

OPERATING LEASE SUPPORT SYSTEM DEVELOPMENT

FOR



Functional Specification A.3 Collection Module

Revision 1.0

Prepared by:

PT. Berlian Sistem Informasi

KTB Annex Bld. 4th Floor, Jl. Jend. A. Yani. Pulomas,
Tel. +62 21 4786 7575 (Hunting) Fax. +62 21 4714964 www.bsi.co.id

Functional Specification: A.3 Collection Module			
Project	Operating Lease Support System Development		
Author	Deny Prasetya	Date	06 Januari 2015
Status	Baseline	Version	1.0
Document	TM14402A - DSF OLSS - FS A.3 Collection Module Rev.1.0	Page	Page 2 of 11

Document Control

Author	Deny Prasetya
File Name	TM14402A - DSF OLSS - FS A.1 Marketing Module Rev.1.0
Path	N/A
Create Date	25/11/2014 11:02:00
Last Edited	06/01/2015 15:19:00
Number of Pages	11

Revision History

Date	Revision	Description	Author
25-Nov-2014	0.1	Initial creation	Deny Prasetya
10-Dec-2014	1.0	Baseline	Deny Prasetya

Distribution List

Name	Organization	Title
Mr. Jin Nishimura	Dipo Star Finance, PT	DSF Project Director
Mr. Abdul Somad	Dipo Star Finance, PT	DSF Project Manager
Mr. Satoshi Koibuchi	Berlian Sistem Informasi, PT	BSI Project Director
Mr. Deny Prasetya	Berlian Sistem Informasi, PT	BSI Project Manager

Document Approval

By signing this document I acknowledge I have read the document and give the Project Management Team approval to proceed.

Role	Name	Signature	Date
DSF Project Director	Mr. Jin Nishimura		
DSF Project Manager	Mr. Abdul Somad		
BSI Project Director	Mr. Satoshi Koibuchi		
BSI Project Manager	Mr. Deny Prasetya		

Functional Specification: A.3 Collection Module			
Project	Operating Lease Support System Development		
Author	Deny Prasetya	Date	06 Januari 2015
Status	Baseline	Version	1.0
Document	TM14402A - DSF OLSS - FS A.3 Collection Module Rev.1.0	Page	Page 3 of 11

TABLE OF CONTENTS

DOCUMENT CONTROL	2
REVISION HISTORY	2
DISTRIBUTION LIST	2
DOCUMENT APPROVAL	2
1 INTRODUCTION.....	4
1.1 PURPOSE.....	4
1.2 SCOPE.....	4
1.3 ACRONYMS AND ABBREVIATIONS	4
1.4 REFERENCES	4
2 DETAIL SPECIFICATION	5
2.1 BILLING AND PAYMENT HISTORY INQUIRY	5
2.1.1 <i>Use case</i>	5
2.1.2 <i>Operations and scenarios</i>	5
2.1.3 <i>Status management and roles</i>	7
2.1.4 <i>Sitemap design</i>	7
2.1.5 <i>Screen design</i>	8
2.1.5.1 Billing and payment history inquiry	8
2.1.5.2 Update billing and payment history inquiry	9
2.1.6 <i>Screen features</i>	10
2.1.7 <i>Data structure</i>	10
3 APPENDIX.....	11
3.1 USE CASE TERMINOLOGY	11

Functional Specification: A.3 Collection Module			
Project	Operating Lease Support System Development		
Author	Deny Prasetya	Date	06 Januari 2015
Status	Baseline	Version	1.0
Document	TM14402A - DSF OLSS - FS A.3 Collection Module Rev.1.0	Page	Page 4 of 11

1 Introduction

1.1 Purpose

Functional specification is to explain some of the following:

- 1) Describe who uses your application or system,
- 2) Describe the order in which steps or events or on the scenario are performed,
- 3) Show user interface design, and
- 4) What kind of data that will be maintained by functions.

1.2 Scope

Marketing module described about how to maintain data transaction on the marketing process which is utilized by functions in the system. On this module there's no integration with another system (such as ACA and MFAPPL). This modules deal in the "to-be design" for developing the new system.

To keep the accuracy of entire design of the system we are using modeling approach for design and analysis. **To define a model of functions we will determine use cases. In the use case, it can summarize who uses your application or system, and what they can do with it.**

Within a use case we can determine which use cases are supported by application. We can create use case diagram, activity diagram, use case scenario, data structure, and interface design.

A data structure can be specified what kind of information that will be required for the system. Data structure is represented database design of the system. A user interface design can imagine the user about the system as visual. User interface is designed based on prototypes which have been already created. And, based on these things, we will develop the system.

The following is functionality of collection module:

- ✓ Billing Payment History Inquiry
 - a. Add new billing and payment history records
To input a new billing and payment history records by fill out the form. This feature allows a user to save a data into database, after input on the billing and payment history record form.
 - b. Update details billing and payment history records
To update a detail billing and payment history records by fill out the details form. This feature allows a user to changes any data, and then saves into database.
 - c. Filter and sort agreement information
On this feature the record can be filtered and sorted based on columns on top of the list.
 - d. Validate billing and payment history records
After the records was confirm, the record can be to validate.
 - e. Set to draft billing and payment history records
If the data still need to be update by user who initiate to create the agreement, the records can be set to draft.

1.3 Acronyms and abbreviations

- ACA : Auto Credit Approval System
- MFAPPL : Multi Finance Application

1.4 References

This functional scope refers "to be design" in the section A.1.Marketing Module.

Functional Specification: A.3 Collection Module			
Project	Operating Lease Support System Development		
Author	Deny Prasetya	Date	06 Januari 2015
Status	Baseline	Version	1.0
Document	TM14402A - DSF OLSS - FS A.3 Collection Module Rev.1.0	Page	Page 5 of 11

2 Detail Specification

2.1 Billing and Payment History Inquiry

2.1.1 Use case

The figure below is summarizing who uses features of function, and what they can do with it.

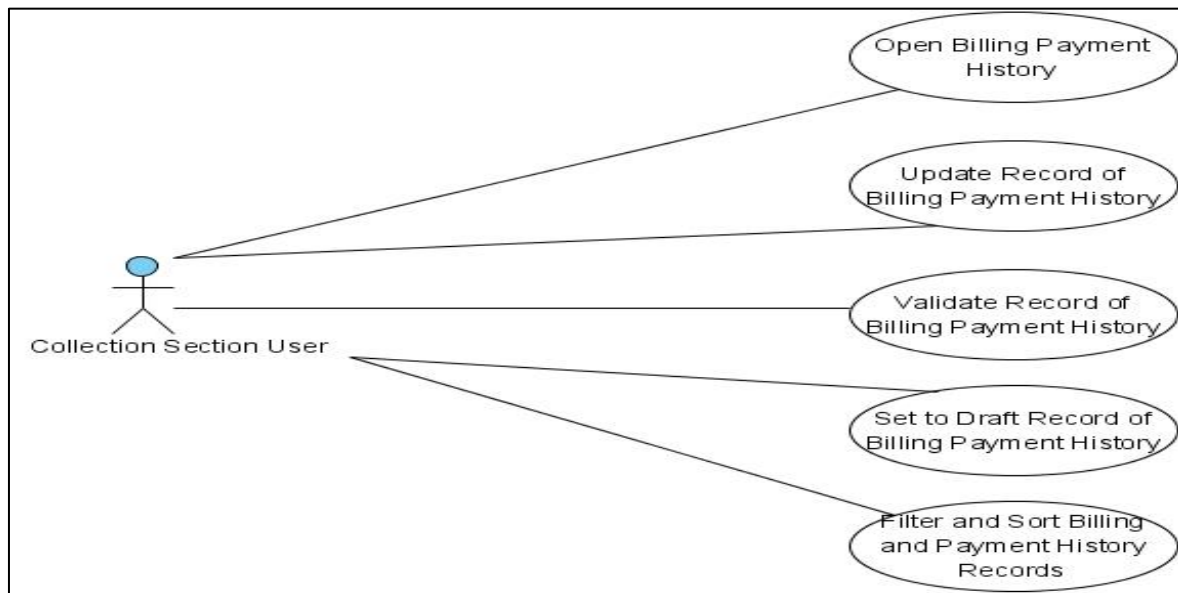


Figure 1 – Use case diagram of Billing and Payment History Inquiry

2.1.2 Operations and scenarios

The figure below is describing operations or steps performed in a function interact with people (flow of work between actors and the system).

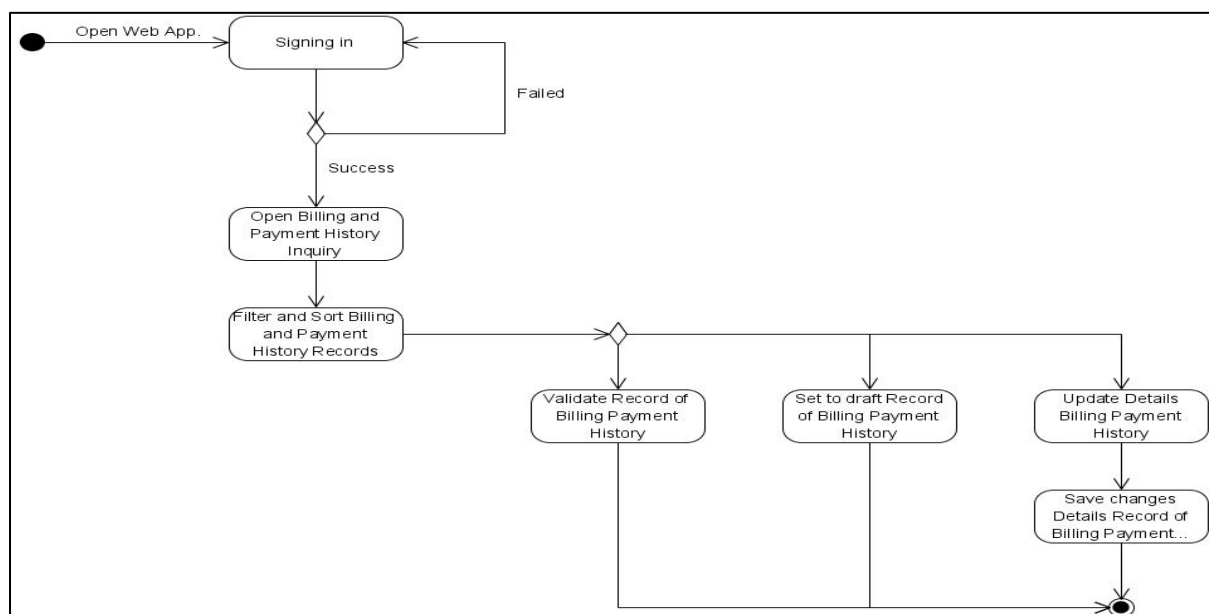


Figure 2 – Activity diagram of Billing and payment history Inquiry

Functional Specification: A.3 Collection Module

Project	Operating Lease Support System Development		
Author	Deny Prasetya	Date	06 Januari 2015
Status	Baseline	Version	1.0
Document	TM14402A - DSF OLSS - FS A.3 Collection Module Rev.1.0	Page	Page 6 of 11

No.	Steps/ Operations	Actor/ People	Scenario
1	Signing in	Collection Section User	<ul style="list-style-type: none"> Actor fills out sign in form by inputting user name and password. Actor clicks [sign in] button. System will check the account of user; if user account is already registered user will enter into the system. If doesn't user can return the step.
2.	Open billing and payment history inquiry module	Collection Section User	<ul style="list-style-type: none"> After login, actor can open billing and payment history inquiry module on the menu of system. After that, the screen of billing and payment history inquiry will open.
3.	Filter and sort billing and payment history records	Collection Section User	<ul style="list-style-type: none"> Actor can filter and sort the record based on columns where displayed on the list. To filter the records, actor can enter keywords into the filter fields. If matched data founds, the filtered result will be displayed on list. If doesn't the list will be empty. To sort the records, actor can click header of column on the list table. After that the records will be sorted by ascending or descending, alternately. Upon select [record number filter] drop down list, actor can select a records number to display on the list. At least only one item can be selected.
4.	Update billing and payment history record	Collection Section User	<ul style="list-style-type: none"> If billing and payment history screen opens, actor can determined the agreement number and police number that want to be display in the billing and payment history. Upon clicking [...] button on the agreement number fields, the agreement look-up screen will be displayed. Agreement number can be selected (only one record can be select). After it's done, agreement information field will be filled automatically. After determining agreement number, user can click [Details] button to edit the details of billing and payment history record. Once it done, 'Details' screen will be displayed. If 'Details' screen opens, actor can edit a record by inputting a data on each of the fields. The mandatory fields cannot be blank.
5.	Validate billing and payment history record	Collection Section User	<ul style="list-style-type: none"> Once data is saved and data has been confirmed, actor can validate the record by clicking [Validate] button. After that system will set a record as <u>validate (or not draft)</u>. If done, actor can click back button to return to the list of billing and payment history.
6.	Set to draft of calculation	Collection Section User	<ul style="list-style-type: none"> To do this process, actor should open calculation detail screen by clicking [Details] button on the list. Once it open, actor can set to draft by clicking [set to draft] button. If the records still need to revise and status still

Functional Specification: A.3 Collection Module			
Project	Operating Lease Support System Development		
Author	Deny Prasetya	Date	06 Januari 2015
Status	Baseline	Version	1.0
Document	TM14402A - DSF OLSS - FS A.3 Collection Module Rev.1.0	Page	Page 7 of 11

			<p>not valid yet, actor can change the calculation status from validated to draft.</p> <ul style="list-style-type: none"> After that, system will proceed automatically to change the status, and actor can click [Back] button to return to the list.
--	--	--	---

2.1.3 Status management and roles

The figure below is describing a role matrix (including relation with Status) of actor that already identified in a function.

Role of Actor	Filter and sort	Save as draft	Save changes (draft)	validate	Validate
Maintenance user	Yes	Yes	Yes	Yes	Yes

The figure below is describing transition of Status that performed when people interact in a function. In this features, drafting process triggered on the agreement module. If service schedule already generated on the agreement module, so the status of service records will be draft too, and vice versa.

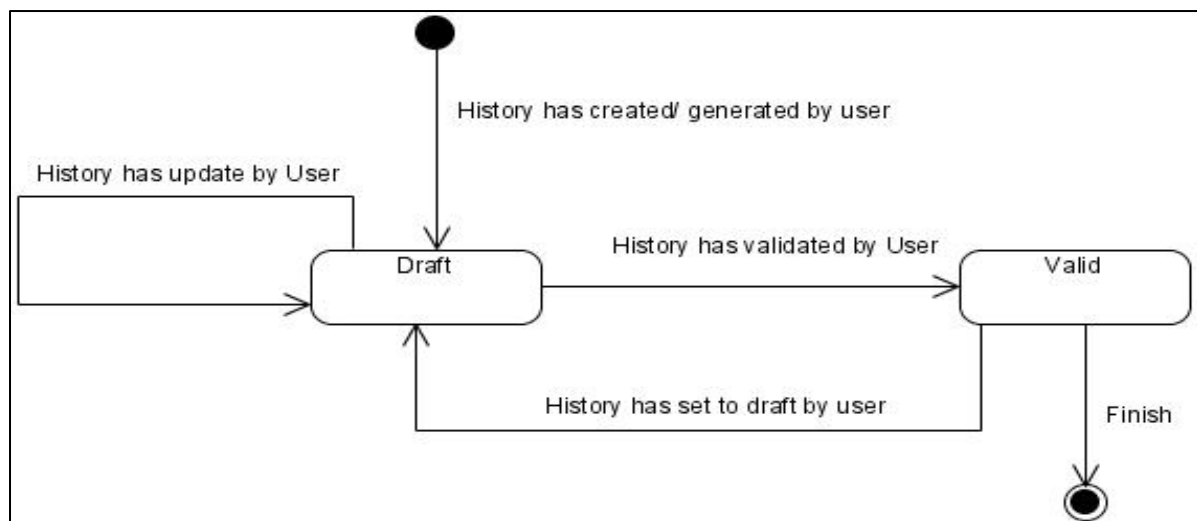


Figure 3 – Status diagram of Calculation of Sales

2.1.4 Sitemap design

Describe a web page that lists the pages on a web site to users. Usually sitemap organized in hierarchical style.

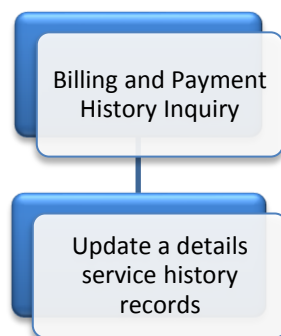


Figure 4 – Sitemap design of Billing Payment History Inquiry

Functional Specification: A.3 Collection Module			
Project	Operating Lease Support System Development		
Author	Deny Prasetya	Date	06 Januari 2015
Status	Baseline	Version	1.0
Document	TM14402A - DSF OLSS - FS A.3 Collection Module Rev.1.0	Page	Page 8 of 11

2.1.5 Screen design

2.1.5.1 Billing and payment history inquiry

This screen is designed to billing and payment history inquiry. On this screen actor can open service records. And also, actor can open another screen to add and/or update billing and payment history record.

[Open Agreement Information Inquiry](#)

To view audit rails

Created By Created Date Modified by Last Modified

Contract Information

General information of agreement

Agreement Number Previous Agreement Number Agreement Date

Billing and Payment History

General information of billing payment history/ payment condition

Sales PIC Name Sales PIC Position Sales PIC Phone Sales PIC Email

Customer Name Product Brand Name Product Model Name Model Year

Lease Category Maintenance Type Insurance Purchase Required

Contract Start Date Contract Expired Date Lease Period (Months) Usage

Expectation Collection Amount Collection Amount Overdue Amount

To open details billing and payment

Payment Schedule	Bill Amount	Invoice Issue Date	Collection Date	Collection Amount	Break Dawn	Penalty	Overdue (Days)	VAT (10%)	PPH (2%)	Action
10/24/2014	20,000,000	10/15/2014	11/05/2014	16,000,000	5,000,000	1,000,000	20	1,600,000	320,000	Details
11/24/2014	20,000,000	09/15/2014	11/20/2014	20,000,000	5,000,000	1,000,000	0	2,000,000	400,000	Details
12/24/2014	20,000,000	08/15/2014	-	0	0	0	0	0	0	Details
01/24/2015	20,000,000	01/15/2015	-	0	0	0	0	0	0	Details
02/24/2015	20,000,000	02/15/2015	-	0	0	0	0	0	0	Details
03/24/2015	20,000,000	03/15/2015	-	0	0	0	0	0	0	Details
04/24/2015	20,000,000	04/15/2015	-	0	0	0	0	0	0	Details
05/24/2015	20,000,000	05/15/2015	-	0	0	0	0	0	0	Details
06/24/2015	20,000,000	06/15/2015	-	0	0	0	0	0	0	Details
07/24/2015	20,000,000	07/15/2015	-	0	0	0	0	0	0	Details

Showing 1 to 10 of 18 entries

Data paging information

To open paging of records

First Previous 1 2 Next Last

Image 1 – Billing and Payment History Inquiry Screen

Functional Specification: A.3 Collection Module			
Project	Operating Lease Support System Development		
Author	Deny Prasetya	Date	06 Januari 2015
Status	Baseline	Version	1.0
Document	TM14402A - DSF OLSS - FS A.3 Collection Module Rev.1.0	Page	Page 9 of 11

2.1.5.2 Update billing and payment history inquiry

This screen is designed to update the billing and payment history records. After changing some data on the screen, actor can store a data into the system by clicking the action button.

< Back

To view audit rails

Created By Created By Created Date Created Date Modified by Created Date Last Modified Created Date

Contract Information

General information of agreement

Agreement Number Agreement Number Previous Agreement Number Previous Agreement Number Agreement Date (mm/dd/yyyy)

Billing and Payment History Details

General information of billing payment history/ payment condition

Payment Condition

Payment Transaction Transfer First Due Date of Usage Unit (mm/dd/yyyy) Due Date of First Payment (mm/dd/yyyy) Term of Payment (Days) (Days)

Monthly Inst. Rp. Deposit Amount Rp. Number of Payment (Numbers) 1 Deposit Payment Date (mm/dd/yyyy)

Deposit Return Date (mm/dd/yyyy) Break Dawn Special Contract Yes Issue of Invoices Date (mm/dd/yyyy) Interest Penalty (%) Interest Penalty (%)

Collection Information

Collection Date (mm/dd/yyyy)

Collection Amount Rp. Collection Category Full After Break Dawn Break Dawn Amount Rp. Penalty Amount Rp.

To save and validate a billing and payment records.

Save Changes Validate

Image 2 – Screen of Update Details Billing Payment History Inquiry

Functional Specification: A.3 Collection Module			
Project	Operating Lease Support System Development		
Author	Deny Prasetya	Date	06 Januari 2015
Status	Baseline	Version	1.0
Document	TM14402A - DSF OLSS - FS A.3 Collection Module Rev.1.0	Page	Page 10 of 11

2.1.6 Screen features

Features	Description
[Filter and sort]	To perform data filtering and data sorting of calculation records.
[Save as draft] or [Set to draft]	To save a record as a draft.
[Validate]	To validate a record as a final.
[Save changes]	To update changes when editing calculation record.

2.1.7 Data structure

Field	Data Type	Data Length	Format	Mandatory
Billing and Payment History Summary				
ExpectationCollectionAmount	Decimal	18,0	###,###,###.##	Yes
CollectionAmount	Decimal	18,0	###,###,###.##	Yes
OverdueAmount	Decimal	18,0	###,###,###.##	Yes
BillingTotal	Decimal	18,0	###,###,###.##	Yes
Billing and payment history Record				
PaymentTransactionType	Text	100	N/A	Yes
PaymentSchedule	Date	N/A	mm-dd-yyyy	Yes
BillAmount	Decimal	18,0	###,###,###.##	No
InvoiceIssueDate	Decimal	18,0	###,###,###.##	No
CollectionDate	Decimal	18,0	###,###,###.##	No
CollectionAmount	Decimal	18,0	###,###,###.##	No
BreakDawnAmount	Decimal	18,0	###,###,###.##	No
PenaltyAmount	Decimal	18,0	###,###,###.##	No
OverdueDays	Numeric	N/A	N/A	No
PPHAmount	Decimal	18,0	###,###,###.##	No
Audit Rail				
Create By	Text	100	N/A	Yes
Create Date	Date time	N/A	mm-dd-yyyy:hh-mm-ss	No
Last Modified By	Text	100	N/A	Yes
Last Modified	Date	N/A	mm-dd-yyyy	No
Status Management				
Is Deleted	Yes/No	N/A	N/A	Yes
Is Draft	Yes/No	N/A	N/A	Yes
Is Submitted	Yes/No	N/A	N/A	Yes
Is Valid	Yes/No	N/A	N/A	Yes

Functional Specification: A.3 Collection Module

Project	Operating Lease Support System Development		
Author	Deny Prasetya	Date	06 Januari 2015
Status	Baseline	Version	1.0
Document	TM14402A - DSF OLSS - FS A.3 Collection Module Rev.1.0	Page	Page 11 of 11

3 Appendix

3.1 Use Case Terminology

What is the use case?

- (i) **A use case is** a written description of how users will perform tasks on your website. It outlines, from a user's point of view, a system's behavior as it responds to a request. Each use case is represented as a sequence of simple steps, beginning with a user's goal and ending when that goal is fulfilled. (<http://www.usability.gov/how-to-and-tools/methods/use-cases.html>)
- (ii) **A use case is** a list of steps, typically defining interactions between a role and a system. (http://en.wikipedia.org/wiki/Use_case)
- (i) **A use case is** a formal way of representing how a business interacts with its environment. it summarized into a single picture. (<http://romisatriawahono.net/lecture/sad/romi-sad-05-implementation-march2014.pptx>)

What are Benefits of use cases?

- (i) **Use cases** add value because they help explain how the system should behave and in the process, they also help brainstorm what could go wrong. They provide a list of goals and this list can be used to establish the cost and complexity of the system. Project teams can then negotiate which functions become requirements and are built.

What Use Cases Include	What Use Cases Do NOT Include
<ul style="list-style-type: none">• Who is using the website• What the user want to do• The user's goal• The steps the user takes to accomplish a particular task• How the website should respond to an action	<ul style="list-style-type: none">• Implementation-specific language• Details about the user interfaces or screens.

(<http://www.usability.gov/how-to-and-tools/methods/use-cases.html>)

- (ii) With the help of use case diagram, you can discuss and communicate:
 - The scenarios in which your system or application interacts with people, organizations, or external systems.
 - The goals that it helps those actors achieve.
 - The scope of your system.

(<http://msdn.microsoft.com/en-us/library/dd409432.aspx>)