

APPLICATION OPERATION MANUAL
ON
DATA MANAGEMENT SYSTEM
FOR
BUILDINGS ENERGY EFFICIENCY ORDINANCE
FOR
ENERGY EFFICIENCY OFFICE
OF
ELECTRICAL AND MECHANICAL SERVICES
DEPARTMENT (EMSD)



By



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1. Purpose

The purpose of this manual is to:

provide relevant information on the various functions of Data Management System for
Buildings Energy Efficiency Ordinance (DMS-BEEO)

serve as a guideline for the operating staff on the application implemented; and

document the instructions of all the work to be performed by the operating staff in
running the application system, and the operation procedures for job preparation and
restart.

2. Scope

This document defines the operation procedure for (DMS-BEEO). It should be reference for all operation staff involved in (DMS-BEEO) operation.

3. Reference

Documentation Standards for Implementation Phase (S8)

4. Definitions and Conventions

4.1 Definitions

DMS	Data Management System
DB	MS SQL Database
Rptserv	MS SQL Report Server
LN	Lotus Notes
EA	Energy Audit
FOC	Form of Compliance
COCR	Certificate of Compliance Registration
INSP	Inspection
REA	Registered Energy Auditor

4.2 Conventions

NIL

5. System Description

5.1 System Overview

The DMS consists of the following module, jobs or applications:

- BEEO Web Application
- Mobile Inspection
- BJ_GenBringUpAndReminder
- BJ_GenReport
- BJ_Checklist_MobileList
- BJ_LetterAction
- BJ_SendElicenceEmail
- BJ_SendReminder
- MS SQL jobs
- MS SQL Report Subscription

5.1.1 BEEO Web Application

This module is a web application located on IIS. It is the main core part of the system which manages the information of assignment, buildings, referrals and summons, the submission for EA, FOC, COCR, REA and Inspection. It also includes generation of letters, checklist, improvement notices and reports. It manages the workflow of the submission, sending reminders and bring ups to user. In addition, it facilitates batch generation of letters, random selection of buildings. For more details, please refer to “*DMS-BEEO User Guide.doc*”.

The application is located in application server *c\$\csudemo*

5.1.2 Mobile Inspection

To be completed by Amy

5.2 Job Description

5.2.1 BJ_GenBringUpAndReminder

This job generates report reminders, case specified reminders and user-defined (UD) reminders periodically. It also generate the base list for process “random selection of building list”

The job is an exe program located in application server
c\$\BJ_GenBringUpAndReminder\bin\Release\
BJ_GenBringUpAndReminder.exe

The configuration of bring up is stored in table *tbl_BringUp_config* in the database.

Case specified reminders which generated when required situation occur.
The job check the situation once daily.

Bring Up Type ID	Description	Enable
BG-COCR-13	buildings with stage two declaration received, COCR not yet issued (or not yet refused) and the deadlines (i.e. 3 months after the day on which the declaration is received) have already expired	No
BG-COCR-14	buildings with stage two declaration received, COCR not yet issued (or not yet refused) and the deadlines are to be expired in N7 month(s) (where N7 should be configurable)	No
BG-COCR-15	(Send Once) buildings with stage two declaration received, COCR not yet issued (or not yet refused) and the deadlines are to be expired in 1 month	Yes
BG-COCR-16	(Send Once) buildings with stage two declaration received, COCR not yet issued (or not yet refused) and the deadlines are to be expired in 2 weeks	Yes
BG-COCR-17	(Send Once) Building with the anticipated occupation approval date due for preparation of stage 2 submission	Yes
BG-EA-4	buildings with energy audit forms already expired but still without valid energy audit forms in force	No

BG-EA-5	buildings with energy audit forms which are currently in force are to be expired in N2 month(s) (where N2 should be configurable)	No
BG-INSP-1	buildings to be inspected in N9 month(s)	No

Report reminders consist of monthly and weekly type. For monthly type, when the day configured on the month come, this kind of reminder will be generated. For weekly type, when the day (1-7) configured in a week come, the reminder and the report (excel format) will be generated

Bring Up Type ID	Description	Enable
RPT-COCR-13	Weekly report of buildings with stage two declaration received, COCR not yet issued (or not yet refused) and the deadlines (i.e. 3 months after the day on which the declaration is received) have already expired	Yes
RPT-COCR-14	Monthly report of buildings with stage two declaration received, COCR not yet issued (or not yet refused) and the deadlines are to be expired in N7 month(s)	Yes
RPT-COCR-32	Monthly report of Received COCR Stage One Declaration which are not closed 6 months after received	Yes
RPT-COCR-33	Monthly report of Received COCR Stage Two Declaration which are not closed 6 months after received	Yes
RPT-EA-2	Weekly report of buildings without energy audit form received but first energy audit deadlines have already expired (i.e. 10 years after the building is first issued with a Certificate of Compliance Registration or pursuant to schedule 5 of the Ordinance)	Yes
RPT-EA-3	Monthly report of buildings without energy audit form received but first energy audit deadlines will be expired in N1 month(s)	Yes
RPT-EA-30	Monthly report of Received Energy Audit Form which are not closed 6 months after received	Yes
RPT-EA-4	Weekly report of buildings with energy audit forms already expired but still	Yes

	without valid energy audit forms in force	
RPT-EA-5	Monthly report of buildings with energy audit forms which are currently in force are to be expired in N2 month(s)	Yes
RPT-FOC-31	Monthly report of Received FOC which are not closed 6 months after received	Yes
RPT-INSP-16	Weekly report of buildings to be inspected in N9 month(s)	Yes

User-defined (UD) reminders – the job checks for effective UD bring up and generate the corresponding reminder.

Bring Up Type ID	Description	Enable
UD	User Defined reminder	Yes

5.2.2 BJ_GenReport

This job runs on the end of weekdays each week to generates reports and excel file. The job will email them to target users. The excel file was used for import to WBRS manually.

"BEEO Register & List.xls" – for WBRS import.
"BEEO Statistics Report.xls"

The job is an exe program located in application server
c\$\BJ_GenReport\bin\Release\ BJ_GenReport.exe

5.2.3 BJ_Checklist_MobileList

To be completed by Amy

5.2.4 BJ_LetterAction

To be completed by Amy

5.2.5 BJ_SendElicenceEmail

This job creates E-licence and send email with E-licence as attachment to the applicant and inform related parties after “Payment Received Date” + N days (Configurable).

The job is an exe program located in application server
c\$\BJ_SendElicenceEmail\bin\Release\ BJ_SendElicenceEmail.exe

The schedule of job is TBC.

5.2.6 BJ_SendReminder

This job creates emails for the reminders generated and sends them to target user through LN.

The job is an exe program located in application server
c\$\BJ_SendReminder\bin\Release\ BJ_SendReminder.exe

5.2.7 MS SQL jobs

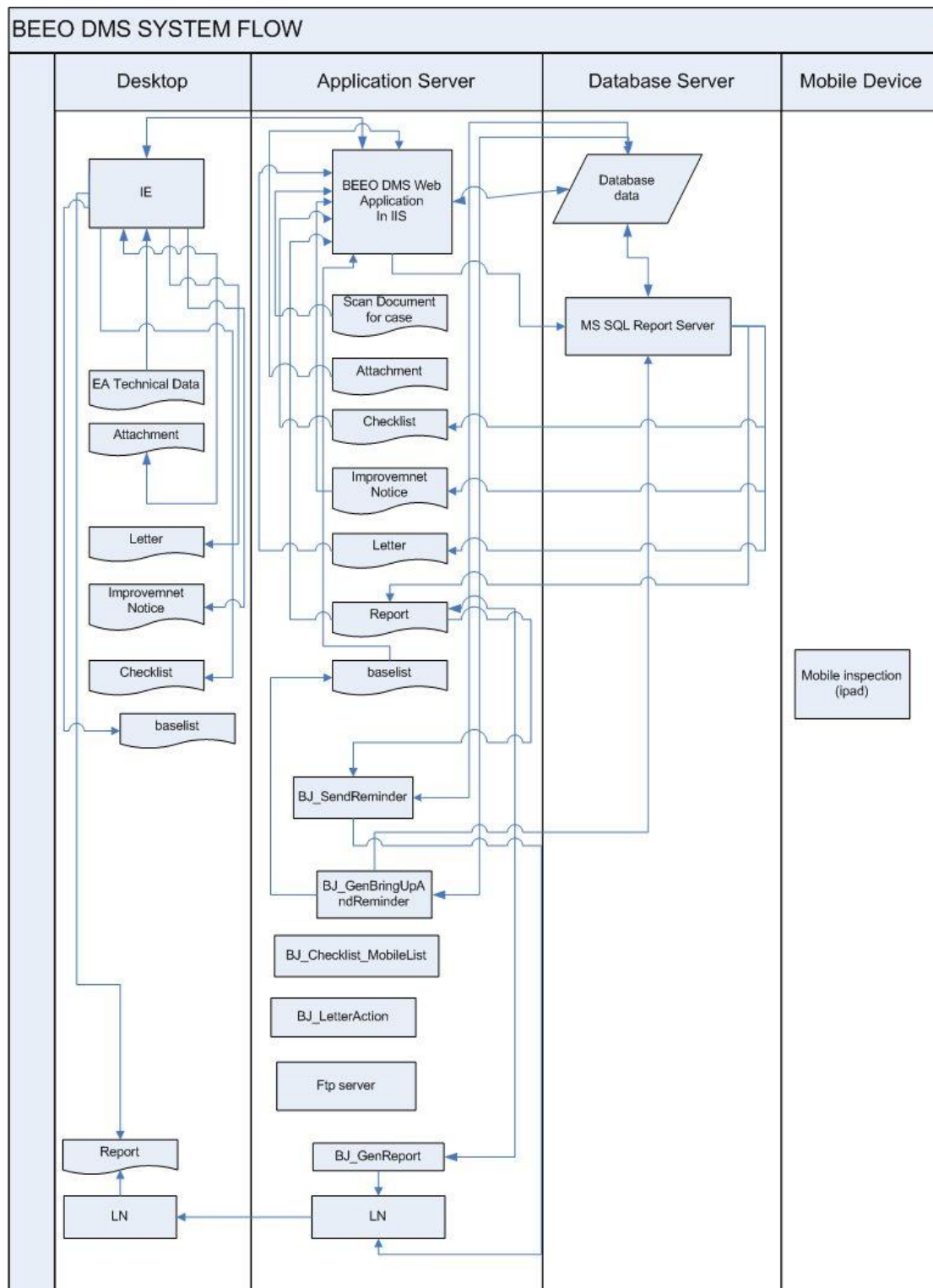
The following jobs are stored in mssql server and are run by mssql agents.

- *backupbeeo.Subplan_1*
This job backup database
- *HandlingPendingBringUp*
This job set pending bring up to effective state if bring up time reach.
- *Letter_Advisory_letter*
To be completed by Amy
- *UPDATEBATCHSTATUS*
This job update batch job (batch generation of letter) status

5.2.8 MS SQL Report Subscriptions

To be completed by Amy

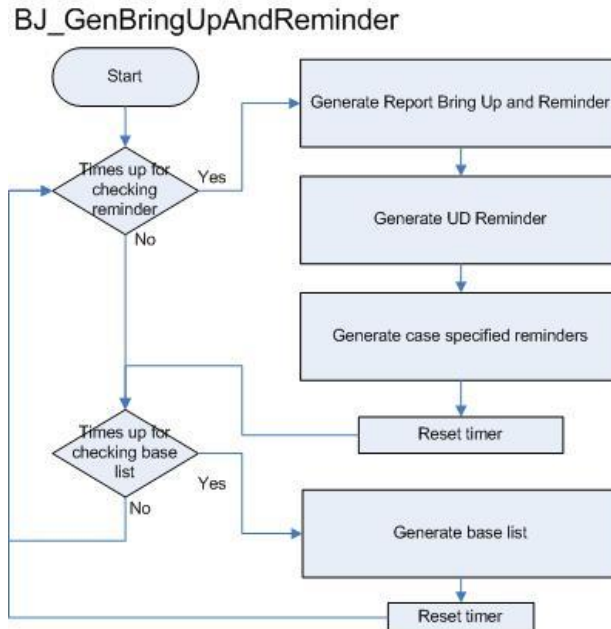
5.3 System Flow



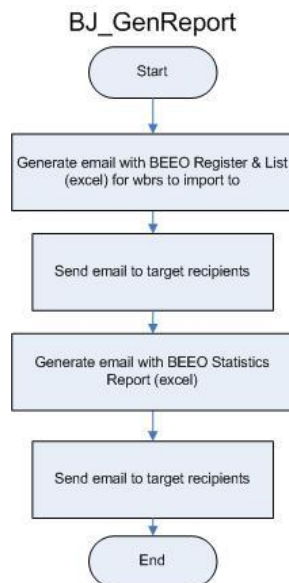
the BJ_Checklist_MobileList, BJ_LetterAction,ftp and Mobile Inspection on this diagram are not complete. Any please modify beeo.vsd file and send me back

5.4 Job Run Flow

5.4.1 BJ_GenBringUpAndReminder



5.4.2 BJ_GenReport



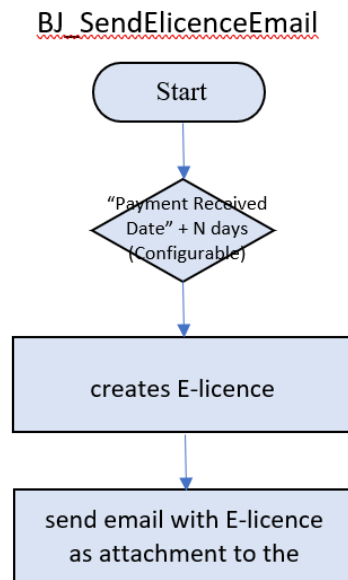
5.4.3 BJ_Checklist_MobileList

To be completed by Amy

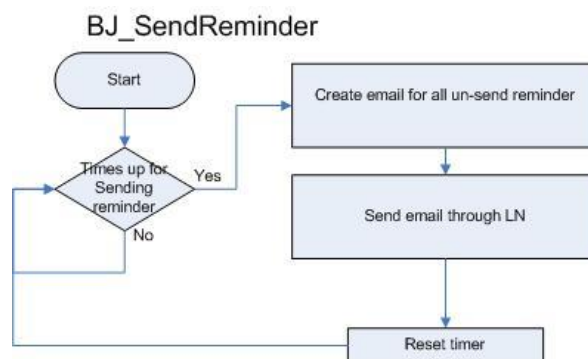
5.4.4 BJ_LetterAction

To be completed by Amy

5.4.5 BJ_SendElicenceEmail



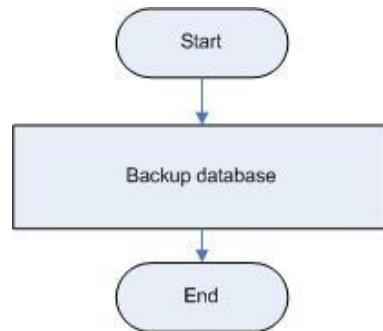
5.4.6 BJ_SendReminder



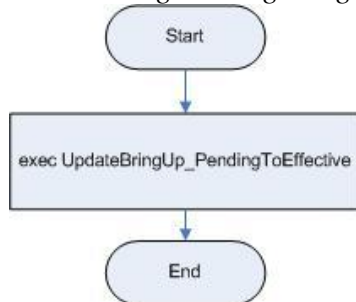
5.4.7 MS SQL jobs

The following jobs are run by mssql agent.

- *backupbeeo.Subplan_1*

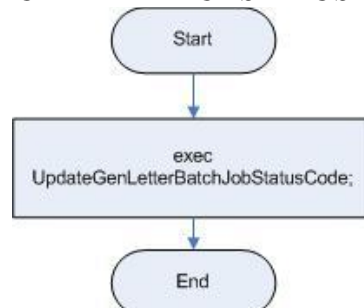


- *HandlingPendingBringUp*



- *Letter_Advisory_letter*
To be completed by Amy

- *UPDATEBATCHSTATUS*



5.4.8 MS SQL Report Subscriptions

To be completed by Amy

5.5 Summary of program description

Program/Job	Description
BEEO Web Application	the main core part of the system which manages the information of assignment, buildings, referrals and summons, the submission for EA, FOC, COCR, REA and Inspection. It also includes generation of letters, checklist, improvement notices and reports. It manages the workflow of the submission, sending reminders and bring ups to user. In addition, it facilitates batch generation of letters, random selection of buildings
Mobile Inspection	
BJ_GenBringUpAndReminder	generates report reminders, case specified reminders and user-defined (UD) reminders periodically. It also generate the base list for process "random selection of building list"
BJ_GenReport	generates reports and excel file: <i>"BEEO Register & List.xls"</i> – for WBRs import. <i>"BEEO Statistics Report.xls"</i>
BJ_Checklist_MobileList	
BJ_LetterAction	
BJ_SendElicenceEmail	After "Payment Received Date" + N days (Configurable), send email with E-licence as attachment to the applicant and inform related parties
BJ_SendReminder	creates emails for the reminders generated and sends them to target user through LN
backupbeeo.Subplan_1	backup database
HandlingPendingBringUp	set pending bring up to effective state if bring up time reach
Letter_Advisory_letter	
UPDATEBATCHSTATUS	update batch job (batch generation of letter) status

To be completed by Amy

6. System output reports

Report type ID	Category	Description	is Online Report
1	REA	Statistics and Summary	Yes
2	EA	Weekly report of buildings without energy audit form received but first energy audit deadlines have already expired (i.e. 10 years after the building is first issued with a Certificate of Compliance Registration or pursuant to schedule 5 of the Ordinance)	
3	EA	Monthly report of buildings without energy audit form received but first energy audit deadlines will be expired in N1 month(s)	
4	EA	Weekly report of buildings with energy audit forms already expired but still without valid energy audit forms in force	
5	EA	Monthly report of buildings with energy audit forms which are currently in force are to be expired in N2 month(s)	
6	FOC	Weekly report of completed major retrofitting works without FOC received but the (anticipated) deadlines (i.e. 2 months after the anticipated/actual completion date of major retrofitting works) have already expired	
7	FOC	Monthly report of completed major retrofitting works without FOC received and the (anticipated) deadlines will be expired in N3 month(s)	
8	FOC	Monthly report of major retrofitting works without FOC received and the works are anticipated to be completed in N4 month(s)	
9	COCR	Weekly report of buildings without stage one declaration received but the deadlines (i.e. 2 months after the day on which the consent to the commencement of building works for the superstructure construction of the building is given) have already expired	
10	COCR	Monthly report of buildings without stage one declaration received but the deadlines are to be expired in N5 month(s)	
11	COCR	Weekly report of buildings without stage two declaration received but the (anticipated) deadlines (i.e. 4 months after the day on which the	

		(anticipated) occupation approval is issued in respect of the building) have already expired	
12	COCR	Monthly report of buildings without stage two declaration received but the (anticipated) deadlines are to be expired in N6 month(s)	
13	COCR	Weekly report of buildings with stage two declaration received, COCR not yet issued (or not yet refused) and the deadlines (i.e. 3 months after the day on which the declaration is received) have already expired	
14	COCR	Monthly report of buildings with stage two declaration received, COCR not yet issued (or not yet refused) and the deadlines are to be expired in N7 month(s)	
15	COCR	Weekly report of buildings with COCR already expired but not yet renewed	
16	INSP	Weekly report of buildings to be inspected in N9 month(s)	
17	IN	Weekly report of buildings with issued IN not yet rectified and the deadlines for rectification have already expired	
18	IN	Monthly report of buildings with issued IN not yet rectified and the deadlines for rectification are to be expired in N10 month(s)	
19	REA	List of REA Register	Yes
20	REA	List of Issued / Renewed REA Certificate per Reporting Period	Yes
21	REA	List of REA to be expired within 12 months / 6 months / 3 months	Yes
22	INSP	List of Buildings being inspected in past 12 months / 6 months / 3 months	Yes
23	INSP	List of Buildings to be inspected in next 12 months / 6 months / 3 months	Yes
24	COCR	List of Received COCR Stage One Declaration per Reporting Period	Yes
25	COCR	List of Received COCR Stage Two Declaration per Reporting Period	Yes
26	COCR	List of Received COCR Renewal per Reporting Period	Yes
27	EA	List of Received Applications for EA Exemptions per Reporting Period	Yes
29	FOC	List of Received FOC per Reporting Period	Yes

28	EA	List of Received Energy Audit Form per Reporting Period	Yes
30	EA	List of Received Energy Audit Form which are not closed 6 months after received	
31	FOC	List of Received FOC which are not closed 6 months after received	
32	COCR	List of Received COCR Stage One Declaration which are not closed 6 months after received	
33	COCR	List of Received COCR Stage Two Declaration which are not closed 6 months after received	

7. System Media Inputs and Outputs

Please refer to COPM document.

8. Operations description

This section should describe the Operation schedule and service hours of the Application System.

8.1 On-line Schedule

This system provides online service in 7 x 24 basis

8.2 Backup Schedule

Please refer to COPM document

8.3 Ad-hoc Schedule

Nil.

9. Run job specification

9.1 BJ_GenBringUpAndReminder

Function

This job generates report reminders, case specified reminders and user-defined (UD) reminders periodically. It also generate the base list for process “random selection of building list”

Estimate Run Time: run continuously

Parameters:

In application server c\$\BJ_GenBringUpAndReminder\bin\Release\
BJ_GenBringUpAndReminder.exe.config

Variable Name	Description	mins
checkingIntevalinMins	The time interval for checking reminders to be generated	30
checkingGenBaseListExcelIntevalinMins	The time interval for checking base list to be generated	20

Requirement/Limitation: Database started

Program Schedule: run continuously

Restart Procedure: In case of system error, simply restart the program.

Output Listings: Bringups, reminders, baselist.

9.2 BJ_GenReport

Function

This job runs on the end of weekdays each week to generates reports and excel file. The job will email them to target users. The excel file was used for import to WBRS manually.

Estimate Run Time: 10 mins – 20 mins

Parameters:

In application server c\$\BJ_GenReport\bin\Release*BJ_GenReport.exe.config*

Variable Name	Description
mailaddr	Recipants

Requirement/Limitation: Database and Lotus Notes client need to be started.

Program Schedule: run on weekday end

Restart Procedure: In case of system error, simply restart the program.

Output Listings:

Email with "BEEO Register & List.xls" – for WBRS import.

Email with "BEEO Statistics Report.xls"

The above excel file is generated in *c:\beeo\bj_GenReport*

9.3 BJ_Checklist_MobileList

To be completed by Amy

9.4 BJ_LetterAction

To be completed by Amy

9.5 BJ_SendElicenceEmail

Function

This job creates E-licence and send email with E-licence as attachment to the applicant and inform related parties after “Payment Received Date” + N days (Configurable).

Estimate Run Time: run continuously

Parameters:

In application server c\$\BJ_SendElicenceEmail \bin\Release\
BJ_SendElicenceEmail.exe.config

Variable Name	Description
Id	E-licence ID
Lek	LEK
LicenceType	Licence Type
ElicencePdf	The PDF file of the E-licence
RegNo	REA Registration Number of Applicant
Email	Email Address of Applicant

Requirement/Limitation: Database started

Program Schedule: run continuously

Restart Procedure: In case of system error, simply restart the program.

Output Listings: Email with E-licence attachment

9.6 BJ_SendReminder

This job creates emails for the reminders generated and sends them to target user through LN.

The job is an exe program located in application server
c\$\BJ_SendReminder\bin\Release\ BJ_SendReminder.exe

Function

This job creates emails for the reminders generated and sends them to target user through LN.

Estimate Run Time: run continuously

Parameters:

In application server c\$\BJ_SendReminder\bin\Release\ BJ_SendReminder.exe.config

Variable Name	Description	mins
reminderIntervalInMins	The time interval for sending reminders	1

Requirement/Limitation: Database and Lotus Notes client need to be started.

Program Schedule: run continuously

Restart Procedure: In case of system error, simply restart the program.

Output Listings:Email reminders

9.7 MS SQL jobs

- *backupbeeo.Subplan_1*
Function: backup database

Estimate Run Time: 1-10 mins (depends on database size)

Parameters: Nil

Requirement/Limitation:mssql server and mssql agents started

Program Schedule: run at 11:00 pm daily

Restart Procedure: In case of system error, simply restart the job

Output Listings: backup database file
(in c\$\beeoddbbackup\BEEOMDS on database server.)

- *HandlingPendingBringUp*
Function:

Set pending bring up to effective state if bring up time reach

Estimate Run Time: depends on database size

Parameters: Nil

Requirement/Limitation: mssql server and mssql agents started

Program Schedule: run every 15 mins

Restart Procedure: In case of system error, simply restart the job

Output Listings: Nil

- *Letter_Advisory_letter*
To be completed by Amy
- *UPDATEBATCHSTATUS*
Function:
Update batch job (batch generation of letter) status

Estimate Run Time: depends on database size

Parameters: Nil

Requirement/Limitation: mssql server and mssql agents started

Program Schedule: run every 24 mins

Restart Procedure: In case of system error, simply restart the job

Output Listings: Nil

9.8 MS SQL Report Subscriptions

To be completed by Amy

10. Error handling

Error happens in the BEEO-DMS operation is classified as critical and non-critical. Unless otherwise specified in the Section 9: Run Job Specification that it will affect the on-line service on the next day or immediate on-line service, all jobs are considered non-critical.

10.1 Critical Errors Handling

When there is an abnormal end in running job, users should refer to the Section 9: Run Job Specification, and follow the procedures to prepare for restart or recovery.

If a critical job fails to recover, users should contact in-house Support Staff of the Application for advice. Also, to record all information about job failure, such as time and date, error message code and content, relevant data and actions performed for further investigation.

10.2 Non-critical Errors Handling

All jobs are considered non-critical unless otherwise specified. All non-critical jobs should be restart/recover using the restart/recovery procedures in the corresponding subsection of the Section 9: Run Job Specification. If the procedures fail on job restart/recovery, users should contact in-house Support Staff to follow up the issues.

10.3 Contact Points

User Support
ITMU

Office Hours
2808 3929

- End of Document -