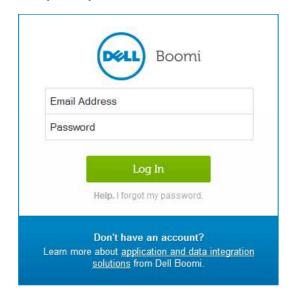


Accessing the Platform

https://platform.boomi.com







Course Overview

- SaaS Training: SF to DB, DB to SF/Mail
- Administration Training (for Developers)
- Development Life Cycle
- Properties
- Document Flow



SaaS Training Agenda

- SaaS Integration Overview
- Salesforce Connector Review
- Database Connector Review
- Advanced Logic Concepts
- System Lookups and Best Practices
- Messaging
- Event Synchronization





SaaS Training Integration Scenario

Business Use Case:

- Sales team enters prospect information into salesforce.com
- Operations team wants to query Salesforce Accounts (Prospects) and send responses to an Organization Tracking System for lead management
- They also want to prevent duplicate prospects from being entered

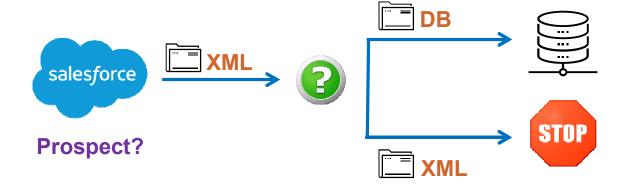




SaaS Training Integration Scenario

Integration Goal (Process 1 – Prospect Tracking):

- Query the Salesforce Account object for modified Prospect records
- Insert main account information into the orgtrack database
- Add lookup logic to query the CUSTOMER table for existing records
- Route out existing records from the Process flow

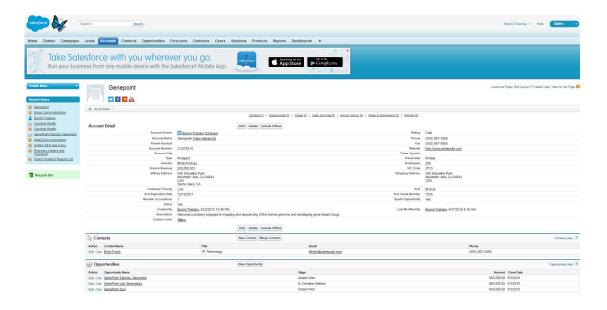




What is Salesforce?



- An online web-based Customer Relationship Management (CRM) application accessible from salesforce.com
- Captures and organizes communications and information from current or prospective customers for many departments across a company





SaaS Training Expectations

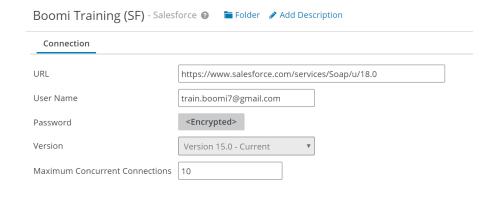


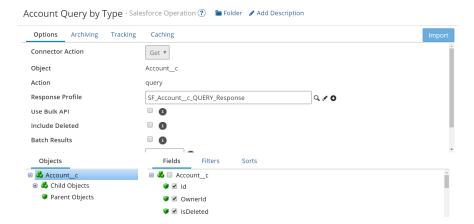


Salesforce Connector Options



- The main component contains all information needed to connect to a single Salesforce account instance
- Combination of two components:
 - 1) Connection Sandbox or Production URL and integration user log-in
 - 2) Operation Query or Write: Objects(s) Request/Response definition

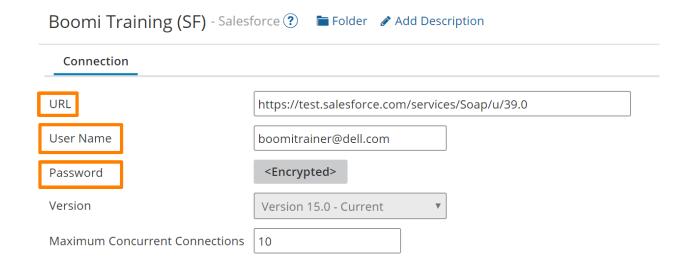






Salesforce Connection Configuration

- URL: Production or Sandbox URL path to the Salesforce API
- **User:** Email for integration user with appropriate access rights
- **Password:** User log-in password concatenated with the user's Security Token generated within the Salesforce account instance





Let's Start Building!



Instructor to Demonstrate

Instructor To Demonstrate:

- Exercise 1: Set up Folders
- Exercise 2: Download Process
 Endpoints from the Process Library
- Exercise 3: View the Salesforce Read Connector

Page(s): 5-7



Participants to Complete

Participants to Complete:

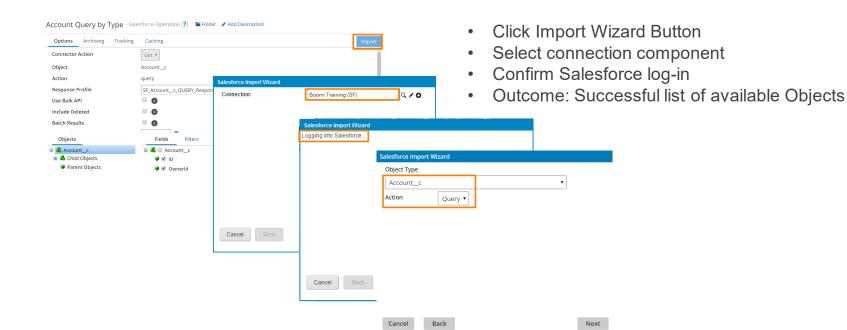
- Exercise 1: Set up Folders
- Exercise 2: Download Process
 Endpoints from the Process Library
- Exercise 3: View the Salesforce Read Connector

Page(s): 5-7



Salesforce Connectivity Testing

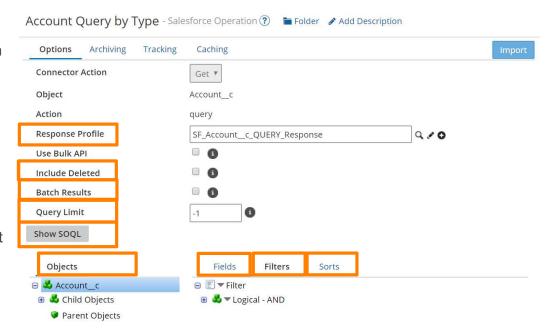
Use the Salesforce Connector components to ensure successful connectivity to your account instance





Salesforce Operation Options (Query)

- Query returns 0 to many object records from a single API request based on 0 or more input "filters"
- Response Profile: Identifies full standard and custom response field set along with Salesforce data formats
- Include Deleted: Returns "deleted" records in results (QueryAll)
- Batch Results: Builds response records into a single List document
- Query Limit: Specifies max number of records to return (Default -1 is all results)
- **Show SOQL:** Displays read-only pop-up of current fields and filters in query language format
- Objects: Set different field rules per highlighted object
 - Fields: Select/Deselect specific fields or the entire field set
 - Filters: Narrows down the response set
 - Sorts: Orders results in an ascending or descending order.





Instructor to Demonstrate

Instructor To Demonstrate:

Exercise 4: Create a Salesforce query operation

Page(s): 8-11



Participants to Complete

Participants to Complete:

Exercise 4: Create a Salesforce query operation

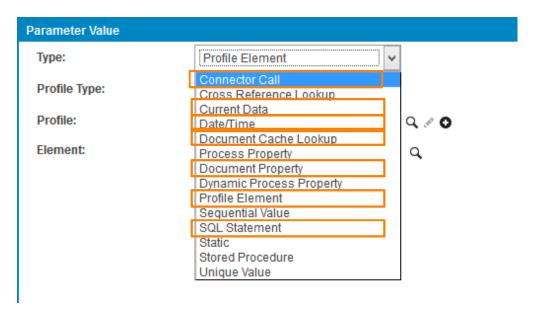
Page(s): 8-11



Setting Parameters

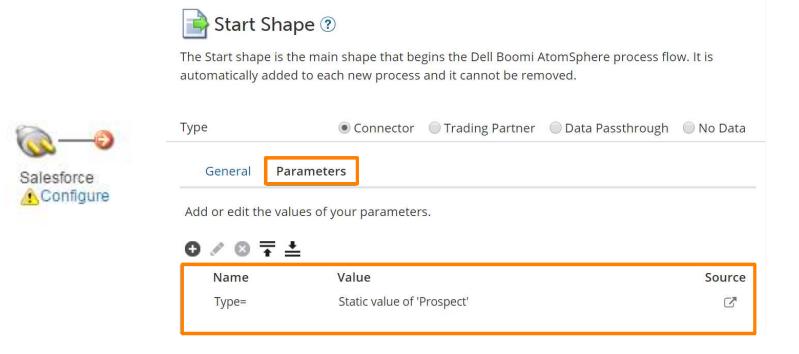
Common interface for configuring runtime inputs

- Reference elements from document(s)
- Reference system date where the Process is executing
- Define lookup inputs against databases and system APIs
- Build dynamic messaging and notifications





Setting Parameters





Instructor to Demonstrate

Instructor To Demonstrate:

- Exercise 5: Set the Salesforce runtime parameter
- Exercise 6: Test the process

Page(s): 12-15



Participants to Complete

Participants to Complete:

- Exercise 5: Set the Salesforce runtime parameter
- Exercise 6: Test the process

Page(s): 12-15



Database Training Expectations



- The Database connector allows you to connect into any database solution supporting a JDBC driver.
- Goal is to read/write records from a demo organization tracking system
- MySQL is a popular open source database used as the database for this training



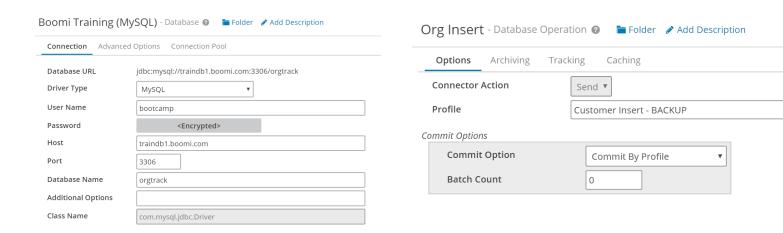
Database Connector Options



The main component contains all information needed to connect to a single Database instance

Combination of two components:

- 1) Connection Database type, location, and user log-in
- 2) Operation Read or Write: Statement and record grouping definition

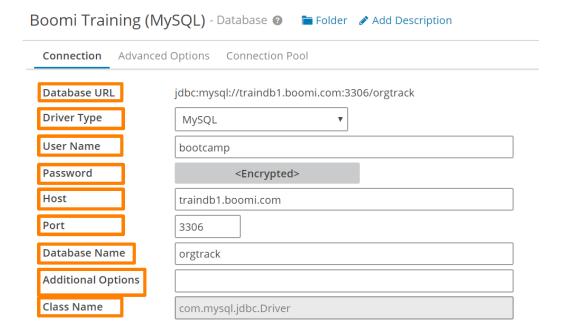




Q / O

Database Connection Configuration

- Database URL: Read only field for JDBC URL populated as other values are entered
- Driver Type: Dropdown for DB Type definition
- User Name: Database User Name
- Password: Database User Password
- Host: The name or IP address of the database (DB) server
- Port: The port on which to connect to the DB server: Ex. MSSQL – 1433; MySQL – 3306
- Database Name: The name of your database
- Additional Options: Items to add at the end of the DB URL; mostly name/value pairs
- Class Name: Read-only Java class name of the JDBC driver

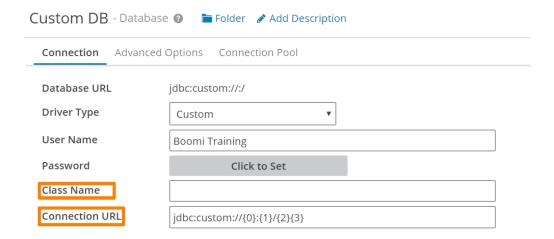




Custom Database Connection

 Class Name: Java class name of the JDBC driver

• Connection URL: JDBC URL syntax





Walkthrough

Walkthrough:

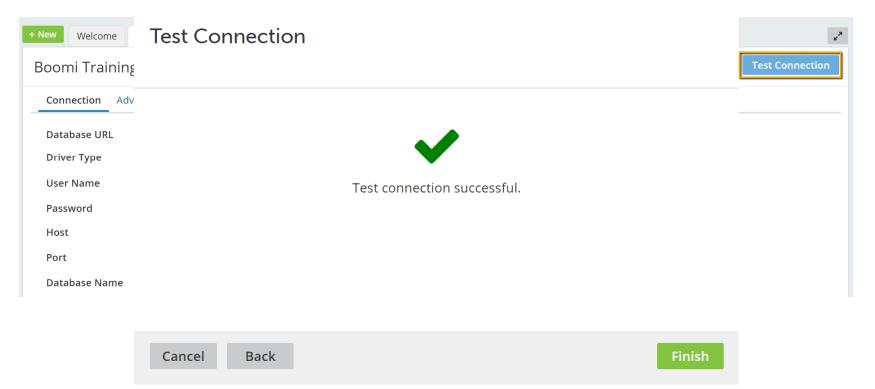
Exercise 7: View the database write connector

Page(s): 16



Database Connectivity Testing

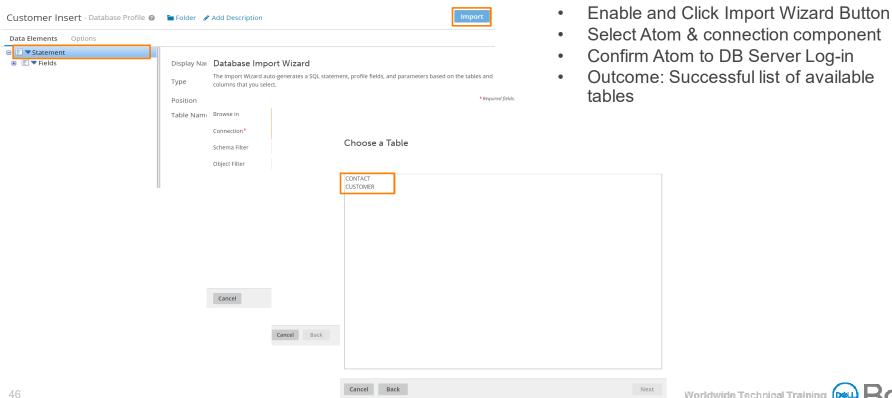
Use the "Test Connection" button to ensure successful connectivity to your database instance





Database Connectivity Testing

Use the Database Connector components and the Atom to ensure successful connectivity to your database instance





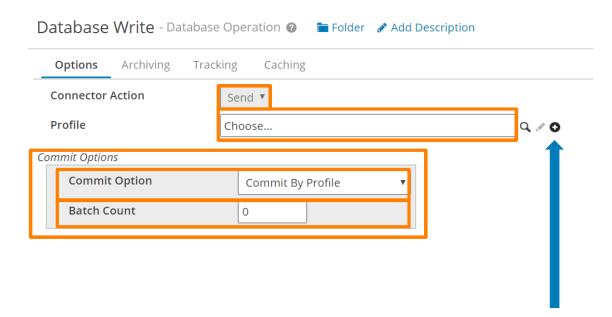
Database Operation Options (Write/Send)

Write Profile

- Statically or dynamically define Write statements against a table or stored procedure inputs
- Use the Import Wizard to dynamically poll a table and auto-list the columns with field types

Commit Options

- Option: Commit statement(s) based on number of rows or statement sets defined in Profile
- Batch Count: Specify the commit interval or leave as 0 to indicate no limit





Instructor to Demonstrate

Instructor To Demonstrate:

- Exercise 8: Create a database write operation
- Exercise 9: Create a database write profile

Page(s): 17-20



Participants to Complete

Participants to Complete:

- Exercise 8: Create a database write operation
- Exercise 9: Create a database write profile
- Class Activity 1: Create a Salesforce to database insert map

Page(s): 17-21



Instructor to Demonstrate

Instructor To Demonstrate:

- Review Class Activity 1: Create a Salesforce to database insert map
- Exercise 10: Map the source and destination fields
- Exercise 11: Set default mapping values

Page(s): 21-24



Participants to Complete

Participants to Complete:

- Exercise 10: Map the source and destination fields
- Exercise 11: Set default mapping values
- Class Activity 2: Populate the CREATE DATE field
- Additional Challenge 1: Update the Salesforce query operation with contact information
- Additional Challenge 2: Map the contact information

Page(s): 22-28



Instructor to Demonstrate

Instructor To Demonstrate:

- Review Class Activity 2: Populate the CREATE_DATE field
- Review Additional Challenge 1: Update the Salesforce query operation with contact information
- Review Additional Challenge 2: Map the contact information

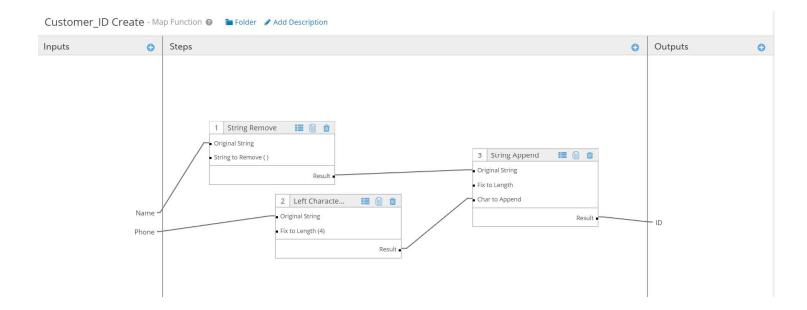
Page(s): 25-28



User Defined Map Functions



- Permits multiple steps of conversion logic to be applied to values as they are being mapped
- Can be saved and reused across multiple maps requiring the same conversion logic





Instructor To Demonstrate:

Exercise 12: Create a user-defined map function

Page(s): 29-33



Participants to Complete:

Exercise 12: Create a user-defined function

Page(s): 29-33



Instructor To Demonstrate:

Exercise 13: Test the process

Page(s): 34



Participants to Complete:

Exercise 13: Test the process

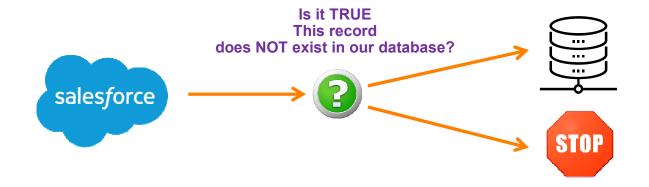
Page(s): 34



What is a Decision?



- Query records in Salesforce
- TRUE or FALSE. Is this a new account? Is the record non-existent in our database?
- If it is TRUE, and the record is not in our database, we will write it to the database
- If it is FALSE, and the record already exists, we will send the record down another path

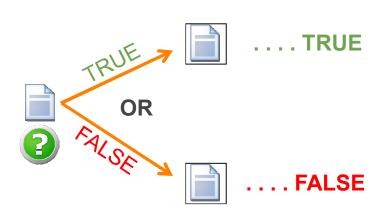


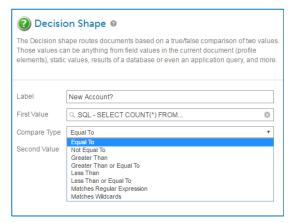


What is a Decision?



- Decisions are commonly used to validate field values or check the existence of data in a destination system
- Compares 2 values and routes a document down a TRUE or FALSE path based on the outcome of the comparison
- TRUE documents are processed to completion BEFORE the FALSE documents are processed
- The Compare Type can be changed to manipulate the outcome







Instructor To Demonstrate:

- Exercise 14: Add a decision shape to query the database
- Exercise 15: Test the decision lookup

Page(s): 35-39



Participants to Complete:

- Exercise 14: Add a decision shape to query the database
- Exercise 15: Test the decision lookup

Page(s): 35-39



Congratulations!



SaaS Training Integration Scenario

Business Use Case:

- Checks are made against the Tracking DB for recently closed opportunities
- The Salesforce record is updated to reflect new contract Service Level Agreement (from current value to 'Gold')
- A team member is then notified via email
- The Tracking DB is updated to reflect the team member was notified

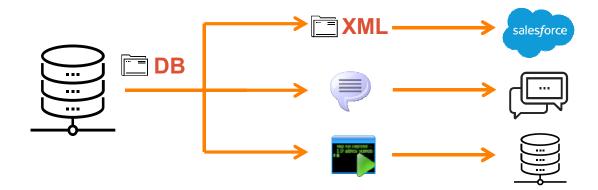




SaaS Training Integration Scenario

Integration Goal (Process 2 – Daily Customer Wins):

- Query the Organization Tracking System for modified Customer records
- Update Salesforce Account records to SLA 'Gold'
- Email monitoring user dynamic content about new customer records
- Update Database System indicating emails have been sent





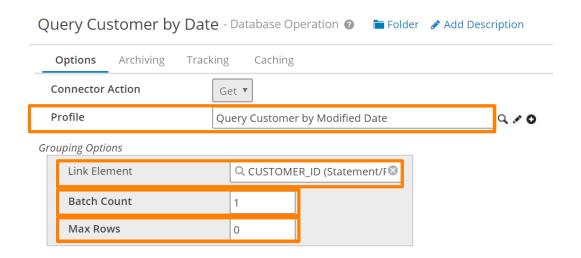
Database Operation Options (Read)

Read Profile

- Statically or dynamically define Read statement against table(s) or stored procedure outputs
- Use the Import Wizard to dynamically poll tables and auto-list the columns with field types

Grouping Options

- Link Element: The common field in a record group to batch document(s)
- Batch Count: Define an interval for the grouping behavior
- Max Rows: The maximum number of rows to return in a single read request





Instructor To Demonstrate:

- Exercise 16: Create a database read process
- Exercise 17: Set a database runtime parameter
- Exercise 18: Test the process

Page(s): 40-47



Participants to Complete:

- Exercise 16: Create a database read process
- Exercise 17: Set a database runtime parameter
- Exercise 18: Test the process

Page(s): 40-47



Salesforce Write Options



Create – Creates new records in a defined object

Generate the internal 'ID' field automatically for each document executed

Update - Updates existing records in a defined object

Supply the internal 'ID' field in the request to update the existing object record.

Upsert – Creates new or Updates existing records in a defined object

Identify a designated internal 'ID' field in the request for Salesforce to determine the correct action.

Delete - Deletes existing records in a defined object

Supply the internal 'ID' field in the request to delete the existing object record.

Merge - Merges Salesforce records of the same object type into one record

You must use the masterRecord/ID field to indicate which of the records is the master record.

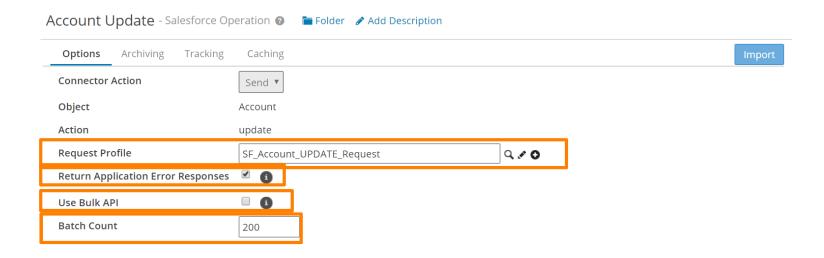




Salesforce Operation Options (Write/Update)



- Request Profile: Standard and custom request field set along with data formats
- Return Application Error Responses: Returns XML responses
- Use Bulk API: Applies Bulk API to execute send (Up to 10,000 records)
- Batch Count: Specify the number of documents to send in 1 request





Instructor To Demonstrate:

Exercise 19: Create a Salesforce update action

Page(s): 48-49



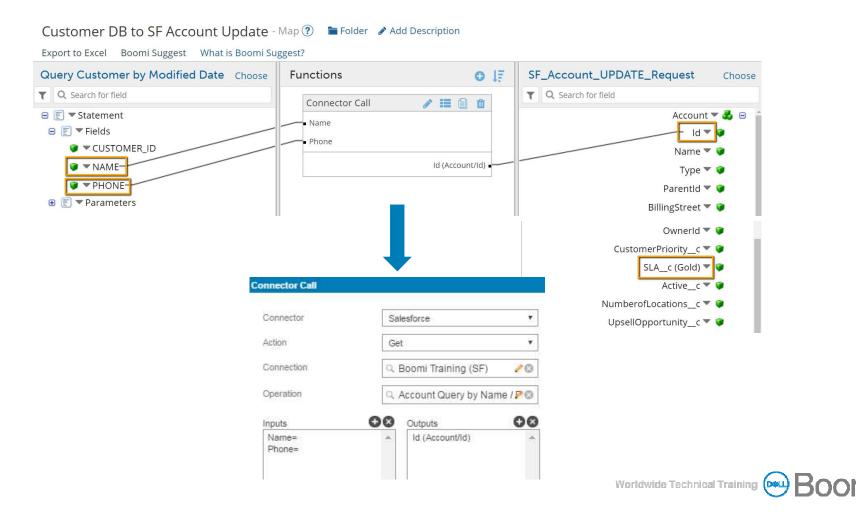
Participants to Complete:

Exercise 19: Create a Salesforce update action

Page(s): 48-49



Updating Account Record in Salesforce



Connector Call Usage



- Identify and configure all object query operations before building your full integration solution
- Add Connector Call in logic shapes or map functions to perform documentlevel queries on-the-fly (NOTE: this has negative performance implications and should not be a first resort)
- Enable caching in map functions to limit API requests for common input records

 If multiple mappings or logic require the same Connector Call, consider using Dynamic Document Properties or Document Caching at the front-end of the Process

Name= Phone=	*	Id (Account/Id)	*
nputs	00	Outputs	06
Operation	Q. Account Query by Name / P@		
Connection	Q. Boomi Training (SF)		20
Action	Get		•
Connector	Salesforce		



Instructor To Demonstrate:

Exercise 20: Create a Salesforce update map

Page(s): 50-56



Participants to Complete:

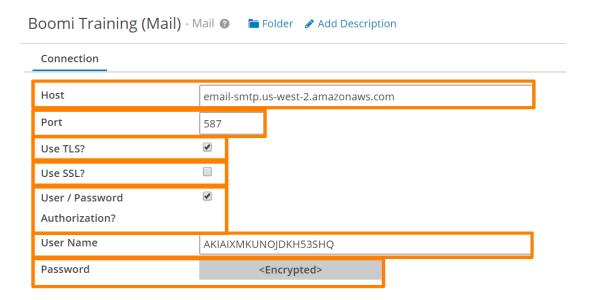
Exercise 20: Create a Salesforce update map

Page(s): 50-56



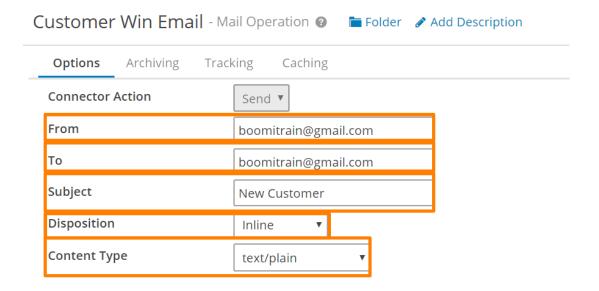
Mail Connection Configuration

- Host: IP Address or the Domain Name of the Mail Server
- Port: The command port the server will listen for incoming connections from a mail client
- Use TLS?: Encrypts all data with a digital security certificate
- Use SSL?: Encrypts all data exchanged between the server with a certificate
- User/Password Auth?: Check to provide login credentials to authorize the user with the mail server.
- User: User Name of the account on the mail server
- Password: Password of the account on the mail server





Mail Operation Configuration (Write/Send)





Instructor To Demonstrate:

Exercise 21: Create a mail operation

Page(s): 57-58



Participants to Complete:

Exercise 21: Create a mail operation

Page(s): 57-58



What is a Message?



- Generates a free-flow text message from dynamic or static inputs
- Converts documents passing through it into new data
- Often paired with Mail connector for advanced notifications

Message	e Shape 🛮
parameters, Docu	pe can generate a free-flow text message from a dynamic or static set of input ments that are sent to a Message shape are transformed and the documents a the format of the message.
Label	Optional
Options	Combine documents into a single message
Message	Prospect -{1}- closed on {2}.
Variables	S Database Profile - Query Customer by Modified Date - NAM E (Statement/Fields/NAME)



Instructor To Demonstrate:

- Exercise 22: Configure a message shape
- Exercise 23: Test the mail connectivity

Page(s): 59-63



Participants to Complete:

- Exercise 22: Configure a message shape
- Exercise 23: Test the mail connectivity
- Additional Challenge 3: Format output to email

Page(s): 59-64



Instructor To Demonstrate:

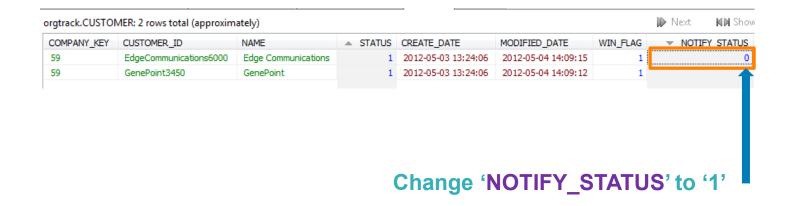
Review Additional Challenge 3: Format output to email

Page(s): 64



Update the Database

Email Notification Sent Reflect Change in DB

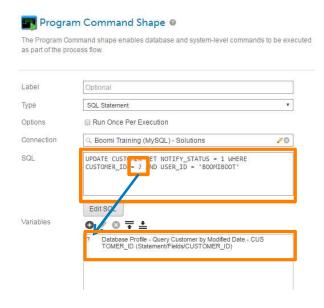




What is a Program Command?



- Executes database and system-level commands in the Process flow
- Includes SQL or command window to write dynamic commands
 - System: {#}Database: ?
- Does not return document(s) into Process flow





Instructor To Demonstrate:

Exercise 24: Add a SQL Command

Page(s): 65-67



Participants to Complete:

Exercise 24: Add a SQL Command

Page(s): 65-67



Congratulations!





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