Rejected row table created** message.



**Figure 61. Rejected Source Rows tab**

- To see the table you just created, you can use SQL Server Management Studio. Open SQL Server Management Studio and browse to Databases>SCRIBEINTERNAL>Tables>SCRIBE.RR\_ACCOUNTS.

Open up the Columns list. You will see that the RR\_ACCOUNTS table contains the same fields as your source data (in this case, Scribe Sample Text) plus some extra fields for error handling.



**Figure 62. Scribe Sample Text and RR\_ACCOUNTS tables**

7. Before we continue, you'll need to refresh the sample database again. After you clear the contents of the Sample database, the next DTS run will be able to insert data, which is what we want. For instructions on refreshing the database, see [Prepare the Scribe Sample database](#) on page 42.

### Three: Create a data view

You have now created a rejected rows table, and you know how to view it using SQL Server Management Studio. However, it might be easier to view (and possibly repair) the rejected rows within Scribe Console. To do this, we need a data view.

#### ► To create a data view:

1. Let's go back to Scribe Console (you can save and close Scribe Workbench first).
2. Under Collaborations, browse to **Data Views** in the Account Integration collaboration you created in the last tutorial.
3. Click on **Data Views** to open the Data Views pane, and then click **Add**:

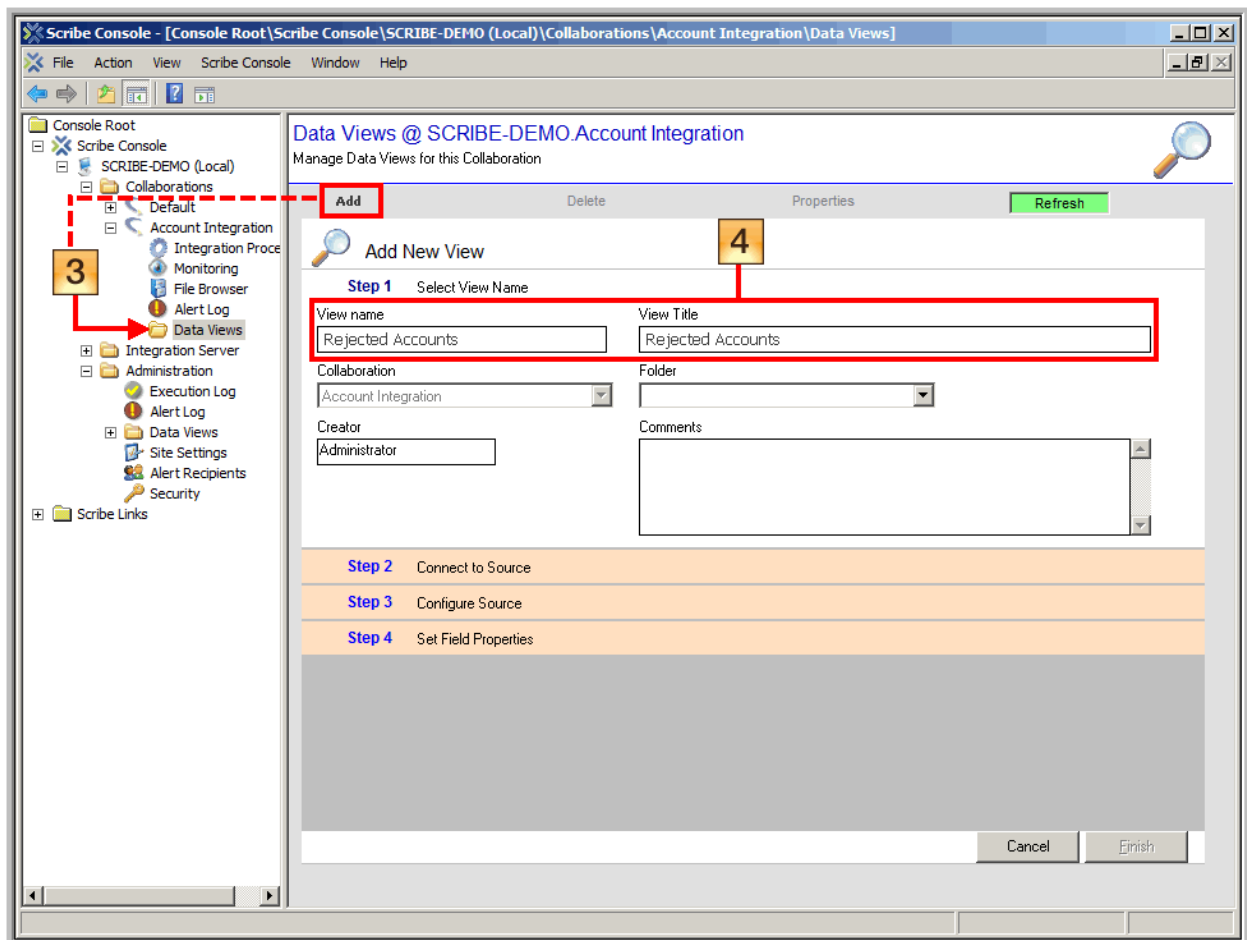


Figure 63. Add New Data View – Step 1

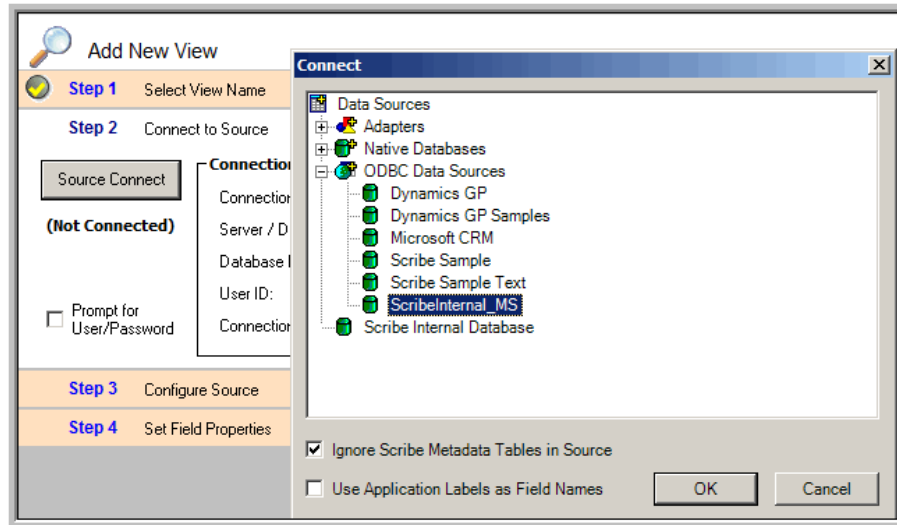
4. Let's call our view Rejected Accounts. Enter that in both the **View name** and **View Title** fields.

If we were creating multiple data views for this collaboration, you could enter the name of a folder in the **Folder** field. Insight will create a folder and store your data view in the specified folder. Since we're only creating one data view, we'll skip this step.

5. Next, click **Step 2** to select a source connection.

As we saw in the previous step, the rejected rows table is in the Scribe Internal database, so we know that Scribe Internal needs to be the source.

6. In Step 2 – Connect to Source, click **Source Connect** and then select ScribeInternal\_MS under ODBC Data Sources:



**Figure 64. Add New Data View – Step 2**

7. Enter the connection information in the Connect to DSN dialog box:
  - For **User ID**, enter **SCRIBE**.
  - For **Password**, enter **integr8!**
8. Now, go to Step 3 to configure the source. We'll want to use the RR\_ACCOUNTS table that you created earlier.
9. In Step 3:
  - a. Click **Source Configure** to open the Configure Source dialog box.
  - b. In the All Data Objects by Type, select Tables, and then select RR\_ACCOUNTS.
  - c. Click OK to close the Configure Source dialog box.
10. Before you leave Step 3, make sure that the default View Presentation is set to **Table**.
11. Go to Step 4 to configure the field properties. The only change we need to make here is to allow updates and deletes. To do this, in the **Allowable Operations** box, check **Updates** and **Deletes**:

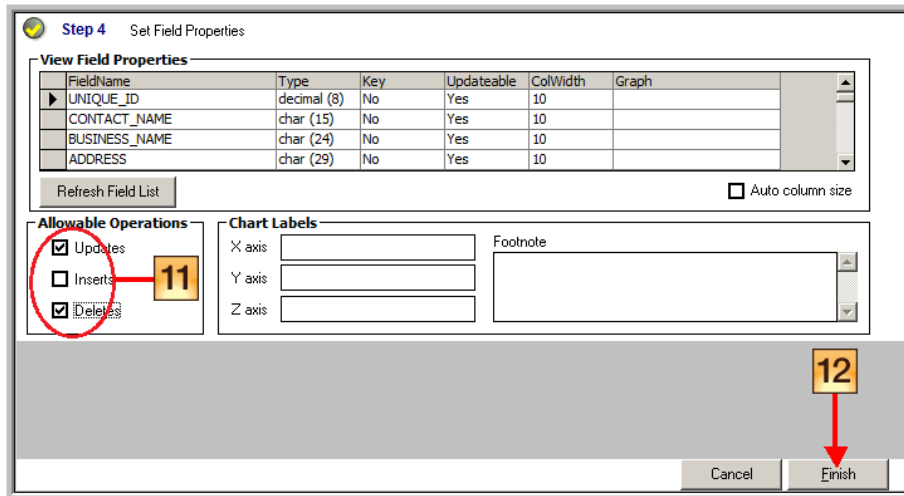


Figure 65. Add New Data View – Step 4

12. Click **Finish** to save your new data view.
13. Now, let's run the view and see what happens.

➤ **To run the data view:**

1. In the Console tree, browse down to the new data view and click on the data view name:

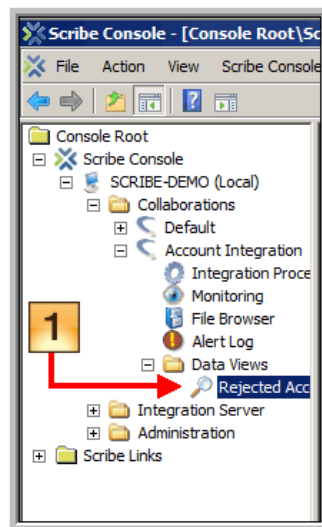


Figure 66. Running a data view

2. Since we have not yet run the DTS file, the Rejected Accounts Data View is currently empty. However, notice that the field names are the same as the fields you saw using SQL Server Management Studio:

Rejected Accounts												
UNIQUE_ID [u]	CONTACT_NA	BUSINESS_NA	ADDRESS [u]	CITY [u]	STATE [u]	ZIP_CODE [u]	COUNTRY [u]	CARRIER_RT	STATECODE [u]	PHONE [u]	FAX [u]	SIC [u]

Figure 67. Rejected Accounts Data View

After we create a monitor (in the next step), we will rerun the collaboration and check the data view again.

#### Four: Create a monitor

A monitor allows you to oversee system issues, business activities, and Integration Processes. You can set a monitor to raise an alert, which is what we'll be doing here.

##### ► To create a monitor:

1. From the Account Integration collaboration, click **Monitoring** to open the Monitoring pane, and then click **Add** to start the Add New Monitor Wizard:

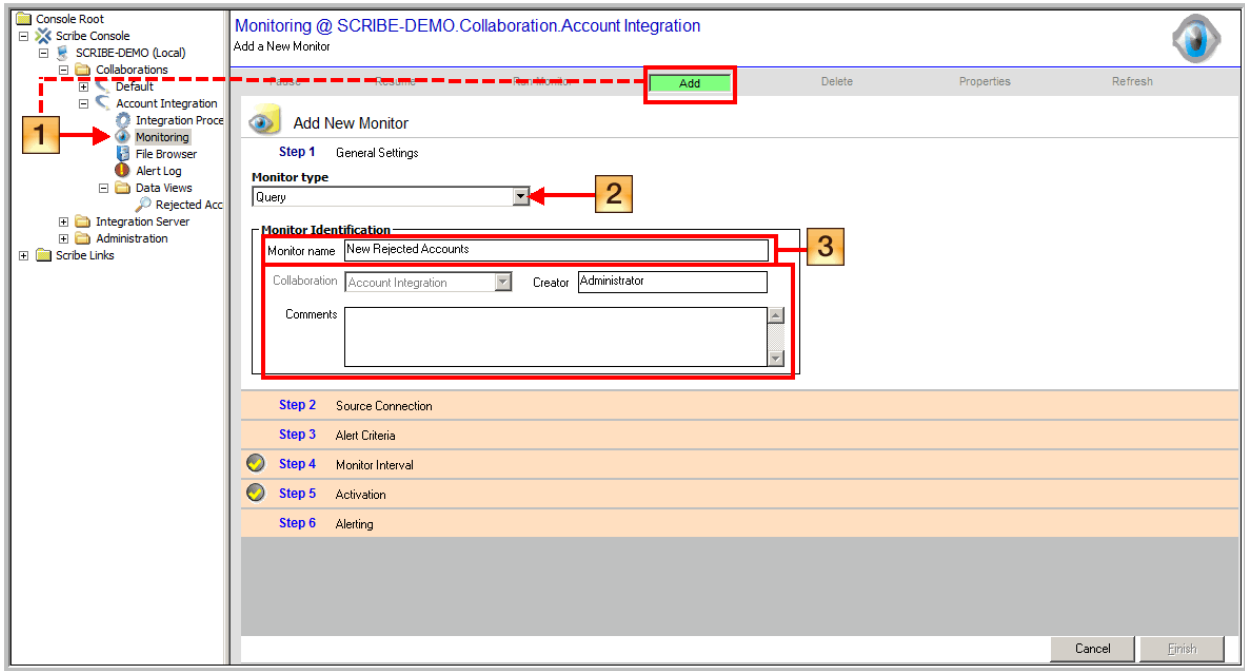


Figure 68. Adding a monitor – Step 1 - 3

2. Make sure the **Monitor type** field is set to Query.
3. Let's name the monitor **New Rejected Accounts** and add a comment in the **Comment** field:

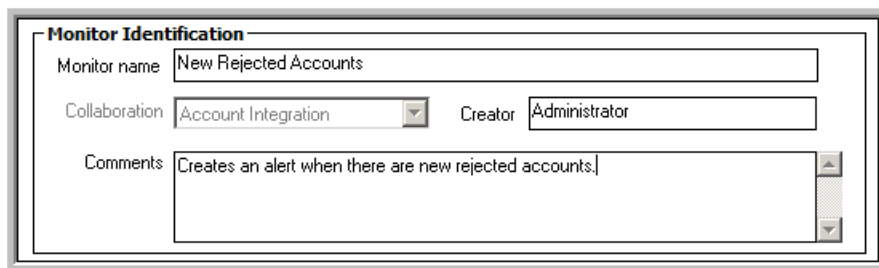


Figure 69. Monitor name and comment

4. Now go to Step 2 and click **Source Connect**. Use the same connection to ScribeInternal\_MS that you used to create the data view in the previous step.

In Step 1, you set the monitor type to **Query**. In Step 3, you'll create the query that the monitor will use.

For the data view, we wanted to include the entire RR\_ACCOUNTS table. For the monitor, we want to use specific data. When we created the RR\_ACCOUNTS table, Scribe added a timestamp field called KSSTARTTIME. We can create a custom query to compare that timestamp to the value of the LastRunDateTime and ThisRunDateTime system variables. If rows have been added to the RR\_ACCOUNTS table since the last run (or before the current run), this custom query will cause the monitor to raise an alert.

5. Go to Step 3 of the Add New Monitor Wizard and click **Source Configure**.

6. In the Configure Source dialog box, create a custom query:

a. Select Custom Query from the dialog box.

b. In the SQL Query window, enter the following query:

```
SELECT * FROM SCRIBE.RR_ACCOUNTS
WHERE KSSTARTTIME >= :LastRunDateTime AND
KSSTARTTIME < :ThisRunDateTime
```

This query raises an alert if the timestamp field, KSSTARTTIME, is later than (that is, greater than) the last run date. To do so, type >= (greater than or equal to) after KSSTARTTIME.

c. Click Test/Requery to test your query.

d. If the query executes without any errors, click OK to close the Configure Source dialog box. If there are errors, correct them and then close the dialog box.

7. As part of Step 3, we also need to set the alert conditions. We want to raise an alert when one or more new rows are found in the RR\_ACCOUNTS table.

8. In the Alert Conditions box, select:

- Row count
- Operator = Greater Than
- Row(s) = 0

---

 Alternatively, you could set the Row count to be Greater Than or Equal to 1.

9. For this tutorial, we do not need to create an Alert for each matching result row. Leave that checkbox blank. In addition, we'll always send the alerts to the same (Fixed) list. In the Alert Recipients box, make sure Fixed is selected; we don't need to worry about who the recipients are at this point.

**Figure 70. Adding a monitor – Step 3**

- 
- ✘ When creating a real collaboration, you will want to add recipients and recipient groups (under Alert Recipients in the Administration node) before adding monitors. When you add the recipients (or groups) in this pane, an email is sent to the recipients whenever an alert is raised.

For information about creating alert recipients, see the *Scribe Insight Online Help*.

---

10. In Step 4, we can leave the default Monitoring Interval Settings, which is every 15 Minutes.
11. In Step 5, make sure the Status is set to Active. That's the only thing we need to do for this step.
12. For Step 6, we want to create a Warning alert with a description, an Alert number, and a message, as follows:
  - a. Alert Type: select Warning.
  - b. Alert description: enter a meaningful description, such as New rejected Accounts.
  - c. Alert number: change this number to 3001. Note that the error number is for your own purposes. Insight displays the Alert number, but does not perform any error handling using this number.
  - d. Alert message: Add a meaningful message, for example: There are new rejected accounts from the Account Import process.
13. In the Alert Message Options, we want **Include results**, **Include row count/value** and **Attach results as XML** selected. Having an XML file will make it easier to figure out what went wrong.

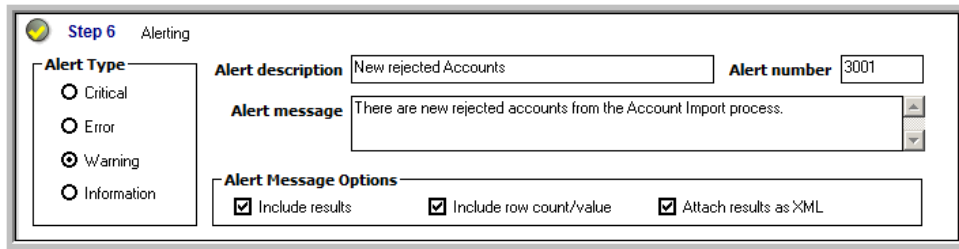


Figure 71. Adding a monitor – Step 6

14. And finally, click **Finish** to save and close your new monitor.

### Five: Run the integration processes

At this point, we have:

- The integration process that we created in the previous tutorial
- A DTS file that we know will create a rejected row
- A data view for the Rejected Rows table, which we called RR\_ACCOUNTS
- A monitor which monitors the integration process and raises an alert if changes are made to the RR\_ACCOUNTS table

Let's run the integration process and see what happens.

#### ► To run the integration process:

1. Under Collaborations in the Console tree, browse to Collaborations, then to Account Integration and then select Integration Processes.
2. Select the Account Integration Collaboration from the Integration Processes pane:

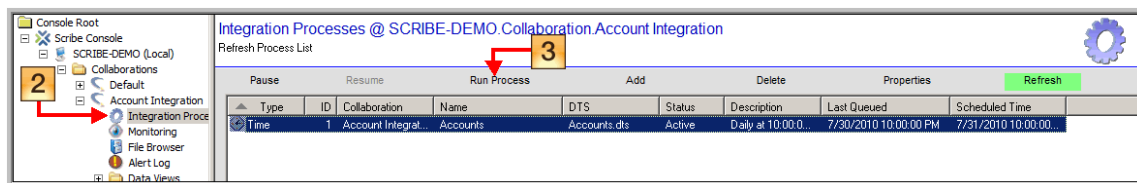
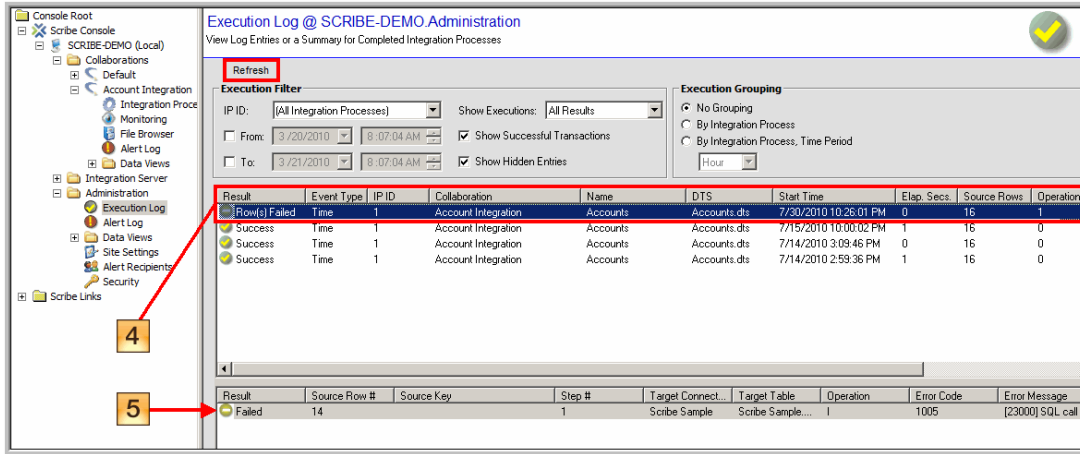


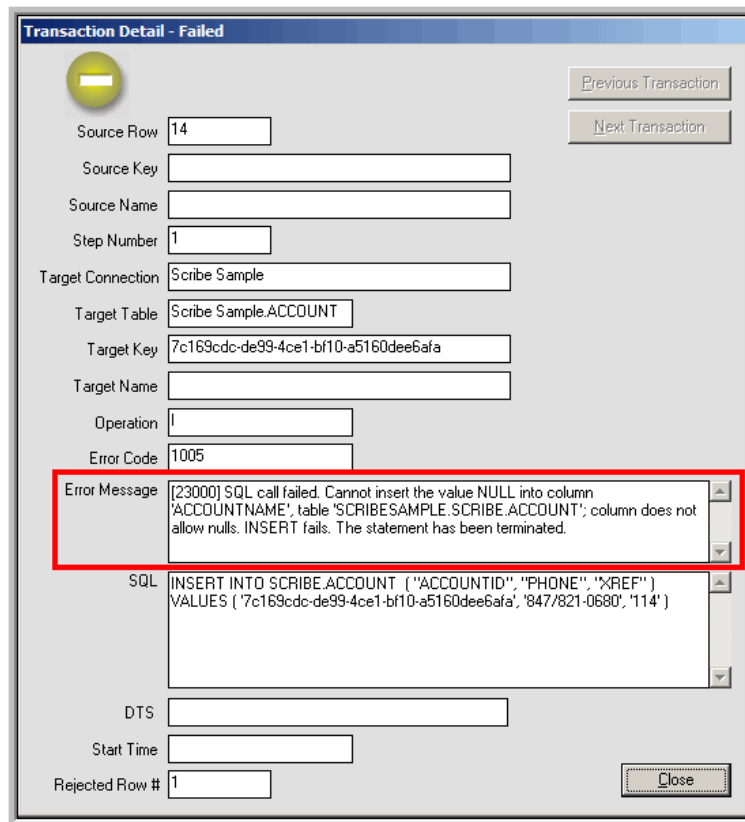
Figure 72. Integration Processes pane - Account Integration

3. Click **Run Process** to force the collaboration to run, and open the Execution Log (under Administration) to see the results. Click **Refresh** to update the results:



**Figure 73. Execution log – Failed row**

- You can see that, after running the process, one row failed. Select the Row(s) Failed message and more information displays below. Now, you can see that source row #14 failed, with Error Code 1005.
- Double-click on the lower message, and the Transaction Detail report displays:



**Figure 74. Transaction Detail report**

6. Check the error message and you can see that the ACCOUNT column does not allow nulls:

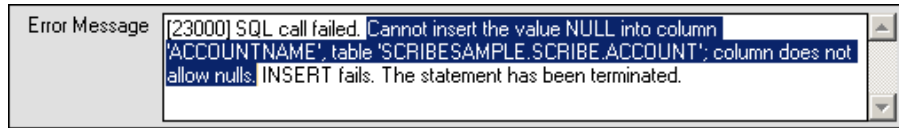


Figure 75. Transaction Detail report – Error Message

### Six: Check the RR\_ACCOUNTS table

After checking the Execution Log, we know there's an error. The next step is to figure out exactly which row we need to repair. There are a couple of ways to do this. We could open the RR\_ACCOUNTS table in SQL Server Management Studio, or we could use the data view we created earlier in this tutorial. Let's take a look at the table using the data view.

#### ► To check the RR\_ACCOUNTS table:

1. From the Data Views node under Account Integration, open the Rejected Accounts Data View.
2. This time, you'll see that there is a row in this data view:

Rejected Accounts												
UNIQUE_ID [u]	CONTACT_NA [u]	BUSINESS_NA [u]	ADDRESS [u]	CITY [u]	STATE [u]	ZIP_CODE [u]	COUNTRY [u]	CARRIER_RT [u]	STATECODE [u]	PHONE [u]	FAX [u]	SIC [u]
▶ 114	Bob Rickert		5575 Quarter	BANNOCKBUR/AB		T6A 3W2	Canada			847/821-0680		

Figure 76. Rejected Accounts data view

3. The row shows that for the company with the unique ID of 114, the Business Name is blank.

From here, you could either:

- Update the source to correct the error and rerun the collaboration. Since the DTS file has lookup links and an Update/Insert step, when you rerun collaboration, the new data is inserted without creating duplicate records.
- Go back to the DTS and add the error processing formula `[(IF(ISERROR(S3),"Unknown"&S1, PROPER(S3)))]` that we removed at the beginning of this tutorial. The formula inserts an error message into the target when an error is found.

However, these steps are beyond the scope of this tutorial. Feel free to try either method yourself.

### Seven: Check the monitor

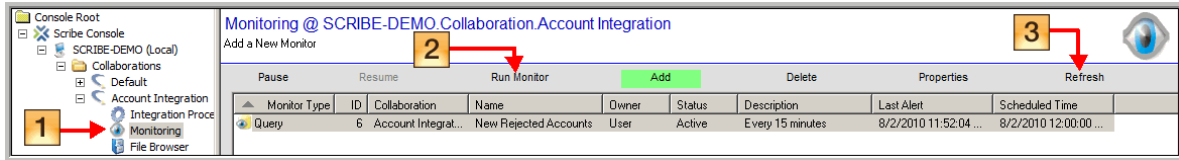
And finally, let's check the monitor. As discussed in Step Four of this tutorial, you will want to add Alert recipients to your real monitors. In that case, an email will be sent whenever an alert is raised. For the purposes of the tutorial, however, we'll just check the monitor manually.\

#### ► To check the monitor:

1. Under Account Integration in the Collaborations node, click on **Monitoring** to open this monitor.

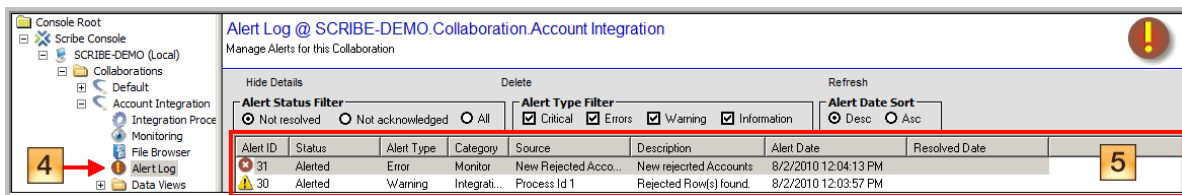
✦ You can also view all monitors on your system by selecting **Monitoring** from the Integration Server node.

2. Rather than waiting, click **Resume**, if needed, and then click **Run Monitor**.
3. Click **Refresh** and you'll see that an alert has been created:



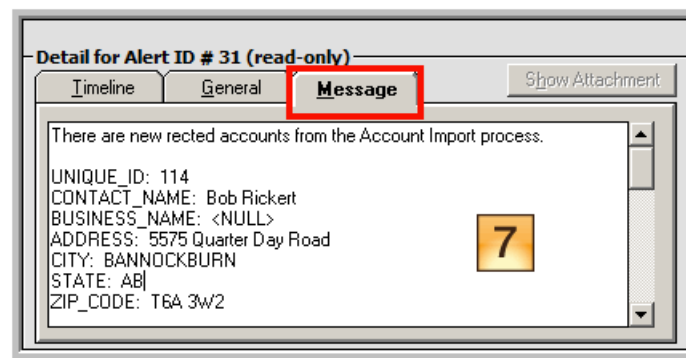
**Figure 77. Checking the monitor**

4. To view the alert, click on the **Alert Log** under Account Integration:



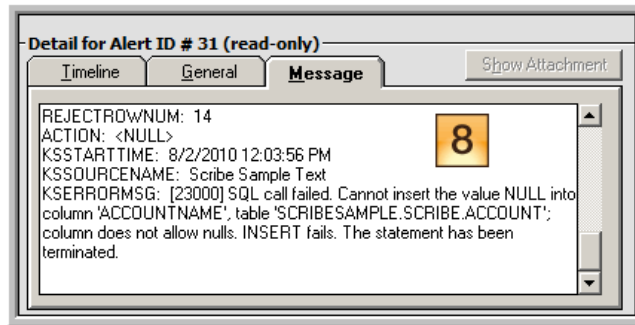
**Figure 78. Viewing the Alert Log**

5. Note that there are two alerts; a system monitor raises one alert on the process ID, and then the alert raised from the monitor we created.
6. Select the alert generated by the monitor (look for Monitor in the Category column) and click on the **Message** tab for more information:



**Figure 79. Alert log message details - top**

7. Here, we can see all of the information we'll need to correct the data and rerun the collaboration. All of the data in this message is generated from the RR\_ACCOUNTS table. At the top, as shown above, we see the UNIQUE\_ID field, which will allow us to find the record.
8. At the bottom, shown below, you can see the exact error message, along with the timestamp and other useful data.



**Figure 80. Alert log message details – bottom**

9. Congratulations! You've finished this tutorial.

### *What's next?*

With these two tutorials, we've introduced you to some of the basic tasks you'll need to perform using Scribe Console. Keep in mind that there are other tools in the Console that you'll need to use, but these tutorials should help get you started.

Remember, for more information, there are many resources available, including the *Scribe Insight Online Help*, the *Scribe Insight User Guide*, Scribe Installation Guide, and Scribe's Forums and Knowledgebase at <https://openmind.scribesoftware.com/forums>.