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*See page 4.*

## We Don't Use Databases

*Dream of freedom from the RDBMS.*

*See page 16.*

## Integrating Oracle and Hadoop

*When an RDBMS is not enough.*

*See page 20.*

***Much more inside . . .***

# Oracle Siebel CRM 8 Installation and Management

A Book Review by **Brian Hitchcock**

## Details

**Authors:** Alexander Hansal

**ISBN:** 978-1-849680-56-1

**Pages:** 560

**Year of Publication:** 2010

**Edition:** 1

**List Price:** \$70

**Publisher:** Packt Publishing

**Overall Review:** A thorough introduction to the architecture and management of Siebel CRM 8.

**Target Audience:** Anyone new to Oracle Siebel CRM 8.

**Would you recommend this book to others:** Yes.

**Who will get the most from this book?** Administrators.

**Is this book platform specific:** No.

**Why did I obtain this book?** My group at work was preparing to support Siebel CRM 8 for the first time.



## Overall Review

Everyone brings a context to everything they do. For this book review, my context is that I've never worked on a Siebel CRM system before. I've heard some things about it over the years, but I've never actually worked with such an environment. Given that, I'm highly qualified to review this book from the viewpoint of someone that needs to have a high-level overview and come up to speed on the basics as fast as possible. By the same token, this also means that I can't offer a review from the perspective of someone who has many years of experience administering Siebel CRM.

Given my context, this book delivered exactly what I needed. After reading this book, I can tell you about the components of a Siebel CRM system and some things I would look for if I were asked to troubleshoot such a system. This leads to another important point: It is always good to get some exposure to new things—in this case, software products that I haven't seen before. I may not end up working with Siebel full time, but learning how the product works has given me a fresh perspective on the other Oracle products that I do work with all the time.

Because I'm not a Windows Administrator, I can't comment on the sections of the book that discuss Siebel on Windows. My experience is with Linux/UNIX systems. I was expecting to

see some discussion of Siebel CRM on virtual machines (VM) and specifically on Oracle Virtual Machines (OVM), but it never came up. Since I am working with OVM more and more often, I would have liked to have seen this discussed. As each aspect of Siebel was discussed, there was a section with information about how to verify the installation. This is very good information that is not often included. I was able to find related information using the index, which is also a good thing. Similarly, at the end of many sections of the book, a URL was given linking to the relevant official Siebel documentation. One negative observation is that some of the figures were primitive. In two cases it is difficult to read the labels of the system components in the figure because the text is obscured by the lines of the figure.

## Chapter 1—Introducing the Siebel Web Architecture

The high-level architecture is discussed. Since I'm new to Siebel and the discussion was all about Siebel, I wasn't sure if I should assume that this meant Oracle Siebel CRM or not. It became clearer as I got through more of the book, but initially, I wasn't really sure that "Siebel CRM" was the same as "Oracle Siebel CRM." Because I have been working with Oracle Fusion Applications recently, I would have liked to see the author compare and contrast Siebel CRM with the CRM components of Fusion Applications. I was also unclear about how the licensing for Oracle Siebel CRM works. Several components of Siebel CRM are Sybase products, for example. Can I assume that a license for Oracle Siebel CRM includes all the needed licenses for the Sybase software products? Overall, I would have liked to see some discussion of the timeline for Siebel CRM as it moved from a Siebel product to an Oracle product, and the various changes that were made to the product along the way, including licensing issues. I was fascinated to learn that Siebel does not use the RDBMS for constraints; these are all handled in the application software. I had heard this before but wasn't sure if it was true until I read about it here. That seems like a throwback to a time long ago. The diagram of the Siebel Web Architecture was good. I have long been confused about the "Siebel Enterprise Server" versus the "Siebel Server," and now I know that the Enterprise Server is a logical term for the entire system, which can have one or more Siebel Servers executing.

The discussion also covers configuration parameters that have been stored in files in the past but have been moving into the database. The various components of the Siebel Enterprise are presented. I learned that the Siebel Web Templates contain

HTML tags that are proprietary. I found this fascinating. For the end user to see all the data inside Siebel CRM, the user must use the HI mode, which stands for the “High Interactivity mode, and this mode is only supported using Microsoft Internet Explorer. I would have liked to see a discussion of the plans for the Siebel product. I assume it will move away from proprietary HTML commands and away from supporting only one web browser, but this isn’t made clear.

The chapter ends with a summary wherein the author tells us that “installing Siebel CRM is a complex endeavor that involves multiple professionals.” It seems to me that software is always getting more complex. After all these years, why isn’t it becoming less complex?

## **Chapter 2—Planning and Preparing the Installation**

This chapter covers the steps needed to prepare and execute the installation of Siebel CRM, the various components involved, and various license key issues.

The author begins this chapter with the following: “Implementing Siebel CRM for thousands of users in corporations that do business across the globe is not something a single person would do on a single day.” This reinforces the point that Siebel CRM is a complex product. We are then warned that many issues with Siebel CRM projects can be traced back to a lack of planning. I wondered if this is unique to Siebel, but that isn’t discussed. My experience is that all large systems have issues that go back to insufficient planning. Another way this happens is that the project requirements change while the planning is happening, and at some point something has to get built.

Steps are presented for the reader to set up a Siebel development system to be able to follow along with the discussions in the text. This development environment requires a host machine with a VM and fully licensed MS Windows. Since I don’t have anything like this available to me, I didn’t attempt to set up this development environment.

## **Chapter 3—Installing Siebel CRM Server Software on Microsoft Windows**

Here we learn how to install the software on MS Windows servers. This can be done in a GUI mode and a console mode. The GUI installer is used to install most but not all of the Siebel components. The specific inputs needed by the GUI for each component are discussed. Specific advice is presented, such as the need to install the database server utilities on the same machine as one of the Siebel servers. The level of detail provided for each component is good. To integrate Siebel CRM with other products, such as MS BizTalk and Oracle Enterprise Business Suite (EBS), requires installing EAI connectors. The Siebel Web Server Extension is installed using a separate installer and must be installed on each individual server where a web server will run. The Environment Verification Tool (EVT) is provided to check that everything, including patches for the Siebel server software, is in place.

## **Chapter 4—Configuring Siebel Server Software on Microsoft Windows**

Having discussed installation on MS Windows, this chapter covers how to configure the installed software. This is done

with the Siebel Software Configuration Wizard, which also validates various configuration parameters. This wizard runs in two phases, gathering the inputs and then configuring the software. The Siebel Gateway Name Server must be fully installed before any other part of the Siebel Enterprise Server can be set up. You can set up multiple Enterprise Servers to use a single Name Server, but this isn’t supported. The Name Server is the heart of the Siebel CRM installation. It can use either the database or LDAP to authenticate users. By default, the database is used, but MS Active Directory is another option. Configuring the database requires executing a SQL script and other utilities to set up the needed tablespace names, user passwords, and additional user accounts. This process also creates tables, indexes, functions, and procedures, and imports seed data.

## **Chapter 5—Installing and Configuring Siebel CRM Server Software on Linux**

This chapter covers the same installation and configuration issues as the previous two chapters, only this time on the Linux platform. There are many specific details that are different for Linux. We are told to use a non-root user account for the install steps, and I’m curious about what most installations use. My guess would be “siebel,” but we aren’t told. The Siebel Gateway Name Server is also known as the name daemon on Linux. Configuring the Siebel Enterprise on Linux creates the ODBC data source, which is defined in a hidden file .odbc.ini.

Details are given for installing the database schemas and seed data, configuring the Siebel Servers, the Siebel Web Server Extension (SWSE), and starting all the various components on Linux.

## **Chapter 6—Installing Siebel Client Software**

Most business users will connect to Siebel CRM using the Siebel Web Client that uses files downloaded by the user’s browser. All users have access to the Siebel Web Client when connected to the corporate network. For users that don’t have a full-time Internet connection, there is the Siebel Client Software, which requires installing software and configuring other components. The differences between—and the confusion about—Developer Web Client and Mobile Web Client are covered. Siebel Client Software is only supported using MS Internet Explorer. I would hope this limitation is going away soon, but that isn’t discussed. A Siebel sample database must be installed to support the Client Software. This sample database is a Sybase Adaptive Server Anywhere database, which makes me wonder again about license issues; it is installed not by the Oracle Universal Installer (OUI) but by using InstallShield. The application of Client Software patches, which does use OUI, is discussed.

## **Chapter 7—Installing Ancillary Siebel Server Software**

The “ancillary” software turns out to be Visual Mining’s NetCharts server and Business Intelligence Publisher (BI Publisher). I have not worked with Visual Mining’s NetCharts before. This product creates charts to help visualize the data from web-based applications. We are told that NetCharts is a lower-cost option compared to BI Publisher. I would have liked some comments on how this will be handled in the future.

Will NetCharts continue to be an option, or will BI Publisher be the only choice? The author also mentions that many customers choose to export data into MS Excel and points out that this is a lengthy, insecure, and error-prone process. I agree.

The steps to install and configure both NetCharts and BI Publisher are covered. This includes setting up needed Siebel Enterprise parameters.

A useful history is presented that explains how BI Publisher came to replace Actuate Report Server. I found the summary of what BI Publisher actually does to be very good. Among other things, BI Publisher supports multiple heterogeneous data sources and is built using pure Java and XML.

## **Chapter 8—Special Siebel Server Configurations**

The Siebel Enterprise Server is a logical construct of multiple software components, one of which is the Siebel Server. Each Enterprise Server will have one or more Siebel Servers to handle the processing. This chapter covers the installation and configuration of multiple Siebel Servers. Setting up multiple Siebel Servers is usually done in production environments to support scalability and failover, and to minimize downtime during deployments. The author recommends that we only install one Siebel Server on each server. Since virtual servers are not specifically addressed, I don't know if that would include multiple VMs on a single physical server, with a single Siebel Server on each VM.

Three different kinds of load balancing are supported in Siebel. Single Siebel Server, Siebel Native Load Balancing, and Third-Party Load balancing are all described, along with the configuration details for each. The SWSE also needs additional configuration to support load balancing. This chapter ends by describing the process of installing additional language packs. I found it interesting that not all system messages are translated, so we must always install the English language pack first before installing any other languages.

## **Chapter 9—Siebel Server Management**

Once the Siebel CRM environment is installed and configured, it needs to be maintained. This requires understanding all of the different servers and components, and all of the parameters affecting them. The various server management screens that appear in the Siebel client are shown as well as the command-line utilities available that perform the same functions. The various software components are grouped to simplify their management, and the most important groups are identified. There are many parameters in Siebel, and collections of parameters are called "profiles." The parameters are organized into the enterprise hierarchy. Parameters in one level inherit all the parameters from the lower levels. This means that it is important to be careful when changing parameters, as the change can propagate and affect other parameters.

Two standard administrative user screens are shipped with each standard Siebel application, one for server configuration and one for server management. The data displayed in these screens is stored in the Siebel Gateway Name Server, and we can query the Name Server to retrieve specific information. However, the Name Server is not an RDBMS, and we are cau-

tioned not to use SQL wildcards when retrieving data from the Name Server.

## **Chapter 10—User Authentication**

Siebel CRM offers several ways to authenticate users. The default is database authentication. This requires that every Siebel user also have a database user created. Other options are LDAP and Web SSO. For LDAP, MS Active Directory is also supported. Siebel CRM also provides a software development kit (SDK) that supports custom authentication solutions. The author advises that "*avoiding redundant user accounts across various systems is the most crucial aspect of professional user administration,*" without further discussion. I would ask if this is more important than user password security. The main authentication component is the Security Adapter, which is configured for the chosen authentication. If database authentication is chosen, you can use the same RDBMS that contains the Siebel data or a separate database. Whatever the configuration details may be, the user accounts and passwords are always managed outside of Siebel CRM.

## **Chapter 11—User Authentication and Access Control**

Having discussed user authentication in the previous chapter, we move on to look at how access control works in Siebel CRM. This refers to restricting access to Siebel views, customer data, and master data. Siebel views are the actual web pages a user sees. Views, along with groups of users, are associated with responsibilities. For mobile users, views that allow access to large data sets should not be available when the user is working offline to prevent performance issues.

Note that controlling access to customer data is not handled by the database. The data is in the database and the details of the access controls are stored in tables in the database, but the access control is not based on any mechanism built into the database itself. Data that is relatively static, such as product information, is referred to as "master data." Whole sets of data can be set up as catalogs and categories, which makes it easier to grant access to one or more users. It is confusing that Siebel can control access to views based on conditional expressions using the Siebel Query Language. Yes, that would be "SQL" but not the SQL you are used to thinking of.

## **Chapter 12—Managing User Accounts**

Managing users in Siebel CRM requires understanding divisions and organizations and how to set them up. I'm not clear what the impact would be of a major reorganization. Someone has to update all of the information to move people around. Is there a process for this? This isn't addressed. This chapter covers setup and management of the position hierarchy; setup of user and employee accounts; and setup of divisions, organizations, and user and employee accounts.

Since the authentication of users is handled outside Siebel, you also need to create user accounts in the database or LDAP. If database authentication is used, this means creating a database user for each Siebel CRM. If LDAP is used, we are told that "*info entered in Siebel screens will be propagated to the directory server and a new directory server account will be created automatically.*" Really? What is the mechanism for this? Does

this happen in real time or due to some batch update? Finally, if a user is removed from LDAP, does that change get propagated back into Siebel? These subjects aren't addressed.

### **Chapter 13—Siebel Remote and the Siebel Development Environment**

Siebel Remote is a module that synchronizes local databases with the central Siebel database. This is used even if a customer doesn't deploy mobile clients, because developers still need it to set up local workspace for development work. Synchronization involves exchanging transaction information between the Siebel database and the local database. The database stores information about Siebel transactions in tables. Don't get confused—these are Siebel transactions, not the database transactions. The central and local databases are synchronized by exchanging files. These files are generated by reading the transaction information from each database. There is no discussion of conflict issues or how they are resolved. If the same data is changed in both the central and the local database, how does the synchronization process handle this? Perhaps this issue doesn't come up. I would also like to have seen some comments on the size of these transaction files and how long the synchronization process typically takes. For a large organization, I would expect the files would be large and synchronization would take a long time.

### **Chapter 14—Installing and Configuring the Siebel Management Server Infrastructure**

The Siebel Management Server Infrastructure consists of the Siebel Management Server and the Management Agent. This infrastructure is currently used by two Siebel modules: the Application Deployment Manager (ADM) and the Siebel Diagnostic Tool. ADM is used to migrate configuration changes from one Siebel CRM environment to another. The Diagnostic Tool is discussed in a later chapter. This chapter provides an overview of the infrastructure as well as installing and configuring the components. The prerequisites for the Siebel Management Server are presented, as is installation on MS Windows. Finally, the steps to install and configure the Siebel Management Agent are discussed. The Management Agent software must be installed on each machine that runs Siebel Server.

### **Chapter 15—Migrating Configuration Changes between Environments**

This topic comes up when, for example, you need to transport configuration changes from a development environment to test and production environments. First we learn how to deploy the Application Deployment Manager (ADM). Then we see how to extract administrative data which are grouped into data objects. Examples include data for List of Values, responsibilities, positions, and organizations. The major administrative objects are described as well as the ADM architecture. To extract changes from the source environment, we generate the ADM package, which is then copied and applied to the target. Other migration utilities are explained.

The author ends this chapter with the following statement: "The complete, flawless, and reliable deployment of configura-

tion changes from one Siebel enterprise to another is a complex endeavor that cannot be accomplished with a single tool." I'm becoming convinced that Siebel administration is not for the faint of heart!

### **Chapter 16—Monitoring Siebel Applications**

This chapter describes how complex the Siebel environment is, due to interwoven architecture, heterogeneous hardware, software from various vendors, and large numbers of users. The Server Component Event Logging is presented, which includes Siebel Application Response Measurement (SARM). Siebel software components include instrumentation points that gather timing information as requests flow through the system. Once SARM is enabled, `sarmquery` is used to examine the log files that are generated. A command-line utility

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is provided to select information from the log files. The `sarmquery` utility uses syntax that is unique but looks very much like SQL. The Siebel Diagnostic Tool takes SARM data and outputs charts and tabular data. SARM only provides data on the server side. Siebel also provides client-side logging, which is used to gather performance data for the client, and the client log file is discussed.

### **Conclusion**

This book provided what I needed. Since I did not have any previous experience with Siebel CRM, I needed a high-level review of all of the major components along with a brief description of what each one does. I was struck by the complexity of the product, but that may be because it is new to me. The other products in the Oracle Applications Unlimited product suite are complicated. Imagine trying to take all the pieces and parts of Siebel CRM and Oracle EBS and all the other products, combining them all, and rewriting them all in Java to use a common interface. That's the challenge of Fusion Applications. ▲

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