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Crystal Enterprise

Renaming the Crystal Enterprise System

Overview

This document is intended to assist you rename a server that has a complete installation of Crystal Enterprise (CE) 8.5 installed and running. It is intended for system administrators who have strong working knowledge of CE.

CE services, and consequently the entire Enterprise environment, can be adversely affected by changing the name of the server they are running on. If it is necessary to rename some or all of your servers, please read this entire document before beginning the process.

If you have any questions, please contact Crystal Decisions Technical Support before you rename the server. We will address any of your questions and help ensure that your system remains stable and highly available after the renaming process is complete.

Contents

Introduction

This document outlines step by step how to rename an Enterprise system. Follow this document sequentially to ensure that you complete each step.

If you are changing the name of a server that only has CE servers installed except the APS, there are no issues with renaming a server and the process is relatively simple.

However, renaming a server is more complicated when:

- the only APS in the environment is installed and running on the server that is to be renamed.

- the database server that stores the APS' system database tables is renamed and the APS on another server cannot connect to it. Determining why a database server fails to start after the server has been renamed is beyond the scope of Crystal Decisions Technical Support. Please refer to the database manufacturer's documentation for assistance.

- the web server is installed on the server that is being renamed. CE supports many different web servers, some of which are extremely sensitive to being renamed. Determining why a web server fails to start or function after the server has been renamed is beyond the scope of Crystal Decisions Technical Support. Please refer to the web server manufacturer for information and support before you rename the server.

While this document focuses on how to rename a Windows based server that has a complete CE install on it, the above three points are also discussed.

NOTE	**CE will be unavailable throughout this process**
	Renaming a server that has all CE services installed means that the entire system will be unavailable throughout this process. Ensure your users are informed ahead of time that the system will be unavailable.

Before Renaming the Enterprise System

Backing up data is critical to protecting the production system should any complications occur during the renaming process.

The following items must be saved or backed up prior to renaming the system:

- current server settings

- service configuration information

- APS system database

- Input and Output FRS File Stores

Log Current Server Settings

It is important to note the configuration settings for each server that is listed in the Crystal Management Console (CMC). Without these configuration settings, it is difficult to return the servers to their original state after the system is renamed. It is necessary to use the same configuration settings to ensure that the renamed system operates correctly in your environment.

To record the server settings in the CMC, complete the following steps:

1. Log onto the CMC as an administrator and click **Manage Servers**.

2. Click a server name and that server's properties display. Copy these properties into a text file.

3. Click each server to see its properties and create a list of these configurations for future reference.

Log Current Service Configuration Information

When CE services start, they run command line options. These options are important to note before renaming the system.

To output these command line options to a text file, complete the following steps:

1. Open the Crystal Configuration Manager (CCM) and also open Notepad.

2. Click the Crystal APS and then click the 'Copy' button on the toolbar. This button is located to the right of the 'Print' button.

3. Open Notepad and from the **Edit** menu click **Paste**.

4. Repeat steps two and three for each server listed in the CCM.

5. Save this as a .TXT file in an easily accessible location.

Back up Automated Process Scheduler's (APS) System Database Tables

The changes you are about to make to your CE server will modify the entries in your system database. If you need to return to the original database, restoring a backed up copy of the database is critical.

To find out where you are storing the crystal enterprise system tables, refer to Appendix A.

To back up the APS system database tables, complete the following steps:

1. Open the CCM and click the APS from the list of servers.

2. Click the **Stop** button. If you have more than one APS running as a cluster, you must also stop all additional APSs.

3. Commit any existing transaction logs and back up the system database. Refer to your database manufacturer's documentation for instructions on backing up your database.

4. Verify that you can restore the back up of the system database. Do not proceed until this can be done successfully.

NOTE	If your CE installation uses the Microsoft Database Engine (MDSE) for its system database and you do not have access to SQL Server Enterprise Manager, information on how to back up the system database from the command line can be found at www.microsoft.com Search for Knowledge Base article Q241397.

Back up the File Repository Server (FRS) Content

To prevent loss of objects or instances, it is recommended that you back up all FRS content. The FRS content contains the report files that are used in the CE environment and are referenced in the system database. You can find the directory location of your FRS content by referring to the configuration of the Input and Output servers created from the CMC.

Renaming the Enterprise System

With all information logged and all critical data backed up, you are ready to change the name of the Enterprise system.

Reconfigure NT Authentication

To reconfigure NT authentication, complete the following steps:

1. Log on to the CMC and click **Manage Authorization.**

2. Click the **Windows NT** tab to view your NT authentication settings. This tab displays the Default NT Domain and the Mapped NT Member Groups as shown in Figure 1. If the groups are mapped to the local computer, the computer to be renamed, then authentication will not work correctly after the system has been renamed. Once the system is renamed you cannot change the value of the **Default NT Domain** field if it is mapped to the computer that was renamed.

3. Set the **Default NT Domain** to a global NT Domain and the **Mapped NT Member Groups** to a global group.

Figure 1

	When changing NT Member groups, there is the possibility that user folders and user rights could be lost. Make sure that the global NT group you are mapping to contains the same NT members as your previous group.
NOTE	If you are unsure about any part of these instructions, please contact Technical Support.

Stop all Services and Rename System

At this point, the services can be stopped and the computer can be renamed. To do this, complete the following steps:

1. Open the CCM and click the **Enable/Disable Servers** button.

2. Log on to the APS, click the **Disable All** button and then click **OK**.

3. Select all the servers listed in the CCM and then click the **Stop** button.

4. Select all the servers again and click the **Delete Server** button.

5. If you have any database server and/or web server running on this computer, ensure that you do what is necessary for these services to start and function once the computer has been renamed. Refer to the database or web server manufacturer, for help in these areas.

6. Rename the computer and restart it.

7. Test and ensure that other servers recognize the newly named computer on the network through host name resolution.

	If you have the MSDE running on this system, upon startup you should get an Error message. The error message is "Your SQL server installation is either corrupt or has been tampered with (unknown package id). Please rerun Setup."
	For information regarding how to resolve this error, go to www.microsoft.com and search for Knowledge Base article Q229875.

Ensure that Web Server and Database Server Function Correctly

Once you rename and restart the server, confirm that the web server is working. Confirm that you can view the server's default web site by going to http://<new_server_name> If you cannot do this, there is a problem with your web server and the CE system will not function correctly.

Please refer to the web server manufacturer for information and support if the web server does not function correctly. Troubleshooting the web server is beyond the scope of Crystal Decisions Technical Support.

If there is a database server running on the computer, such as the MSDE, ensure that the server is running and that you can connect to it outside of CE. The database client must be reconfigured so it can communication with the database. In the case of the MSDE, the ODBC DSN must be reconfigured to reflect the new server name and tested to connect.

Please contact the database manufacturer for assistance is you cannot connect to the database server. Please contact the database manufacturer for information and support if you cannot connect to the database. Troubleshooting the database server is beyond the scope of Crystal Decisions Technical Support.

Reconfigure the Web Connector

Once you have confirmed that the web server and database function as expected, reconfigure the web connector to the new server name. Because the Web Component Server (WCS) is still configured to communicate with the old WCS, you must edit this entry and change the name of the WCS to the new server name.

To do this, complete the following steps:

1. In the CCM, click the **Configure web connector** button. This button has a picture of a computer with a yellow wrench on it.

2. Select the WCS listed in the top pane of the **Web Connector Configuration** dialog box and then click the **Edit** button.

3. Change the **WCS Host Name** to the new server name and click **OK.**

4. Stop and restart the World Wide Web Publishing Service in the CCM for the changes to take effect.

Recreate APS and WCS

Now it's time to re-add the services that we deleted earlier. To do this, complete the following steps:

1. In the CCM, click the **Add Server** button and then click the **Next** button in the **Add Crystal Server Wizard**.

2. Select **Crystal APS** from the **Server Type** box.

3. Type any display name you would like.

4. In the **Server Name** field type the new server name.

5. Point the new APS to the same data source as it was using previously.

6. Start the new APS and ensure that its Status changes to **Running**.

7. Next add the WCS. Follow the prompts in the **Add Crystal Server Wizard**. Be sure to use the new server name.

8. Click the **Enable/Disable Servers** button in the CCM and enable the WCS.

9. Start the WCS and ensure you can connect to the CMC successfully.

Recreate all other services

Once you are able to connect to the CMC, recreate all the other CE services.

Recreate the other services using the **Add Crystal Server Wizard.** The steps for doing this are very similar to those used to add the APS. Follow the prompts in the wizard making sure to specify the new server name and APS name.

When all the services are recreated, output the service information to a .TXT file. For instructions to do this, go to the Output Service Configuration Information to a Text File section of this document.

Compare the service information from the original .TXT file you made to this new .TXT file. For example, compare the original cache server settings and the new ones to ensure that the new cache server is configured the same way the old one was.

Leave all services except the WCS in a status of **Stopped**.

Configure Services to Communicate with the Cluster

Ensure that the services you just created specify communication with the cluster name rather than the APS name. This way, the services know to communicate with any other APS that are added to the cluster.

To determine what the cluster name is, complete the following steps:

1. In the CCM, right-click the APS and from the submenu click **Properties**.

2. Click the **Configuration** tab

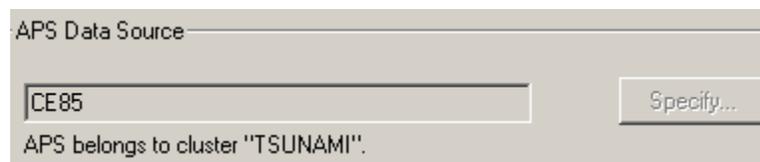3. You should see something similar to Figure 2 displayed in the bottom half of the **Configuration** tab.

Figure 2

In Figure 2, the cluster name is **@TSUNAMI**. The cluster name is always prefixed with the **@** symbol.

To configure the services to communicate with the cluster name, complete the following steps:

1. In the CCM, right-click any service and from the submenu click **Properties**.

2. Click the **Configuration** tab and in the **APS Name** field type the cluster name. Click **OK**.

3. Repeat steps one and two for each service.

4. Start and enable all services. These services will not be used by the Enterprise system until they are enabled. Please note that the page server may take up to two minutes to communicate with the cache server.

Configure Servers in the CMC

It is time to reference the old servers' configurations that you recorded before renaming the Enterprise system. The new servers must now be configured in the CMC. To do this, complete the following steps:

1. Log on to the CMC as an administrator and click **Manage Servers.**

2. Click each server listed and compare it's Properties to those recorded earlier.

3. Ensure that the properties match except that the new server name is used where applicable.

After Renaming the Enterprise System

At this point, you should have a fully functional CE system. If you experience difficulties with the system, log on to the CMC and disable and then enable all the. If you still experience difficulties, restart the system. Please contact Crystal Decisions Technical Support if you have issues with this process.

When you have a fully functional system, there are some maintenance tasks you may want to perform. These tasks are optional.

- The shortcut for the Crystal Launchpad will not work correctly unless you update it with the new server name. To update it, browse to **<drive>:\ Program Files\Crystal Decisions\Enterprise\win32_x86**, locate **createshortcut.exe** and execute it. You will be prompted for the new server name. Type the new server name and click **OK**. The shortcut is now updated and will work correctly.

- Entries of the old CE servers still exist in the system database. To delete these servers, log on to the CMC as an administrator and click **Manage Servers.** Select the check box to the right of each old server and then click **Delete**.

- By default, an APS cluster name reflects the name of the first APS that you install prefixed with an **@** symbol. To modify the cluster name see page 208 of the CE8.5 Administrator's Guide.

	The third party products discussed in this white paper were not fully tested in conjunction with Crystal Enterprise prior to its release. Officially supported Crystal Enterprise platforms are listed in the text file Platforms.txt found in the root of the Crystal Enterprise CD as well as in the Knowledge Base article c2009003 (search for this article number at http://support.crystaldecisions.com/kbase), which is more current.
	The information in this document is provided as a courtesy to assist our customers with the configuration of our product in conjunction with these third party platforms.
	In the event issues arise with an unsupported configuration, there is no escalation support; however, they will be considered during the development of the next generation of our product.

Appendix A

How to Tell What Database the APS or APS Cluster is Using

The APS can access the system database through ODBC or natively to Oracle 8.17 or DB2 7.2.

To determine which database CE is using, complete the following steps:

1. Open the CCM on the APS server and right-click **Crystal APS**.

2. From the submenu click **Properties** and then click the **Configuration** tab.
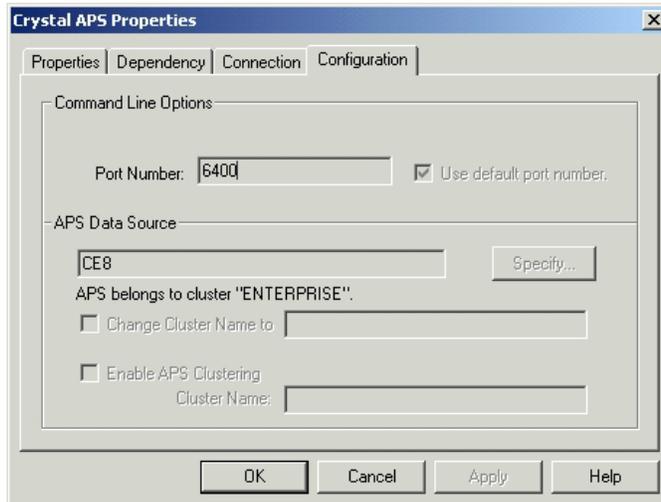

Figure 3

3. The database connection that the APS is using is specified in the **APS Data Source** field. The APS Data Source listed may reference an actual ODBC DSN, the TNS Name Entry (for Native Oracle) or the DB2 Service Name (for Native DB2). The default is CE85 pointing to a database on a local MSDE SQL server.

NOTE	You must use the CCM on the APS server to see database configuration information
	If you open the CCM on another server and change the server name to one with an APS installed, you will still be able to configure the server. However, you will not be able to view or change any database information.

How to Tell What Type of Access the CE 8.5 APS Is Using

The **APS Data Source** field in the CCM only lists the data source name but it does not list the actual database and connection method. As stated above, the

APS Data Source listed can be referencing an ODBC DSN, the TNS Name Entry (for Native Oracle) or the DB2 Service Name (for Native DB2).

To determine what method the APS is using to access the database, check the registry of the APS server. Browse to the following key:

HKEY_LOCAL_MACHINE > SOFTWARE > Crystal Decisions > 8.5 > APS > Instances > <APS Name> (where **APS Name** is the name of your APS server.)

The connection type is stored in the Value Name, **DatabaseDriver** as shown in Figure 4. The top window uses and ODBC connection and the bottom window uses a native connection.
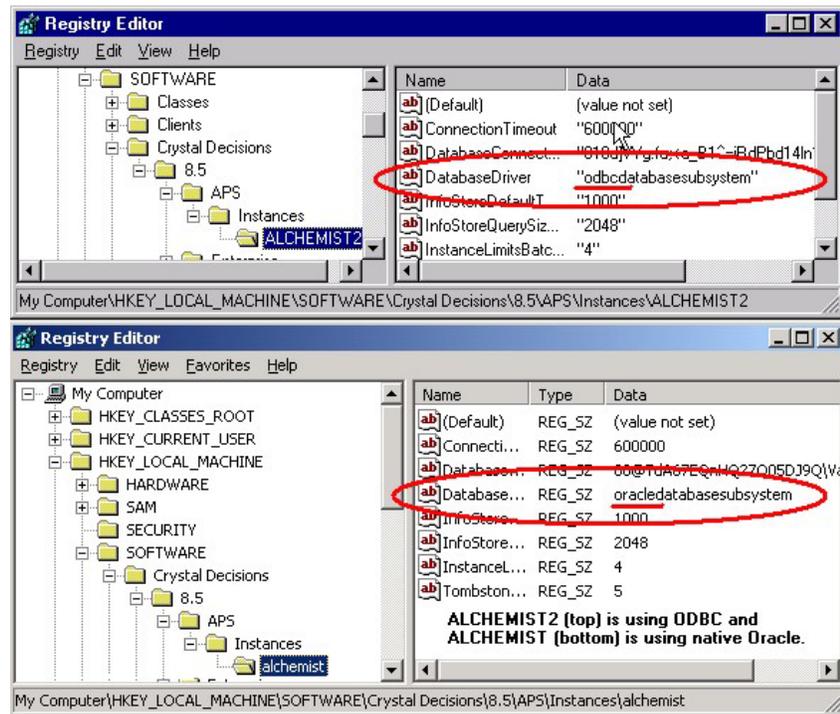

Figure 4

Another method is to use the Modules utility to look at the database drivers are being loaded by the CrystalAPS.exe. To get Modules, go to http://support.crystaldecisions.com/downloads and search for the file name modulex.zip. This zip file includes the utility as well as instructions for using the utility.

IMPORTANT	If the APS is using an ODBC connection, it is important to know that this only tells you what ODBC Data Source Name the APS is referencing to connect to the system database. It does not tell you what actual database the CE system is using. To determine the actual database, you must locate check the DSN in the ODBC Administrator.

Contacting Crystal Decisions for Technical Support

We recommend that you refer to the product documentation and that you visit our Technical Support web site for more resources.

Self-serve Support:

http://support.crystaldecisions.com/

Email Support:

http://support.crystaldecisions.com/support/answers.asp

Telephone Support:

http://www.crystaldecisions.com/contact/support.asp