Salesforce.com
How to deploy enterprise analytics with Salesforce data
Stefan Zepeda
About Me

Stefan Zepeda

Sr. Salesforce Specialist for MicroStrategy:

• 5 years experience with the MicroStrategy platform: MCD, MCE certified.

• 2 years with the Salesforce platform: Service Cloud, Community, Admin and Advanced Admin certified.

• Unique insight on leveraging the power of MicroStrategy to analyze data from SAAS applications and the Force.com platform.

• Experience enhancing business processes and delivering analytics to track KPIs across the organization.

• Focused on fast delivery and full transparency to the business.

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Agenda

• Why MicroStrategy?

• Salesforce limitations

• Different ways to access your Salesforce data from MicroStrategy:
  • Native connector
  • ODBC Driver
  • ETL tools

• Recommended approach

• Examples

• Questions
Why MicroStrategy?
Salesforce has important limitations on analysis, visual and delivery capabilities.

• **Data analysis limitations:**
  • Hard or impossible to model complex object relationships.
  • Limited historical trend capabilities.

• **Visual limitations:**
  • Limited number of columns and thresholds.
  • No concept of tabs or chapters reduce overall usability.

• **Data delivery limitations:**
  • Limited number of subscriptions, recipients and schedules.
Salesforce Data Analysis Limitations

- Salesforce reports are limited to 4 object analysis in a single hierarchy.
- Some objects cannot be reported on even though they exist in the database.
- Functionality that is impossible in Salesforce can be done in minutes with MicroStrategy.
Salesforce Data Analysis limitations

• Unable to create multi-dimensional reports

• Salesforce reports can only display the first 2000 rows

• Salesforce historical analysis capabilities are limited to 2000 rows per snapshot
Salesforce Visual limitations
You need more than 4 columns in your dashboard

• Salesforce dashboards can only show 4 columns per widget and not all columns can be attributes.

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• Extremely limited threshold capabilities.

• Very single focused with no concept of tabs and chapters.
Salesforce Data Delivery Limitations
Reports are useless if they cannot be shared with the business

• Salesforce only allows users to subscribe to 5 reports in total:

• No ability to burst reports to users to keep them in the loop about important metrics.

• No ability to set schedules more granular than one hour:

• No ability to share with external users

• No options to export to PDF or formats other than CSV.
What can we do to overcome these limitations?
3 Ways To Tap Into Your Salesforce Data With Microstrategy

MicroStrategy offers flexibility to connect to your Salesforce instance according to your business needs, delivery schedule and available tools.

• **Native Salesforce Connector**: Essential for both quick prototyping and robust analysis of a predetermined set of Salesforce reports.

• **ODBC connector to Salesforce.com**: Shipped out of the box, provides direct access to your Salesforce.com object as tables in both in-memory and Live connection mode.

• **Traditional ETL tools**: MicroStrategy can also leverage data from a warehouse populated by ETL tools like Informatica.
MicroStrategy-Salesforce Native Connector
Take your Salesforce reports to the next level

• The Salesforce Native connector provides a very quick and robust way to import data from your favorite Salesforce reports into MicroStrategy.

• Doesn’t require SQL/SOQL knowledge or any familiarity with the Salesforce instance in question (plug & play for Salesforce reports).

• Accessible to all areas of the business without IT intervention due to its ease of use.

• Retains Salesforce security controls from the user importing the report.

• Essential for prototyping solutions that can be delivered in minutes.

• Ability to wrangle data as needed using the powerful MicroStrategy data tools.
• Click Salesforce Reports

• Find your report:
MicroStrategy-Salesforce Native Connector
Data in 4 clicks

• Click Prepare or Finish:

• Publish your cube
Limitations and how to overcome them:

• Only supports in-memory mode. **Set an automatic republish schedule that fits your needs.**

• Salesforce reports are limited by the object relationships defined in Salesforce report types. **Data blend multiple reports in MicroStrategy to achieve more complex object relationships.**
Salesforce ODBC Connector
Enterprise grade Salesforce analytics

• Provides a robust, enterprise grade method to access your Salesforce data.

• Supports modeled and unmodeled data access. Configure the Salesforce DSN as a Database Instance to model your warehouse tables or configure your DSN to be accessed via Data Import for quick unmodeled data analysis.

• Allows users to select columns and apply filters in the MicroStrategy interface without the need of a Salesforce administrator.
Salesforce ODBC Connector
Enterprise grade Salesforce analytics

• Perfect for applications that need live connections to Salesforce.

• Ability to join multiple Salesforce tables as needed to bring data from multiple dimensions.

• A single user is configured as the point of entry to Salesforce. Not all your MicroStrategy users will need Salesforce access.

• Do your own snapshots with MicroStrategy Datamarts.
Salesforce ODBC Connector
Modeled data access

• Configure your DSN as a database instance.

• Configure your Salesforce tables as warehouse tables

• Create attributes and metrics as done normally.
Salesforce ODBC Connector
Unmodeled data access

• Configure your DSN in the Data Import menu

• Select the DSN and select the sforce context

• Double click any table and start importing data with SOQL queries.
Salesforce ODBC Connector
Tired of the 2000 row limit in Salesforce snapshots? Make your own snapshots with datamarts!

• Configure the Salesforce ODBC driver as a database instance.
• Build a report with the data that needs to be analyzed historically.
• Configure the Datamart settings on your report to level up your historical analysis of your Salesforce data.
Salesforce ODBC Connector
Overcome the Salesforce object limitations and blend data with MicroStrategy

• In Data Import, import a few tables with a related key
• Using data blending, connect the related attributes
• Start analyzing your data at dimensions not possible with Salesforce.
Salesforce ODBC Connector

Limitations and how to overcome them:

• Requires SQL/SOQL knowledge. Create IT governed cubes for the rest of the enterprise to use. Other users can leverage those cubes at will to build reports and dossiers.

• Requires knowledge of the Salesforce object architecture. Collaboration between your Salesforce and MicroStrategy administrators is key for success in this project. Implement a frequent communication channel between the teams improve the speed of delivery.

• Limited aggregation functions supported at the ODBC level. Perform complex calculations and aggregations in the MicroStrategy Analytical engine rather that in facts and metrics at the database level. If complex fact calculations are needed, use the ETL approach on a robust database.
Traditional ETL Tools

• Flexibility to choose database vendors and ETL tools to extract your data from Salesforce.com.

• MicroStrategy seamlessly connects to your preferred database.

• Supports both modeled and unmodeled data access.

• Supports complex database fact level calculations.
Traditional ETL Tools

Limitations and how to overcome them:

• No support for live connect. **Current ETL tools do not support live connections to Salesforce, make sure you set an automatic republish schedule that fits your needs.**

• High level of effort to deliver an analytics project. **ETL projects typically take a long time to develop. Set expectations and perform an iterative approach to the project.**

• Requires access to a robust database infrastructure, ETL tools and a multidisciplinary team. **Create a checklist of the infrastructure assets you will need and make sure you have the expertise in house or contracted to perform the work.**
So what is the best way to access my data?
Choose The Best Solution Based On Your Requirements

Depending on the requirements choose of the following solutions:

• **Native Connector:**
  • Allows for quick prototyping and fast delivery of solutions.
  • Any project that doesn’t require live connection or complex joins between various salesforce objects.
  • Doesn’t require IT support.

• **ODBC Connector:**
  • Allows for robust prototyping when used in unmodeled data.
  • Perfect for projects that require live connections to Salesforce.
  • In enterprise grade projects, use the modeled data approach.
  • Requires SQL knowledge and IT support.

• **ETL tools:**
  • Most robust but time consuming.
  • Does not support live connections to Salesforce.
  • Use with caution and only when the other methods do not accommodate the requirement.
Iterative Approach To Analyzing Salesforce Data

Objective

- Define your objective and desired outcome.

Discovery & Prototype

- Native Report Connector

Enterprise grade draft

- ODBC Driver with unmodeled data

Enterprise grade solution

- Use modeled data with the ODBC driver or traditional ETL tools
What can I do with my data?
Some examples
Real-time Operational Dossiers
Empower your teams with real-time accountability

- Track progress and prioritize real-time.
- Two blended data sources
- Powerful filters
- KPI driven detailed dashboard

HelpDesk

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HelpDesk

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**Historical Analysis Dossiers**
Plan and analyze your data over time

- **Historical Analysis**
- **Multiple blended data sources**
- **Measure performance**

### Year: 2017

#### Requests Submitted: 32,384

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#### By Request Type

- **Workload by Week**
- **Resolved by Week**

Change Panel below for details

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[@MicroStrategy](https://www.microstrategy.com)
Other examples
Overcoming Salesforce limitations
Create a Dossier to show all items followed by users

- Create a Data import cube with the following two objects: EntitySubscription and User
- Join the SubscriberId column with the UserID column to identify the users following records.
Create a Dossier to show all items followed by users

• Create a couple of visualizations and a quick link to the item followed by the user:
Create A Dossier To Show All Approval/Denial Comments

• Create a Data import cube with the following objects:
  ProcessInstance, ProcessInstanceStep and User table (to identify submitters and approver)
Create A Dossier To Show All Approval/Denial Comments

- Build a dossier specific to your business case:

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Questions?

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