Discovering Business Intelligence Using MicroStrategy 9

Nelson Enriquez
Samundar Singh Rathore

Chapter No. 6
"MicroStrategy and the Cloud"
In this package, you will find:

- A Biography of the authors of the book
- A preview chapter from the book, Chapter NO.6 "MicroStrategy and the Cloud"
- A synopsis of the book’s content
- Information on where to buy this book

About the Authors

Nelson Enriquez is a multicultural executive and business leader with more than 17 years of experience in IT, strategy and planning areas, with specializations in business studies at Stanford (U.S.A), INSEAD (France), and EGADE (Mexico). He has international experience of working on several projects in other geographical locations including Asia, Europe, the Middle East, and South America, that are focalized in business integration, valuing and acquiring technology-related companies (the Due Diligence process), and integrating IT-related operations to company standards (Mergers and Acquisitions). He also has experience in retail, pharma, services, and manufacturing industries as a partner at an IT services company, in Monterrey, as an External Director in a Big Five consultant firm, and as a IT Planning Director at Tier 1 Retail in Mexico.

Dedicated to Nelson and Enzo, my beloved children, to the woman who supports my dreams, and my mother, who always believes in me.

For More Information:
Samundar Singh Rathore is a data warehousing and business intelligence consultant, and a trainer with extensive experience on various data warehousing business intelligence products. He has worked with a large business and analytics organization with specialization in investment and healthcare domain data. He is currently working as a MicroStrategy administrator and architect. He was born in Mundara, Rajasthan, and raised in Mumbai, Maharashtra, which is the financial capital of India. He speaks Hindi and English, and he is also proficient in Java and SQL. He is an active member and the "Guru" of the MicroStrategy official discussion forum at https://resource.microstrategy.com/Forum/UserProfile.aspx?uid=8557.

I would like to thank my family and friends for their support and motivation that led me to put my thoughts together for this book. I dedicate this work to my loving mother.

For More Information:
Discovering Business Intelligence Using MicroStrategy 9

This book covers various MicroStrategy 9 capabilities, such as the do-it-yourself approach, import and export of data from or into MicroStrategy, dashboards, scorecards, sharing or distribution of BI reports/dashboards, Cloud BI, and Mobile BI. It also explains standard designs and best practices applicable to each chapter depending on the content and context. This book, from start to finish, will guide you well on the various offerings and practices around creating various analyses using the MicroStrategy platform Cloud service.

What This Book Covers

Chapter 1, The Value Proposition of MicroStrategy, serves as a guide for the self-service concept, for the prerequisites to install and enable the platform, and for preparing a data set used in the book as a reference. At the end of the chapter, the user will understand the self-service concept and confirm that he can apply the DIY approach.

Chapter 2, Mapping Typical Business Needs, explains to the user the procedure and mechanism, with a very practical approach, of how to map business needs to MicroStrategy components. At the end of this chapter, users will have a clear understanding of how to map their real business to MicroStrategy components.

Chapter 3, Reporting – from Excel to Intelligent Data, explains the procedures and gives hints to design, build, and deploy BI reports using the MicroStrategy platform. The users will be able to generate their first report and analyze data based on a real business need.

Chapter 4, Scorecards and Dashboards – Information Visualization, explains the procedures and mechanisms to design, build, and deploy scorecards and dashboards, focalized in the self-service approach. At the end of this chapter, the user will be able to identify the objects and rules of MicroStrategy for enabling dashboards and scorecards. This chapter will also serve as a practical guide for users to develop their own dashboards.

Chapter 5, Sharing Your BI Reports and Dashboards, covers the procedures to share reports and the subscription engine. At the end of this chapter, the user will be able to set up MicroStrategy components in order to share the reports to defined audiences in an automatic schema.

Chapter 6, MicroStrategy and the Cloud, explains the Cloud offering of MicroStrategy and its usage. At the end of this chapter, the user will be able to identify the Cloud offering of MicroStrategy and see that it is ready to use with basic models.

For More Information:
Chapter 7, *BI Reports at Your Hands*, explains the mobile offering of MicroStrategy, with some practical recommendations and guidelines to enable it. At the end of the chapter, the user will be able to identify the offering of MicroStrategy in the mobile arena, and will be able to design and build a specific model in an iPad and Android device.


Appendix B, *Visualization*, explains various visualization properties and some of the key visualizations in detail.
MicroStrategy and the Cloud

In the previous chapters, we learned how to use the MicroStrategy platform for creating new models, reports, scorecards, and dashboards.

We also saw how to share via different channels without any complex setup of hardware, software, and specialized consultancy from an IT specialist; everything in a do-it-yourself approach.

All of this is possible due to the easy-to-use platform and, more importantly, the usage of the Cloud. But in order to be on the same page, we need to understand what the Cloud is.

In a Cloud approach the companies lease their digital assets, and their users are abstracted from the physical location of resources, such as data centers, applications, and databases they’re using.

These resources are just in the Cloud somewhere; in our case, they are in the MicroStrategy Cloud. Firstly, in the Cloud approach, customers lease the infrastructure and software platform instead of buying them, shifting IT from a capital expense to an operating expense. This is essential for companies as they do not require huge investments in setting up the environment and maintaining them. Organizations can continue to focus on business as opposed to worrying about the environment.

Second, vendors are responsible for everything under the hood—all the maintenance, administration, capacity planning, troubleshooting, and backups.

For More Information:
MicroStrategy and the Cloud

And finally, the MicroStrategy Cloud platform is a high performance, flexible, reliable, and secure platform. The following table highlights some of the key characteristics of the MicroStrategy platform, which enables companies to choose to it.

<table>
<thead>
<tr>
<th>High performance</th>
<th>Flexible</th>
<th>Reliable and secure</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 64-bit architecture</td>
<td>• End-to-end managed services from development to user training</td>
<td>• Systems:</td>
</tr>
<tr>
<td>• In-memory computing</td>
<td>• Connect directly to on-site data with MicroStrategy Direct Connect or host data in MicroStrategy Cloud</td>
<td>48 hours contract to development</td>
</tr>
<tr>
<td>• Best in class databases</td>
<td>• Analytical applications spanning all styles of Business Intelligence</td>
<td>High availability with 99.9 percent uptime guarantee</td>
</tr>
<tr>
<td>• Massive high-speed networks</td>
<td>• Industry-leading BI for either web or mobile devices</td>
<td>Highly redundant global infrastructure</td>
</tr>
<tr>
<td>• State-of-the-art platforms</td>
<td>• Customize the interface by user and application</td>
<td>Vulnerability and penetration testing</td>
</tr>
</tbody>
</table>

The MicroStrategy Cloud portfolio

MicroStrategy offers three different versions of its platform in the Cloud, such as personal, express, and platform. They share the same concept of do-it-yourself schema and strong visualization capabilities, but with some extensions on the express and platform versions.

Personal

This is the entry version of the offer provided by the MicroStrategy Cloud; it is easy to use within minutes and you are able to load data from your Excel files, generate a model, design reports, scorecards and/or dashboards, and share it all with your colleagues and customers. It is intended for only one person in the design and construction role.

For More Information:
This version is ideal for entrepreneurs, journalists, managers, professors, and anyone who needs to analyze data and communicate with their audience. Also, it gives 100 percent self-service and leverages the do-it-yourself approach.

You probably rely on spreadsheets to analyze and share data, as we already discussed. Almost everyone does, but the MicroStrategy Cloud personal edition is smarter. With just a few clicks, you can apply visual intelligence to your data; graph it, slice it, and filter it.

Moreover, this version includes the ability to share our models with mobile devices in a connected mode or offline mode.

The personal edition of MicroStrategy Cloud is free; no upfront or maintenance cost is required and the enablement is very easy, as explained in Appendix A, MicroStrategy Express.

**Personal edition**

MicroStrategy Cloud personal edition characteristics are described in the following table:

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Users</td>
<td>One (edition user)</td>
</tr>
<tr>
<td>Data volume</td>
<td>1 GB</td>
</tr>
<tr>
<td>Data sources</td>
<td>MS Excel</td>
</tr>
<tr>
<td>Reporting</td>
<td>Data visualizations, interactive scorecards, and dashboards</td>
</tr>
<tr>
<td>Sharing</td>
<td>E-mail, social media, and blogs</td>
</tr>
<tr>
<td>Access mode</td>
<td>Web and iPad</td>
</tr>
<tr>
<td>Metadata</td>
<td>Automatic metadata creation. Access and analyze your data instantly. No data modeling or architecture necessary.</td>
</tr>
<tr>
<td>Setup</td>
<td>Instant</td>
</tr>
<tr>
<td>Tech support (in case you need it)</td>
<td>Discussion forum</td>
</tr>
<tr>
<td>Price</td>
<td>Free</td>
</tr>
</tbody>
</table>

This book and all the related examples and guidelines rely on the MicroStrategy Cloud personal edition. MicroStrategy 9.4 now calls the personal edition **Analytic Express**.

**For More Information:**

Express

The express option includes all the functionalities and benefits of the personal edition. Additionally, it provides the design in advanced mobile interfaces without coding, access on premise and Cloud databases, delivery of personalized dashboards to more users, enterprise-grade security, and user management.

In fact, the security and on-premise database access functionalities are more beneficial for an enterprise use of the service.

Express edition

The MicroStrategy Cloud express edition characteristics are described in the following table:

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Users</td>
<td>Unlimited (the size of your wallet)</td>
</tr>
<tr>
<td>Data volume</td>
<td>1 GB per user</td>
</tr>
<tr>
<td>Data sources</td>
<td>• MS Excel</td>
</tr>
<tr>
<td></td>
<td>• Files stored in Web locations</td>
</tr>
<tr>
<td></td>
<td>• Cloud-based or on-premises relational databases</td>
</tr>
<tr>
<td>Reporting</td>
<td>• Data visualizations</td>
</tr>
<tr>
<td></td>
<td>• Interactive dashboards</td>
</tr>
<tr>
<td></td>
<td>• Pixel-perfect reports and dashboards</td>
</tr>
<tr>
<td></td>
<td>• Unique dashboard widgets</td>
</tr>
<tr>
<td></td>
<td>• Advanced and predictive analytics</td>
</tr>
<tr>
<td>Sharing</td>
<td>• E-mail</td>
</tr>
<tr>
<td></td>
<td>• Social media and blogs</td>
</tr>
<tr>
<td></td>
<td>• Secure sharing with other users</td>
</tr>
<tr>
<td></td>
<td>• Scheduled report distribution</td>
</tr>
<tr>
<td>Access mode</td>
<td>• Web</td>
</tr>
<tr>
<td></td>
<td>• iPad</td>
</tr>
<tr>
<td>Metadata</td>
<td>• Automatic metadata creation</td>
</tr>
<tr>
<td></td>
<td>• Instant access and analysis of data</td>
</tr>
<tr>
<td></td>
<td>• No data modeling or architecture necessary</td>
</tr>
<tr>
<td>Setup</td>
<td>Instant</td>
</tr>
<tr>
<td>Tech support (in case you need it)</td>
<td>Live phone, e-mail, and web support</td>
</tr>
<tr>
<td>Price</td>
<td>Per user monthly subscription and capacity-based annual contract</td>
</tr>
</tbody>
</table>

For More Information:

Platform

The platform version of MicroStrategy Cloud is focalized for large deployments across companies with Business Intelligence solutions and leverages the Cloud benefits. It also supports several models from different processes across the company sharing a common set of data.

This version also includes a high-end database platform for extracting, transforming, and loading data from several sources.

The components of the solution are quite different in the personal and express versions. In fact you require more knowledge of Business Intelligence reports, design, and support from an IT specialist for the platform setup; the approach of do-it-yourself is no longer valid in this alternative.

We already know the fundamentals and benefits of the personal edition of MicroStrategy Cloud and the key advantages of the express edition, in particular the security, on-premise database, and the automatic distribution. In the next section of this chapter, we will learn the advantages of the express edition.

Express edition in action

The first step is to enable the express evaluation version in our account that we have already created. We need to create a new team from the main menu of MicroStrategy; select the **New Team**… option and add a name and description in the **Name and Description** field, which in our case is **Commercial** as shown in the following screenshot:

A team groups several reports of dashboards and scorecards. Imagine an area or business department within your company that is a team; each team will have its own security and controls.

For More Information:  
Data sources

Each team can include several reports, but the key difference in the creation of reports is the data source option. Let's create a new dashboard to review the options within the new team named Commercial, which is already created. Select a new dashboard and you will get the complete list of data source options, as shown in the following screenshot:

The data source for the Excel files includes the Use File from Disk option, similar to the personal edition or a URL (the Internet address). This applies when we have data deposited in a document management or intranet repository.

The Salesforce data and the Database option allows us to connect to a relational database, customers, inventories, sales, and so on. Select the objects and start creating your reports; for this option we will need help from the IT staff for the connectivity data. The typical connectivity data required for database access will depend on whether the database we want use is IT related; the following screenshot shows the Microsoft SQL configuration:

For More Information:
By default, when we select the database option, a **Sample Database** is loaded. Select this database and the following table by double-clicking on the **Credit_Card_Purchases** option and select all the related columns in the table by clicking on the add button [+] located at the right-hand side of the field, as shown in the following screenshot:

![Database connection](image)

Then click on the **Continue** button and select the **Grid visualization** option; MicroStrategy will show the default view. Now, click on the **Save** button and name the report as **Inventory Dashboard**.

All the concepts that we learned about filters, visualization objects, layouts, and panels apply to this edition as well. In this case, the difference is the data source options.

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**For More Information:**

MicroStrategy and the Cloud

Security

Another value-added functionality in the express edition is security. With this version we can manage more users and also manage the level of access of each user to our reports. Let's start with users.

In the main menu of MicroStrategy, select the Administration option located at the top of the menu, as shown in the following screenshot:

![Administration Menu](image)

Now, the three main options, Manage Users, Manager Groups, and Team Launchpad (we will analyze later), will appear.

Select the Manage Users option and add a new user. The required data is the name, e-mail, and role such as Administrator (able to configure the platform and create new reports) or Consumer (is only able to view the information). Select the Consumer role; when the user is created in the system, it asks for user notification. Select No in this case.

For demo purposes, create a user with your alternate e-mail in order to play two roles.

The result will be similar to the following screenshot:

![Manage Users](image)

Now it is time to invite the new user to access the MicroStrategy platform; select the user and the message button [ ] and click on the Send option.

For More Information:  
The new users will receive an e-mail with an invitation and a link to activate the account. When the user activates the account, the platform will request to generate a password and confirm the general data of the user.

The same procedure applies for the Manage Groups option. Select this option and then create a new group named Consumers users, and add the user that we created in the previous step.

In order to add a user into a group, select the Manage Groups option in the user's list, click on the drop-down button located in the Name field of the user, and select the desired group.

Applying security

When we have defined the users and groups, it is possible to apply security filters in our models for each user, in particular for two roles, Can view and Can modify.

This option is named Set Permissions and is located in the main dashboard view of the platform in the Share option of the model, as shown in the following screenshot:

For More Information:

The system will show a screen in order to select a user (select the user that is already created) and assign the Can view permission in the Inventory Dashboard option, as shown in the following screenshot:

If we use the login of the new user, the user will only be able to view the reports that have an access with the designed role.

This functionality is very helpful when the data and structure of our report require to be controlled only for a few users, as well as to give access to a specific report. For example, the platform can contain several reports and scorecards from commercial, financial, or HR department. With this option we can assure you that only the users with access to a specific report will be able to consume the information.

Another level of security offered in the MicroStrategy express edition is the capability to choose data from our dashboards and scorecards, which we want to display to specific users. For example, we can display only the data for a specific region for one particular user even when the report contains data for all regions. This function is called personalize.

**Personalize**

Using our inventory dashboard, let's configure the personalize option for the following case. The new user, which we have already created, needs to have access to the inventory information, but just for the self-employee customers.

In the administration view of MicroStrategy, the personalize attribute option is configured via the add button [+] located in the Manage Users option.

For More Information:

Add a new personalization field named **customer type** with the data type text. For the new user, in the new personalization field, type **self-employees** as shown in the following screenshot:

![Personalization Field Example](image)

Now in the main dashboard view, select the **Inventory Dashboard** option and map the personalization field **customer type** to the corresponding field in the inventory model (in the main dashboard option under the **Share** option).

Select the **Personalize** option, search for the **Occupation Category** attribute, select the personalization value **customer type**, and click on the **OK** button as shown in the following screenshot:

![Personalization Dashboard](image)

When the users with personalization fields access the dashboard, they only access the data where the attribute occupation category is equal to self-employees. This option is very useful when combined with the level of access to the dashboard. You can control which users will be able to change the report or only read it, and what content can be read within the report.
Deliveries

Another key characteristic of the express edition is the ability to share our reports in an automatic way via a scheduled program. In the personal edition, we need to trigger the action manually in order to share the report.

This option only schedules the delivery via e-mail with a link, or embeds the PDF report within an automatic e-mail. The option to configure this functionality is in the main dashboard menu in the Deliver option under the Share menu, as shown in the previous section. The procedure to schedule a delivery is as follows:

1. Select the destination users from the register users list.
2. Define a subject for the e-mail.
3. Select the option to include the portable dashboard if it is required.
4. The body of the text is fully configurable. The text between {} are the system variables. Please don't modify their content; you can delete it if you want.

In the frequency selector, you can immediately select from a specific schedule as shown in the following screenshot.

- Daily
- Weekday
- Weekly
- Monthly

For More Information:
The system includes an option to deliver the report one time, immediately, besides the scheduled delivery time.

You can generate several deliveries of the same report with different users and schedules; for example, you only need the dashboard once a month for the Commercial VP, but you would need it every week for the store managers.

Also, it is possible to modify a predefined schedule via the deliveries menu or in the main dashboard view by selecting the message button located at the right-hand side of the desired model, as shown in the following screenshot:

Refresh data
The refresh data functionality allows us to reload our data without compromising the design of the reports; we don't need to rebuild it when the data of the model changes.

In the personal edition, this option is triggered manually, but in the express edition this functionality can be automated if the data structure remains the same. If we have more columns or changes in data types, we need to reimport and analyze the data again; we don't need to rebuild our model even with this option.

This option is enabled in the main menu of the dashboards available in each report. The option is called Refresh data and it has two alternatives; Refresh now and Set schedule refresh.
MicroStrategy and the Cloud

The Set Schedule refresh option allows us to schedule a refreshing of the data at a specific point of time and is similar to the delivery options, as shown in the following screenshot:

If the data of the source changes in terms of structure, when the refresh data is executed, the design data load option is triggered in order to map the new fields.

Summary
During this chapter we learned why the Cloud option is a real alternative for our reporting needs today, as well as we understood the complete portfolio that MicroStrategy offers to leverage the Cloud concept, in particular the express option, which has a cost.

The express option offers extra functionality over the personal option, such as access databases as the source of data, security for report access and attributes within the reports, automate report deliveries, and automate the refreshing of data when this data changes.

The personal edition functionality for designing and configuring the reports is exactly the same as that we used in the express edition. In MicroStrategy 9.4.1, the release Cloud platforms are now called analytics platforms.

For More Information:  
Where to buy this book


Free shipping to the US, UK, Europe and selected Asian countries. For more information, please read our shipping policy.

Alternatively, you can buy the book from Amazon, BN.com, Computer Manuals and most internet book retailers.