C32/CCD Clinical Summary
(BJMD)

Database Encryption SOP

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1.0 Introduction

This document contains the Standard Operation Procedures (SOP) for encrypting the C32 database.

The installation process for the C32/CCD Clinical Document (BJMD) package automatically creates a new Caché database for the C32 Ensemble production. The installation process does not currently encrypt the new database, therefore sites that have encryption enabled in Ensemble need to encrypt the new database after it has been created. Instructions for encrypting a database in Ensemble have been provided in a separate document.

This document provides instructions for how to prepare the C32 Ensemble production and Caché database before encrypting the database and how to return the database and the C32 Ensemble production back to a running state afterwards. By following these instructions, a site can encrypt its C32 database(s) without RPMS downtime.

**Note:** If your site has more than one RPMS database with an associated C32 database, follow the steps outlined in this document for each C32 database.
2.0 Standard Operating Procedures

Note: Mistakes during the encryption process may result in corruption of the Ensemble namespace. To prevent the loss of data, the database encryption must be performed in coordination with Area Office IT personnel.

2.1 Stop C Messaging

Sign onto the RPMS system as a user with the %All role. Go to the C Messaging Menu by selecting the BJMD C MESSAGING option. From the C Messaging Menu, select the Manage C Messaging Transmissions option. At the “Stop C Messaging” prompt, type Y to stop C messaging.

Select OPTION NAME: BJMD
1 BJMD BACKGROUND JOB Background job for C Messaging transmissions
2 BJMD C MESS MGR Manage C Messaging transmissions
3 BJMD C MESSAGING C Messaging Menu
4 BJMD C32ALLGEN Generate C32 documents for all patients in RPMS
5 BJMD C32GENONE Generate C32 for a single patient

PRESS <RETURN> TO SEE MORE, '^' TO EXIT THIS LIST, OR
CHOOSE 1-5: 3 BJMD C MESSAGING C Messaging Menu

EDIT Edit C Messaging Site Parameters
ONE Generate C32 for a single patient
ALL Generate C32 documents for all patients in RPMS
MANG Manage C Messaging transmissions

Select C Messaging Menu Option: MANG Manage C Messaging transmissions
C Messaging status:
No configuration problems found
C Messaging processing task is running
Stop C Messaging? No/// Y (Yes)
Attempting to stop C Messaging....C Messaging stopped

Figure 2-1: Stop C Messaging

2.2 Unschedule the Nightly C32 Job

This step is required only if your site has the C32 nightly job scheduled. If your site does not have the C32 nightly job scheduled, then skip to Section 2.3.
From the **C Messaging Menu**, select the **Edit C Messaging Site Parameters** option. Unschedule the nightly job by entering `@` at the “**TIME TO RUN NIGHTLY TASK**” prompt, then entering `Y` at the “**SURE YOU WANT TO DELETE?**” prompt. Make a note of the existing value as you will need to enter it after the database has been encrypted.

Select OPTION NAME: BJMD

1. BJMD BACKGROUND JOB  Background job for C Messaging transmissions
2. BJMD C MESS MGR  Manage C Messaging transmissions
3. BJMD C MESSAGING  C Messaging Menu
4. BJMD C32ALLGEN  Generate C32 documents for all patients in RPMS
5. BJMD C32GENONE  Generate C32 for a single patient

Press <RETURN> to see more, `'^'` to exit this list, OR

CHOOSE 1-5: 3  BJMD C MESSAGING  C Messaging Menu

EDIT  Edit C Messaging Site Parameters
ONE  Generate C32 for a single patient
ALL  Generate C32 documents for all patients in RPMS
MANG  Manage C Messaging transmissions

Select C Messaging Menu Option: EDIT  Edit C Messaging Site Parameters

Now editing C Messaging parameters:

BACKGROUND JOB DELAY: 1 //
RECORD GLOBAL REFERENCES: Do not capture global references
//
TIME TO RUN NIGHTLY TASK: 23:00 // @
SURE YOU WANT TO DELETE? Y  (Yes)

Now editing C32 (Patient Summary)-specific parameters:

DAYS KEEP TRANSMISSION ENTRIES: 30 //
REPOSITORY LOCATION: http://sample.ihs.gov:19090/PatientRecordReceiverService/PatientRecordReceiverService  Replace
Checking free space... OK
ENABLED?: YES //

Figure 2-2: Unschedule nightly C32 job

### 2.3 Stop the C32 Production

The instructions for this step depend on which version of Ensemble you are using. If your version of Ensemble is 2009 or 2010, then follow the instructions in Section 2.3.1. If your version of Ensemble is 2012, then skip Section 2.3.1 and follow the instructions in Section 2.3.2.
2.3.1 Ensemble 2009/2010

Enter the System Management Portal. Select the Ensemble Management Portal option in the System Administration column.

Figure 2-3: System Management Portal, Ensemble Management Portal option
In the Ensemble Management Portal, navigate to the C32 namespace by selecting the appropriate namespace from the **Namespace** select box in the upper right.

![Figure 2-4: Ensemble Management Portal, namespace selection](image-url)
In the C32 namespace, click the **Stop Production** button.

![Figure 2-5: Ensemble Management Portal, Stop Production button](image-url)
Click **OK** on the **Ensemble Production Stop** screen. If a dialog box asks if you are sure you want to stop the production, click **OK**.

![Ensemble Production Stop screen](image)

Figure 2-6: Ensemble Production Stop screen, OK button

### 2.3.2 Ensemble 2012

1. Sign on to Ensemble’s Management Portal as the administrator.

2. At the top center, the main **Management Portal** page displays the server name, the current user, the current namespace, license and instance information, and a **Switch** link. Click the **Switch** link.
Figure 2-7: Ensemble's Management Portal
In the **Namespace Chooser** box, select the appropriate C32 namespace. The namespace will consist of "C32" concatenated with the name of your RPMS namespace. For example, if your RPMS namespace is called "TEST5", then the associated C32 namespace will be called "C32TEST5". Click **OK** to select the namespace. The namespace displayed on the **Management Portal** page will be updated to reflect your selection.

![Namespace Chooser](image)

Figure 2-8: Namespace Chooser
3. On the main Management Portal page, select Ensemble in the left column, then select Configure >>, then select Production. When the View, Edit, Start, or Stop a Production option appears, click the Go button to display the Production Configuration page.

![Management Portal](image)

Figure 2-9: Ensemble's Management Portal, Production Go button
4. Above the Services column on the left, the words **Ensemble Running** will be displayed. If the words **Ensemble Stopped** are displayed, then the production is already stopped and you should skip to section 2.4.

![Figure 2-10: Ensemble production in a stopped state](image-url)
5. Click the Stop button. It might take the production a few seconds to stop. When it stops, you will see the text in Figure 2-12 appear on the screen. There might be additional messages on this screen if it takes Ensemble more than a few seconds to stop all associated processes.

![Stopping Production](image)

Figure 2-11: Stopping the Ensemble production

1. Click OK to return to the Production Configuration screen.
2.4 Dismount the C32 Database

The instructions for this step depend on which version of Ensemble you are using. If your version of Ensemble is 2009 or 2010, then follow the instructions in section 2.4.1. If your version of Ensemble is 2012, then skip section 2.4.1 and follow the instructions in section 2.4.2.

2.4.1 Ensemble 2009/2010


![Figure 2-12: Ensemble Management Portal, Home option](image-url)
Select **Databases** in the **Operations** column.

Figure 2-13: System Management Portal, Databases option
On the **Databases** screen, locate the C32 database and click **Dismount** for that database. Be sure to select the correct database.

![Database screen, Dismount option](image)
On the **Dismount Database** screen, click the **Perform Action Now** button.

![Image of Dismount Database screen with Perform Action Now button highlighted](image)

*Figure 2-15: Dismount Database screen, Perform Action Now button*
2.4.2 Ensemble 2012

Return to the Management Portal by clicking **Home** in the upper left corner of the Production Configuration screen.

![Production Configuration screen, Home option](image)

Figure 2-16: Production Configuration screen, Home option
In the Management Portal, select **System Operation**, then select **Databases**.

![Management Portal, Databases option](image1)

On the **Databases** screen, locate the C32 database and click **Dismount** for that database. Be sure to select the correct database.

![Database screen, Dismount option](image2)
On the Dismount Database screen, click the Perform Action Now button.

![Figure 2-19: Dismount Database screen, Perform Action Now button](image)

2.5 Perform Encryption

Encrypt the database following the instructions provided in the separate encryption document. If you need a copy of the encryption document, contact the Office of Information Technology (OIT). See section 3.0 for OIT contact information.

2.6 Re-mount the Database

The instructions for this step depend on which version of Ensemble you are using. If your version of Ensemble is 2009 or 2010, then follow the instructions in section 2.6.1. If your version of Ensemble is 2012, then skip section 2.6.1 and follow the instructions in section 2.6.2.
2.6.1 Ensemble 2009/2010

In the System Management Portal, select the **Databases** option in the **Operations** column.

![System Management Portal, Databases option](image_url)

Figure 2-20: System Management Portal, Databases option
Locate the C32 database and click **Mount** for that database.

![Figure 2-21: Databases screen, Mount option](image_url)
On the Mount Database screen, ensure that the Read Only checkbox is unchecked and click the Perform Action Now button.

![Mount Database screen, Perform Action Now option](image)

Figure 2-22: Mount Database screen, Perform Action Now option
2.6.2 Ensemble 2012

In the Management Portal, select **System Operation**, then select **Databases**.

![Management Portal, Databases option](image)

Figure 2-23: Management Portal, Databases option
On the **Databases** screen, locate the C32 database and click **Mount** for that database.

![Databases screen, Mount option](image)

Figure 2-24: Databases screen, Mount option
On the Mount Database screen, ensure that the **Read Only** checkbox is unchecked and click the **Perform Action Now** button.

![Mount Database screen, Perform Action Now option](image)

**Figure 2-25:** Mount Database screen, Perform Action Now option

### 2.7 Reschedule the Nightly C32 Job

This step is required only if you unscheduled the nightly C32 job in section 2.2. If you did not unschedule the nightly C32 job, then skip to section 2.8.

Go to the **C Messaging Menu** by selecting the **BJMD C MESSAGING** option in TaskMan. From the **C Messaging Menu**, select the **EDIT** option. Reschedule the nightly job by entering the time to run the job at the **TIME TO RUN NIGHTLY TASK** prompt.

```
Select OPTION NAME: BJMD
1  BJMD BACKGROUND JOB       Background job for C Messaging transmissions
2  BJMD C MESS MGR       Manage C Messaging transmissions
3  BJMD C MESSAGING       C Messaging Menu
4  BJMD C32ALLGEN       Generate C32 documents for all patients in RPMS
5  BJMD C32GENONE       Generate C32 for a single patient
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5: 3  BJMD C MESSAGING     C Messaging Menu
EDIT   Edit C Messaging Site Parameters
ONE    Generate C32 for a single patient
ALL    Generate C32 documents for all patients in RPMS
```
2.8 Restart C Messaging

From the C Messaging Menu, select the MANG option. Restart C Messaging by entering Y at the Start C Messaging? prompt. This option will also automatically restart the Ensemble production, so it is not necessary to start the production from the Ensemble Management Portal.

Normally, starting C Messaging will automatically start the associated Ensemble production within two minutes. If your _SYSTEM user account has been disabled, then it will not be possible to automatically start the Ensemble production. In that case, the production will need to be started manually.

The instructions for starting the Ensemble production depend on which version of Ensemble you are using. If you are using Ensemble 2009 or 2010, then follow the...
steps in section 2.8.1. If you are using Ensemble 2012, then skip section 2.8.1 and follow the steps in section 2.8.2.

2.8.1 Ensemble 2009/2010

1. Sign on to Ensemble’s System Management Portal as the administrator.


3. In the top right corner you will see the word Namespace and a drop-down list of all namespaces defined within the Ensemble instance. Select the namespace where your C32 Ensemble production is located. The application will refresh the page, and you will see this name prominently displayed at the top of the page.

Note: Ensemble namespaces can look almost identical when viewed on this page, so make sure that you have the right namespace selected.
At the top of the inner box the words **Ensemble Stopped** will be displayed:

Figure 2-28: Ensemble production in a stopped state

4. Click the **Start Production** button immediately under the words **Ensemble Stopped**.
5. A pop-up will appear and ask you “Are you sure you want to start Production BJMD.Prod.Production?” Click OK. The lines in Figure 2-30 should appear on the screen.

```
ConfigItem 'AlertEmailBO' started.
ConfigItem 'BJMD.Prod.C32Fileko' started.
ConfigItem 'BJMD.Prod.CompiledRecordUS' started.
ConfigItem 'BJMD.Prod.ErrorRecordUS' started.
ConfigItem 'BJMD.Prod.GenerateC32Doc#P' started.
ConfigItem 'Ensemble.Actor' updated.
ConfigItem 'Ensemble.Actor' updated.
ConfigItem 'Ensemble.Alarm' started.
ConfigItem 'Ensemble.Alarm' started.
ConfigItem 'Ensemble.MonitorService' started.
ConfigItem 'Ensemble.ScheduleHandler' started.
Scheduler has been updated.

Production BJMD.Prod.Production started.
```

6. Click OK to return to the Ensemble productions screen.

Notice that the button that used to read Start Production now reads Stop Production. The button will remain in this state as long as the production is running.

2.8.2 Ensemble 2012

1. Sign on to Ensemble’s Management Portal as the administrator.
2. At the top center, the main **Management Portal** page displays the server name, the current user, the current namespace, license and instance information, and a **Switch** link. Click the **Switch** link.

![Figure 2-30: Management Portal](image-url)
In the **Namespace Chooser** box, select the appropriate C32 namespace. The namespace will consist of "C32" concatenated with the name of your RPMS namespace. For example, if your RPMS namespace is called "TEST5", then the associated C32 namespace will be called "C32TEST5". Click **OK** to select the namespace. The namespace displayed on the **Management Portal** page will be updated to reflect your selection.

![Namespace Chooser](image)

*Figure 2-31: Namespace Chooser*
7. On the main Management Portal page, select Ensemble in the left column, then select Configure >>, then select Production. When the View, Edit, Start, or Stop a Production option appears, click the Go button to display the Production Configuration page.

Figure 2-32: Management Portal
8. Above the **Services** column on the left, the words **Ensemble Stopped** will be displayed. If the words **Ensemble Running** are displayed, then the production is already running and you should skip the rest of this section.

![Figure 2-33: Ensemble production in a stopped state](image)

9. Click the **Start** button. There might be additional messages on this screen if it takes Ensemble more than a few seconds to stop all associated processes.
3. A pop-up will appear and ask you “Do you wish to start this Production?” Click the OK button. The lines in Figure 2.34 should appear on the screen.

![Figure 2-34: Starting the Ensemble production](image)

Click **OK** to return to the **Production Configuration** screen.
Contact Information

If you have any questions or comments regarding this distribution, please contact the OIT Help Desk (IHS).

Phone: (505) 248-4371 or (888) 830-7280 (toll free)
Fax: (505) 248-4363
Web: http://www.ihs.gov/GeneralWeb/HelpCenter/Helpdesk/index.cfm
Email: support@ihs.gov
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