Oracle® Retail Order Management System (CWSerenade) Installation Instructions

Release 5.0

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Oracle® Retail Order Management System Installation Instructions, Release 5.0

Revision History

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NOTE: The rebranding for the latest version of these instructions is in development as part of post MICROS acquisition activities. References to former MICROS product names may exist throughout this document.

Special Note for installing on Windows 2008/2012 servers

If you are installing Serenade on Windows 2008/2012 server, when you are requested to run a windows batch file (.bat) or a windows executable (.exe), be sure to right-click and select 'Run as administrator' instead of simply double-clicking. An example of this is the setup.exe in step 2 of Install the CWSerenade Application. Also, in order to edit and save a properties file you will need run the notepad application also using the 'Run as administrator' option.

Prerequisites

- 1. A recent Java JDK or JRE (1.5 or greater) must be loaded on each application server in order for the installation to run. This JDK or JRE must also be in the path. To test this simply go to a command line and execute Java –version. If it returns a valid result the JDK/JRE is set up properly.
- 2. All installation steps must be performed by an Administrator of the machine, or someone with Administrator authority. Failure to do so will cause the application to not fully install.

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The following table is provided so that you can collect the needed information for the installation of CWSerenade version 5.0. Information may be case-sensitive so record case accurately.

Information needed for the installation of the CWSerenade database:

Needed information	How to obtain this information	Database Server	Value
Needed information	How to obtain this information	step used	Value
		Steps 9 and 10 of	
		Preparing for the	
	This will be the user id the CWSerenade application	installation of the	
Database server login	server will use to communicate with the CWSerenade	<u>CWSerenade</u>	
id/password.	database.	<u>Database</u>	
The drive on the application		2a	
server where you want the	The database image will be temporarily stored in the		
saved database image to be	Serenade50Database folder on the application server		
temporarily stored.	before it is moved to the database server for installation.		
The drive and folder where		2b	
the saved database image			
will be copied to from the			
application server before it is	By default this is C:\Install\Database but can be any valid		
restored into SQL Server.	path on the database server.		
The drive letter where the		2b	
SQLData folder is stored on	The default for this is D, but should be changed to the		
the database server.	proper drive for your database server.		
		2b	
The drive letter where the			
SQLLogs folder is stored on	The default for this is E, but should be changed to the		
the database server.	proper drive for your database server.		
		2c	
	Sample data includes data that could assist you in setup		
Would like to have the	or your basic understanding how the system works. If		
	you choose not to have sample data, the delivered		
installed database to include	database will only contain data needed to start using		
sample data?	CWSerenade.		

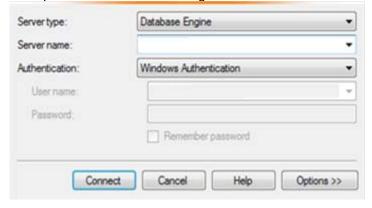
	You will use this initial user to initially sign in with, and also to set up other users. Initially it will be granted all access authority, but can be restricted once other users	2d	
The user id of an initial user.	are created.		
	The default user is needed in CWSerenade in order to run certain background jobs and webservices. It is	2e	
The default user id of a default user.	recommended this user be a user id of a user that is different from the initial user.		

Information needed for the installation of the CWSerenade application:

		Application Server step	
Needed information	How to obtain this information	used	Value
The installation drive letter where		2a	
CWSerenade version 5.0 is to be installed	This is the drive letter where CWSerenade version 5.0 will be installed.		
The database connection information including the name of the database server, database name, and the user id and password for the CWSerenade	Ohtoin this from your datch one administrator	2b	
database	Obtain this from your database administrator.	2c	
Email server connection information (Server name, user id, password, and from email address)	In order for Serenade to send emails, it will need the name of the email server to use, a user id and password that can be used to log into the email server, and a email address to send emails from. Obtain this information from you email/network administrator.	20	
An email address where support emails should be sent.	This needs to be a valid email address where CWSerenade can send support level emails.	2c	
A unique name for each application server to be used to distinguish the application server for logging purposes.	This can be the name of the application server or any unique name.	2d	
Amount of memory on this application server	1. Locate My Computer (either on desktop or from Start menu). 2. Right-click on My computer and select properties. 3. On the General tab near the bottom it generally indicates the amount of memory in GB of RAM.	2e	
The location of your TLS keystore and the password for this keystore	The location of the TLS keystore and the password for this keystore are needed in order to keep TLS enabled. Please note that these will not be required if you chose to disable TLS in CWSerenade.	2g	

Preparing for the installation of the CWSerenade Database

- 1. Log into the database server where the CWSerenade database will be installed.
- 2. Open the SQL Server Management Studio. You should see the following display:

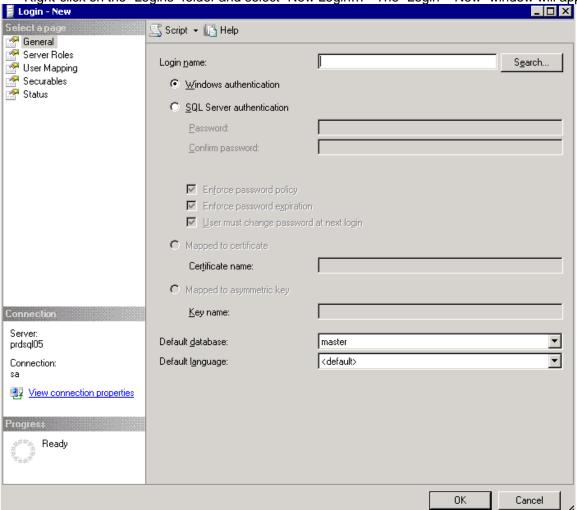


- 3. Fill in the Server Name if it is not filled in with the name of the Database Server.
- 4. Change the "Authentication" from "Windows Authentication" to "SQL Server Authentication". This should open up the "Login" and "Password" entry fields.

Note: If "SQL Server Authentication" is not available as an option, stop the installation now and inform the system administrator that SQL Server authentication must be configured to be "SQL Server and Windows Authentication mode" in order to install CWSerenade.

5. Enter "sa" in the "User Name" field and the password in the "Password" field. Make sure "Remember Password" is not checked for security concerns. Click "Connect."

- 6. The main window of the "Management Studio" will appear.7. The first thing you must do is create a User Profile for the Serenade application. The next steps will step you through this process.
- 8. In the "Object Explorer" pane on the left hand side of the window, expand the "Security" folder.



Right-click on the "Logins" folder and select "New Login..." The "Login – New" window will appear, as shown below:

9. Fill in the Login name with your desired login name.

- 10. Click "SQL Server authentication". This will open up the protected fields, allowing you to specify the following information:
 - a. Password: Your password for the login.
 - b. Confirm password: same as above.
 - c. Enforce password policy: unchecked
 - d. Enforce password expiration: unchecked
 - e. User must change password on next login: unchecked
- 11. Select the "Server Roles" page by clicking on the Server Roles under the Select a page label on the left part of the window.
- 12. On the Server Roles page, check the box next to sysadmin. Also make sure the box next to public is checked.
- 13. Click OK to add the user.
- 14. On the Management Studio, right-click the "Logins" folder and select "Refresh." You should now see the Login name that you created listed.

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Installing the CWSerenade Database

- Copy the *Database Server* folder to one of the applications servers where you want to install CWSerenade. This server must have access to the SQL Server where the CWSerenade database will be installed the server where you want to install the CWSerenade database.
- 2. In the *Database Server* folder of the Install image that you just copied, you will find a setup.exe. Double-click this file to start the installation of the database.

If for some reason the installation window does not appear, please contact Micros support.

Once the installation window appears follow the prompts and instructions in the installation and return to this document when the application installation is complete. Listed below are some of the prompts in the installation that may need clarification:

a. The installation will prompt for the drive where you would like the CWSerenade database saved image stored. This is the drive on the local application server that the saved image of the database will be temporarily stored before it is manually moved over to the database server. This will default to the "C" drive, but if you would like to have CWSerenade installed on a different drive please change it. Please make sure to include the colon (:). An example of the completed prompt is shown below:

Enter the drive where you want the database image stored: $\[\overline{\text{C:}} \]$

b. Next the installation will prompt for information about the database server itself. The first is the drive and folder where the saved database image will be copied to from the application server before it is restored into SQL Server. By default this is C:\Install\Database but can be any valid path on the database server. The next question is the drive letter where the SQLData folder is stored on the database server. The default for this is D, but should be changed to the proper drive for your database server. The last question is the drive letter where the SQLLogs folder is stored on the database server. The default for this is E, but should be changed to the proper drive for your database server. An example of the completed prompt is shown below:

Enter the drive and folder that the database image will be placed on the database server:	C:\Install\Database\
Enter the drive on the database server where SQLData is stored:	D
	_
Enter the drive on the database server where SQLLogs is stored:	E

c. Next the installation will prompt to ask if you would like to have the installed database to include sample data. If you check the box, then the delivered database will include sample data that could assist you in setup or your basic understanding how the system works. If you leave the box unchecked, then only the data needed to start using CWSerenade will be included in the delivered database. The default is to only deliver the needed data and not to include the samples. An example of this prompt with sample data not being included is shown below:

Would you like the sample data to be included in the delivered database?

d. Next the installation will prompt for the user id of an initial user. You will use this initial user to initially sign in with, and also to set up other users. Initially it will be granted all access authority, but can be restricted once other users are created. An example of this prompt with filled in with example data is shown below:

An initial user needs to be created allowing you to set up the CWSerenade application. This initial user will be intially granted all access authority, but can be restricted once other users are created.
Enter initial user id: INITIALUSR

e. Next the installation will prompt for the default user id of a default user. The default user is needed in CWSerenade in order to run certain background jobs and webservices. It is recommended this user be a user id of a user that is different from the initial user. An example of this prompt with filled in with example data is shown below:

A default user needs to be created to run background jobs and web services.
This, for example, is the user that will show up as the created by user on the order when the order comes through the OrderAPI.
Enter default user id: DEFAULT

- 3. At this point the saved image of the database will be stored in X:\CWSerenade50Database where X:\ is the name of the drive you supplied in above. The database is not yet installed, and the next steps are listed here as they were at the end of the installation program:
 - a. Copy the contents of X:\CWSerenade50Database, where X: is the drive you specified in step 2a above, from the application server where you ran the install above to the path on the database server that you specified in step 2b of the the installation above. By default this location was C:\Install\Database\.
 - b. Open Microsoft SQL Server Management Studio and log in using the user id and password you created in steps 9 and 10 of **Preparing for the installation of the CWSerenade Database.**
 - c. Open up a query window.
 - d. Copy the contents of the Install_CWSerenade_Database.sql found in X:\CWSerenade50Database, where X: is the drive you specified in step 2a above, to the query window and execute the query.
 - e. Check the "Messages" tag for any completion messages, and refresh the list of databases to ensure that CWSerenade was restored.
 - f. Delete the X:\CWSerenade50Database folder, where X: is the drive you specified in step 2a above, from the application server where you ran the install above.

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Install the CWSerenade Application

- 1. Copy the *Application Server* folder to the application server where you want to install the CWSerenade application. If your site has multiple application servers, please copy this folder to each application server.
- 2. Inside the Application Server folder is the *setup.exe*. Double-click this file to start the installation of the application.

If for some reason the installation window does not appear, please contact Micros support.

Once the installation window appears follow the prompts and instructions in the installation and return to this document when the application installation is complete. Listed below are some of the prompts in the installation that may need clarification:

f. The installation will prompt for the drive where you would like the CWSerenade application to be installed. This will default to the "C" drive, but if you would like to have CWSerenade installed on a different drive please change it. Please make sure to include the colon (:). An example of the completed prompt is shown below:

Enter the drive where CWSerenade is to be installed: C:

g. The installation will prompt you for the name of the database server and connection information. This defaults to <u>localhost</u> so please make sure to change this to the name of the database server where you installed the CWSerenade database. The installation also prompts you for the name of the CWSerenade database. This defaults to CWSerenade which should be correct unless you renamed the CWSerenade database. The install also prompts for a user name and password to be used by the CWSerenade application to connect to the CWSerenade database. All information is required.

Enter database server name:	localhost
Enter the port for the database connection:	1433
Enter database name:	CWSerenade
Enter Schema/User name for the database:	
Enter password for the database: Re-enter password for the database:	

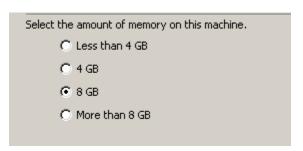
h. The Installation will prompt you for email server connection information to allow CWSerenade to connect to the email server and send emails. The installation needs the name of the email server, the email address for CWSerenade to use to send emails from, and the user id and password for Serenade to use to sign into the email server. An example of this prompt is shown below:

Email Server Setup The following information is needed to allow Serenade to connect Careful: These fields are case sensitive!	to your email server to send emails.
Enter the Email Server name:	
Enter the Email Address to send all emails from:	
Enter User name for the Email Server:	
Enter User password for the Email Server:	
Enter password for the email server: Re-enter password for the email server:	
Enter a valid email address where support emails should be sent:	

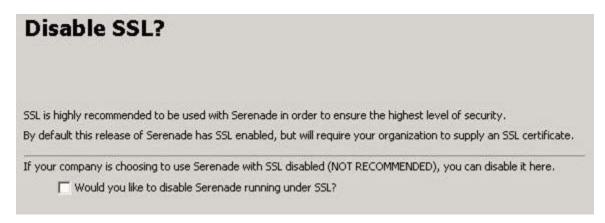
i. The installation will prompt you for a name to uniquely identify this application server for logging purposes. This does not need to be the real name of this server, but should be a name that can be used to identify this machine from all other application servers running CWSerenade. An example of this completed prompt is shown below where APP01 is the name of the server:

Enter server name for logging:	APPO1

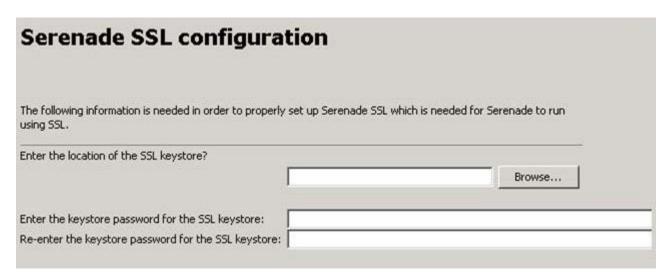
j. The installation will prompt you for the amount of memory on this application server. This is needed so that the proper configuration will be used when installing the Serenade service. If your value is between one of the values listed, select the next higher value. For example if you have 7GB, select the 8GB setting. An example of this completed prompt is shown below:



k. By default, this version of CWSerenade requires all customers to be running over TLS. If for some reason your installation chooses not to do this, then the following prompt can be selected during the installation to disable TLS in CWSerenade:



I. If you did not disable TLS, then the location of your TLS keystore and keystore password are required in order for CWSerenade to run under TLS



3. At this point CWSerenade is installed and set up on this server. It is recommended that you reboot the application server before continuing to make sure that all of these changes take effect. If you have additional application servers where you plan on installing CWSerenade, please repeat the **Install the CWSerenade Application** for each of these machines including the steps in the prerequisites of this document.

Additional setup in a multiple server environment

It is fairly common that CWSerenade will be set up in a multiple server environment so the instructions below describe how to set up your application servers in a multiple server environment.

- 1. The first step is to determine which application server you wish to be the primary application server. This server will be where all generated reports, documents and shared logs will be stored.
- 2. Once the primary application server has been identified, then you should log on to this server and share the X:\Serenade\CWSerenade directory where X: is the drive where you installed the CWSerenade application. This directory must be accessible to all other CWSerenade application servers and must have all authority rights to this directory and files under it since files will need to be added, deleted, and changed.
- 3. Before logging off the primary application server, make note of the name of this machine, or the IP address of this machine since this will be necessary to point the other applications server to it.
- - a. X:\Serenade\server\conf\cwdirectcpproperties\cwdirectcp.properties where X: is the drive where you installed the CWSerenade Application. There should be five (5) or more places to change.
 - b. X:\Serenade\server\conf\cwdirectcpproperties\cwdirectcp_logging.properties where X: is the drive where you installed the CWSerenade Application. There should be one (1) place to change.
 - c. X:\Serenade\server\conf\cwdirectcpproperties\cwdirectcp_labelprinters.properties where X: is the drive where you installed the CWSerenade Application. There should be sixteen (16) places to change.
 - d. X:\Serenade\server\conf\cwdirectcpproperties\cwdirectcp_monitor.properties where X: is the drive where you installed the CWSerenade Application. There should be one (1) place to change.
- 6. An additional file that needs to be changed is X:\Serenade\server\conf\cwdirectcpproperties\cwdirectcp_email.properties where X: is the drive where you installed the CWSerenade Application. Find the line that starts CWEMAIL_TEMPLATE_PATH. This line should be set up as follows where *primaryappservername* is the name of your primary application server:
 - CWEMAIL TEMPLATE PATH=//primaryappservername\\CWSerenade\\EmailTemplates\\
- 7. An additional file that needs to be changed is X:\Serenade\server\conf\jenasysproperties\jenasys.properties where X: is the drive where you installed the CWSerenade Application. In this file the config.dir=C:/CWSerenade should be changed to config.dir=//name or IP address of primary application server/CWSerenade. Please note the number of forward slashes.

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- 8. Since each of your non-primary servers needs to access a file on another server, a user will need to be set up to run the Serenade Service that has authority to access these remote files. See **Setting up a user to run the Serenade Service** below to see how to set up this user. After this user is set up, make sure to assign it to run the Serenade service.
- 9. In order for these changes to take affect, the Serenade Service will need to be stopped and restarted.
- 10. If you have more than one non-primary application server, repeats steps 4-9 on each of these servers.

Additional notes on Multiple Server Environments

- 1. If CWSerenade is shut down on any of the machines in the environment, the CWSerenade application on all servers must be stopped and started.
- 2. If the CWSerenade Application server designated as the primary needs to be rebooted for any reason, CWSerenade on all other servers will need to be stopped and then restarted after the primary server is brought back online.
- 3. When starting up CWSerenade on all servers, the order should be:
 - a. CWSerenade on the Primary Application Server
 - b. CWSerenade on the first non-primary server.
 - c. CWSerenade on the second non-primary server.
 - d. CWSerenade on the ... non-primary server.

Testing the CWSerenade Application

- 1. Once the CWSerenade application has been installed you can give it a quick test by doing the following:
 - a. Open a browser and point it to the CWSerenade application. The URL for the CWSerenade application is https://server:8443/CWSerenade.html where server is the name of the application server where you installed CWSerenade. Please not that if you are not using TLS, this address is https://server:8443/CWSerenade.html.
 - b. Log into the CWSerenade application using the following:
 - i. User: The Initial user you supplied in step 2d of Installing the CWSerenade Database.
 - ii. Password: The password will be the same as the user id.
 - iii. You will be immediately prompted to change the password. The password must be at least 7 characters and no longer than 12 characters. It also must contain at least one number, and one uppercase letter.
 - iv. After changing the password, you will immediately be logged off and asked to login using the password you just created.
 - v. Please be patient since the first time you log onto the Serenade application it may take longer than normal for the first screen to come up. If you happen to get a blank screen, simply close the browser and launch Serenade again.
 - c. At this point you should be logged in. On the first log in it may take the initial screen a couple minutes to completely load, so please pause and allow it to completely load before starting to maneuver around from screen to screen. This only is necessary after the Serenade service is restarted and not on every login.
 - d. To check the application level and database level do the following:
 - i. Click on the MyJobs icon to get to the MyJobs screen.
 - ii. Click on the About button located on the side bar.
 - iii. On the About window, make sure the setting below match what is on this window:

Version = **5.0.150305-1350**Database Level = **5.0.0.0171**

- 2. If you have additional application servers where you have installed CWSerenade, please repeat the **Testing the CWSerenade Application** for each of these machines.
- 3. Once you have verified that all application servers are on the correct version, the final step is to make sure all application servers are sharing the same cache. To do this do the following steps:
 - a. Open a browser and point it to the Serenade application.
 - b. Log into the Serenade application.
 - c. Click on the MyJobs icon to get to the MyJobs screen.
 - d. Click on the Advanced commands to get to the Command screen.
 - e. Click on the My Cache button on the side bar to get to the Cache screen.
 - f. In the Servers in Cluster part of the screen, make sure you can see the IP addresses of all the other Serenade application servers excluding the one you are currently using. For example if you have three Serenade application servers that you just completed upgrading, you should see the IP address of the two additional application servers. If you do not see the correct application servers or see additional servers that you don't believe you should, please should contact support for assistance.
 - g. Repeat steps 3a-3f for each Serenade application server.

Note about installation on test servers:

If this installation is used for a test server, it is important to make sure that the multicastGroupAddress is changed in the ehcache.xml file located on each test application server. This file is located at X:\Serenade\server\additional-lib\ where X: is the drive where you installed the CWSerenade Application. If this setting is not changed, it will be sharing a data cache with your production environment which will potentially cause problems. Please see the CWSerenade Configuration and Operations Guide for more information on this file.

Notes about client browser configuration

- 1. Pop-up blockers must be set to allow pop-up windows since the CWSerenade.html URL will launch a new window.
- 2. Javascipt must be enabled in the browser. This can typically be handled by making sure the URL is in the "Intranet" zone.
- 3. If launching a second window, you MUST launch a new instance of Internet Explorer.

Setting up a user to run the Serenade Service

By default the Serenade Service runs under the Local System account which works fine as long as you don't need the application to write to other servers as would be needed if you are in a multiple application server environment or if you want to use encryption. It is recommended that you use a domain user for ease of set up, but if needed, the same local user may be used on each machine. The following instructions should be used as a guide to help you set up a local user which will allow CWSerenade to access other application servers and also access MQ:

- 1. Create a local user on each CWSerenade application server and assign them to both the Administrators and mqm groups. Make sure that the user is the same on each CWSerenade application server.
- 2. Create a local user of the same name as was used above on the server that contains the MQ manager. This user must only be assigned to the the mgm group.
- 3. Set the Serenade Service to run as the newly created user account.

If a domain user is used, this user must have Administrator authority on all the CWSerenade machines and must be included in the mqm group.

Troubleshooting

One of the most common errors that occur during the installation process is the misspelling of the database server name. This manifests itself by allowing the user to access the CWSerenade application sign-on screen but the application always responds with an "Invalid User/Password". The following steps will show you how to correct the name of the database server on the CWSerenade application servers:

- 1. Log onto the CWSerenade application server that seems to have this problem.
- 2. Get any users off this machine and then stop the Serenade service if it is running.
- 3. Open the file X:\Serenade\server\conf\jenasysproperties\dbconfig.properties, where X: is the drive where you installed the CWSerenade Application. You should be able to open this file with any text editor.
- 4. In this file the database name is listed two (2) times. Replace both these names with the correct name of the database server that contains the CWSerenade database. Make sure you are careful with the case of the server name since it is case sensitive. Save this file after you are done.
- 5. Open the file X:\Serenade\server\conf\tomee.xml, where X: is the drive where you installed the CWSerenade Application. You should be able to open this file with any text editor.
- 6. In this file the database name is listed two (2) times. Replace both these names with the correct name of the database server that contains the CWSerenade database. Make sure you are careful with the case of the server name since it is case sensitive. Save this file after you are done.
- 7. Restart the Serenade service on this machine and try to sign-on again.
- 8. Remember that if you have multiple application servers you may need to correct this on each server.