ORACLE
Financial Services

Product Release Notes

Oracle Banking Supply Chain Finance

Release 14.6.1.0.0

Part No. F70156-01

August 2022

ORACLE®

ORACLE

Oracle Banking Supply Chain Finance
Product Release Note
August 2022
Version 14.6.1.0.0

Oracle Financial Services Software Limited
Oracle Park
Off Western Express Highway
Goregaon (East)
Mumbai, Maharashtra 400 063
India

Worldwide Inquiries:
Phone: +91 22 6718 3000
Fax: +91 22 6718 3001
https://www.oracle.com/industries/financial-services/index.html

Contents

ORACLE

ORACLE

1. Release Notes

1.1 Background / Environment

Oracle Financial Services Software Limited has developed Oracle Banking Supply Chain Finance solution. It is a comprehensive, digitized end-to-end solution that supports the full lifecycle of supply chain finance and factoring across receivables and payables offering supplier centric financing and buyer centric financing. The solution addresses each of the supply chain processes from design through execution thereby enabling banks to optimize the working capital and supply chain operations of their corporate customers. Its unique value lies in its ability to provide the business with predefined processes and a world-class framework that takes care of business risk and compliance needs.

1.2 Purpose

The purpose of this document is to highlight the functionalities included in the Oracle Banking Supply Chain Finance 14.6.1.0.0 release.

1.3 Abbreviations

Abbreviation	Detailed Description
OBSCF	Oracle Banking Supply Chain Finance
FCUBS	FlexCube Universal Banking System
API	Application Programming Interface
NBFC	Non-Banking Financial Company
UI	User Interface
UTR Number	Unique Transaction Response Number
FDD	Future Dated Disbursement
PO	Purchase Order
EOD	End of Day

1.4 Product Summary

Oracle Banking Supply Chain Finance Release 14.6.1.0.0 is enhanced to meet various challenges faced by financial institutions. It addresses each of the supply chain processes from design through execution. Its unique value lies in its ability to provide the business with predefined processes and a world-class framework that takes care of business risk and compliance needs.

ORACLE

1.5 <u>Release Highlights</u>

The key highlight of this release is to release new functionalities and enhancements made in the existing features with 14.6.1.0.0 version, required for supply chain finance industry with cutting-edge technology.

Functional:

- Introduction of new fields in Invoice and Debit Note creation screens

- Removal of validation of expiry date of Limits

- Changes in the Disbursement process for a borrower with overdue transaction(s)

- Changes in the Disbursement process for a borrower with NPA status or one who is delinquent

- Provision to set up reconciliation rule to use margin refunds to settle overdue finances

- Provision to set up reconciliation rule to use interest refunds to settle overdue finances

- Introduction of a configurable parameter that allows/disallows creation of overdue invoices/debit notes

- Routing of overdue invoices/debit notes to manual processing for financing

- Relationship Management enhancements for percolation of data

Non-Functional:

- Provision to search-for and depict multiple statuses for Invoices and Debit Notes in the *Receivables Inquiry* screen

- Provision to display Margin Details in the *Receivables Inquiry* screen, when viewing the details of a specific invoice that has a margin generated against it

- Provision to capture and display erroneous scenarios when executing EOD jobs

- Addition of Transaction Status in certain Inquiry screens

- FCI Changes

Integrations:

- Publishing of invoices and debit notes to the cashflow engine for provision of accurate cashflow forecasts

- Publishing of invoice-payment reconciliation to the cashflow engine for provision of accurate cashflow forecasts

- Introduction of a new API to provide the latest delinquency status of a borrower to the portal

- API enhancement to send accurate Transaction Status to the portal

- Service API enhancement to send the applied Recon Rule to the portal

ORACLE

2. Release Enhancements

2.1 Functional Features

2.1.1 Introduction of new fields in Invoice and Debit Note creation screens

The following fields have been added to the *Create Receivables and Payables* screen for Invoices and Debit Notes:

- BIC Routing Code (in the Basic Information tab)
- Virtual Account Flag (in the Basic Information tab)
- Repayment Account Number (in the Basic Information tab)
- Acceptance Amount (in the Commodity and Pricing tab)
- Pre-Acceptance Flag (in the Basic Information tab, only for debit notes)

2.1.2 Removal of validation of expiry date of Limits

The application now allows the addition of a child limit whose expiry is beyond that of the parent limit, in the *Create Limits* screen under Limits Structure. The existing validation where the limit expiry date of the child limit, for both main and adhoc limits, must be less than or equal to that of the parent limit expiry date, has been removed.

2.1.3 Changes in the Disbursement process for a borrower with overdue transaction(s)

Initially, there were no restrictions on the processing of disbursements, even if the borrower had overdue transactions. With this release, the application will allow the processing of disbursements either automatically or manually, for borrowers with overdue transactions (but not NPA), based on the value of a new flag. This flag is called 'Allow Auto Processing for Overdue Borrowers'. If this flag is set to NO, then the application will route all disbursements for borrowers with overdue transaction(s), to the manual queue. And if the flag is set to YES, then the auto-disbursements will be allowed.

2.1.4 Changes in the Disbursement process for a borrower with NPA status or one who is delinquent

Initially, disbursements were completely restricted for borrowers who have been classified as delinquent (NPA). With this release, the application will allow disbursements to be processed for delinquent borrowers based on the value of a new flag. This flag is called 'Allow Disbursements for NPA Borrowers'. If this flag is set to YES, then disbursements are allowed for delinquent borrowers, but they will always be routed to the manual queue, so that the user may confirm. If the flag is set to NO, then no disbursements will be allowed for a delinquent borrower.

ORACLE

2.1.5 Provision to set up reconciliation rule to use margin refunds to settle overdue finances

The application now provides the required parameters to set up a reconciliation rule that can use margin refunds to settle overdue finances. In the *Create Reconciliation Rule Definition* screen, the reconciliation rule can be created such that any payments in the form of margin refunds should be used to reconcile finances having delinquency status as 'Caution', or 'Warning', or 'Delayed', when the borrower is either the payment party or the beneficiary. This rule can then be linked through Recon Rule Decision, with a condition to add generic rule basis FIFO, with priority as 1, so that margin refund payments are reconciled only against overdue finances. Once overdue transactions are liquidated, the remaining amount may be refunded to the supplier.

2.1.6 Provision to set up reconciliation rule to use interest refunds to settle overdue finances

The application now provides the required parameters to set up a reconciliation rule that can use interest refunds to settle overdue finances. In the *Create Reconciliation Rule Definition* screen, the reconciliation rule can be created such that any payments in the form of interest refunds should be used to reconcile finances having delinquency status as 'Caution', or 'Warning', or 'Delayed', when the borrower is either the payment party or the beneficiary. This rule can then be linked through Recon Rule Decision, with a condition to add generic rule basis FIFO, with priority as 1, so that interest refund payments are reconciled only against overdue finances. Once overdue finances are liquidated, the remaining amount may be refunded to the interest bearing party.

2.1.7 Introduction of a configurable parameter that allows/disallows creation of overdue invoices/debit notes

Two new fields have been introduced in the *Relationship Maintenance* screen for allowing or disallowing creation of overdue invoices/debit notes. The receivables may be created directly on the application or uploaded through a file. The first field is a switch called 'Allow Overdue Receivables'. When this switch is enabled, overdue invoices/debit notes can be created, for that relationship. The second field is called 'Max Days Overdue'. This field will be enabled only if the switch is enabled. The maximum number of days past the invoice/debit note due date or the payment due date (if maintained) for creation of the receivable can be set using this field.

The creation of overdue invoices/debit notes will be prohibited, in the following cases:

- When the 'Allow Overdue Receivables' switch is disabled.
- When the number of days is beyond the number specified by the 'Max Days Overdue' field.

2.1.8 Routing of overdue invoices/debit notes to manual processing for financing

Overdue invoices and debit notes can be financed. However, the finance processing will always be routed to the manual queue. Appropriate warning messages will be displayed during the processing and approval of such finances.

ORACLE

2.1.9 Relationship Management enhancements for percolation of data

Initially, whenever a relationship was created or modified from *Relationship Management*, the relationship-level parameters were always percolated to the child records (or counterparties). In this release, this feature has been enhanced to provide a prompt, to let the user decide if specific relationship-level parameters should be percolated to the counterparties, or not. This feature is relevant for the following fields:

- Auto-Debit Applicable
- Holiday Treatment
- Auto Acceptance Applicable
- No. of Days
- Allow Overdue Receivables
- Maximum Days Overdue

In case a new relationship is being created, a prompt now appears whenever the user clicks on the '+' icon to add a counterparty, to confirm whether the relationship-level parameters should be percolated to the counterparties, or not. Similarly, when modifying an existing relationship record, if any of the above fields are modified, a prompt now appears asking to confirm whether the change should be applied to the counterparties, or not.

In case the user does not wish to copy the parent relationship level data to the child counterparty record, then the user can key in the required values in the specific counterparty grid. In case, any of the counterparty fields is left blank, then the corresponding value of the parent record will be read during transaction processing.

2.2 Non-Functional Features

2.2.1 Provision to search-for and depict multiple statuses for Invoices and Debit Notes in the *Receivables Inquiry* screen

This feature has been introduced because, an invoice/debit note can be in more than one status at a given instance. For example, Raised, Overdue, and Disputed. Therefore, in the *Receivables Inquiry* screen, a user can now search for invoices and debit notes, using multiple statuses in the 'Instrument Status' field. The invoices/debit notes that satisfy all the selected statuses must be displayed in the results. In the search results grid, all the relevant statuses of the invoice/debit note will be shown, separated by '/'. The 'Historical Status' will depict date of action against each status, in the order in which the status changes have occurred.

2.2.2 Provision to display Margin Details in the *Receivables Inquiry* screen

A Margin Details tab has now been introduced in the pop-up window that appears on clicking the reference number of an invoice/debit note, from the search results grid, in the *Receivables Inquiry* screen. This tab will appear only if the invoice/debit note has a margin generated against it. The tab will display details such as margin reference number, value date, margin amount, margin status (reconciled/refunded), reconciliation details (if reconciled), refund details (if refunded), and so on.

ORACLE

2.2.3 Provision to capture and display erroneous scenarios when executing EOD jobs

During execution of EOD batch jobs, there is a possibility of occurrence of technical or functional errors. These errors will now be captured and displayed, so that the user can take required action to rectify them. For this purpose, certain service calls have been enriched to show detailed error messages.

2.2.4 Addition of Transaction Status in certain Inquiry screens

In the *Receivables Inquiry, Credit Note Inquiry,* and *Payment Inquiry* screens, an additional field to display transaction status has been added, which will display if a transaction is in processing or completed state.

2.2.5 FCI Changes

A batch job has been introduced, which finds out the eligible FCI messages that have not been sent. It creates an FCI message for those, and sends them via a configurable workflow.

2.3 Integrations

2.3.1 Publishing of invoices and debit notes to the cashflow engine for provision of accurate cashflow forecasts

To make cashflow forecasts more accurate, newly created invoices and debit notes will now be posted to the cashflow engine, based on the value of a flag. The flag is called 'Create Cashflow from Invoice'. If set to 'Y', then cashflow records are created for the invoices/debit notes that are created. The existing cashflow API has been used for this purpose. This API is called with relevant invoice/debit note data, for cashflow record updating. A mapping of invoice/debit note data against cashflow has been done so that the cashflow engine can consume the relevant data.

2.3.2 Publishing of invoice-payment reconciliation to the cashflow engine for provision of accurate cashflow forecasts

A similar provision as above, has now been made to publish invoice-payment reconciliation (including debit note-payment reconciliation) and invoice-credit note reconciliation (including debit note-credit note reconciliation) to the cashflow engine for achieving accurate cashflow forecasts. This will be done based on the values of the flags – 'Create Cashflow from Invoice' and 'Exclude Recon'. The 'Exclude Recon' flag in the cashflow record is defaulted to 'Y' when the cashflow record is created based on invoice (when 'Create Cashflow from Invoice' is also set to 'Y'). In this case, when the reconciliation of invoice (or debit note) with payment (or credit note) takes place, these records are excluded from Auto and Manual Reconciliation of cashflows with payments. The existing cashflow API has been used for this purpose. This API is called with relevant invoice-payment (or debit note-payment) recon data or invoice-credit note (or debit note-credit note) recon data, for cashflow record updating. A mapping of the required recon data against cashflow has been done so that the cashflow engine can consume the relevant data.

2.3.3 Introduction of a new API to provide the latest delinquency status of a borrower to the portal

A new API has been developed to share the delinquency status of a borrower with the portal. In the 'Get Delinquency Status' request, the ID of the borrowing party can be passed. In the

ORACLE

response, the following is retrieved: delinquency status, delinquency description, active status (marked as 'N' when borrower becomes delinquent), status date, and priority accorded to the status.

2.3.4 <u>API enhancement to send accurate Transaction Status to the portal</u>

Whenever a portal application, such as OBDX, sends a query for retrieving invoice/debit-note/payment/credit-note details, the accurate transaction status is now sent in the response. In case of invoices and debit notes, the exact receivable/payable status, payment status, and finance status are sent. In case of payments, the exact payment status, and allocation status are sent. In case of credit notes, the exact credit note status, and reconciliation status are sent.

2.3.5 <u>Service API enhancement to send the applied Recon Rule to the portal</u>

Whenever a portal application, such as OBDX, sends a query for retrieving invoice/debit-note/payment/credit-note details, if the record has been reconciled or partially reconciled, the recon rule that has been applied is now sent in the response.

2.4 <u>Platform Changes</u>

NA

ORACLE

3. Deprecated Functionality

NA

ORACLE

4. Patches and Bugs

BugID	Bug Description	Fix Description

ORACLE

5. Security Fixes

NA

ORACLE

6. Limitations and Open issues

6.1 Limitations and open issues

BugID	Bug Description

ORACLE

7. Components of the Software

7.1 Documents accompanying the software

The various documents accompanying the software are as follows:

- Release Notes

- User Manuals and Installation manuals

7.2 Software Components

Software Components of OBSCF 14.6.1.0.0 that form part of this release are as follows:

- Core

  o UI Components (Knockout, OJET, Lux)

  o The Swagger / YAML for the services supported

  o Configuration files for the services

  o Service Components

  o Tables, Sequences, Static Data

- Installation utilities

  o Installation documents for Database, UI, Web services

ORACLE

8. Annexure – A: Environment Details

Oracle Banking Supply Chain Finance			
Application Server	Oracle Enterprise Linux Server Release 8.3 (x86 64 Bit)	Java HotSpot (TM) JDK (with WebLogic Application Server)	Oracle JDK 8 Update 321 & JDK 11.0.14
		Oracle WebLogic Server	14.1.1.0.0 ***Patch 32077936*
Database Server	Oracle Enterprise Linux Server 8.3 (x86 64 Bit)	Oracle RDBMS Enterprise Edition	19.14.0.0.0 (19c)
Client Machines#		Mozilla Firefox	87+
		Google Chrome	88+
		Microsoft Edge	89+
		Apple Safari	14+
Message Broker	Apache Kafka	ALL	2.13-2.8.1
	Apache Zookeeper	ALL	3.6.2
Note: • ***Patch 32077936: JSF APPLICATION RESPONSE ISSUE FOR HTTPS PROTOCOL WHEN HTTP2 IS ENABLED.* • Browser Support is strictly tied to the Browser itself, and no longer based on the Operating System. Current release is certified on client workstations with Windows 10 and Mac.			

ORACLE

9. Annexure – B: Third Party Software Details

Sr No	Copyright Holder	Licensed Item ID	Licensed Item Name	Licensed Item Version	BA ID
1	QOS.ch	59317	jul-to-slf4j	1.7.30	109608
2	Marco Ziccardi	35513	Node-TimSort	0.3.0	109785
3	Steven Sanderson	51996	Knockout.js	3.5.0	109793
4	Olli-Pekka Heinisuo	61297	opencv-python	4.3.0.36	84688
5	The Apache Software Foundation	61806	OpenNLP-tools	1.9.3	85908
6	Boxfuse GmbH	61597	flyway-core	6.5.5	86517
7	FasterXML, LLC	61527	jackson-jaxrs-json-provider	2.11.2	86519
8	Eclipse Foundation	59202	EclipseLink	2.7.7	86580
9	jsonwebtoken.io	60118	jjwt	0.11.2	86581
10	SmartBear Software	60156	swagger-annotations	1.6.2	86668
11	Jonathan Halterman	59507	modelmapper	2.3.8	86669
12	Zaxxer.com	59481	HikariCP	3.4.5	86719
13	Pivotal Software, Inc	61593	spring-cloud-stream-binder-kafka	3.0.8.RELEASE	86720
14	JSON.org	60616	JSON	20200518	86802
15	Pivotal, Inc.	61216	Spring Boot	2.3.3.RELEASE	86910
16	Pivotal Software, Inc	61592	spring-cloud-stream	3.0.8.RELEASE	86999
17	QOS.ch	61711	log4j-over-slf4j	1.7.30	87045
18	Apache Software Foundation	59221	Apache FOP	2.5	87059
19	Pivotal Software, Inc	62387	Spring Cloud Sleuth	2.2.5.RELEASE	87147
20	The Apache Software Foundation	62389	ZooKeeper	3.6.2	87164
21	Kalle Stenflo	59742	JsonPath	2.4.0-1ed1ea0	87401
22	JS Foundation and other contributors	58838	jQuery	3.5.1	87532
23	SmartBear Software	62548	swagger-parser	2.0.22	87550
24	The Apache Software Foundation	62632	camel-core	3.5.0	87752

ORACLE

Sr No	Copyright Holder	Licensed Item ID	Licensed Item Name	Licensed Item Version	BA ID
25	Alec Koumjian	62697	datefinder	0.7.1	87889
26	Pivotal Software, Inc	62702	spring-cloud-config-client	2.2.5.RELEASE	87897
27	Pivotal Software, Inc	62705	spring-cloud-config-server	2.2.5.RELEASE	87899
28	Pivotal Software, Inc	62706	spring-cloud-starter-config	2.2.5.RELEASE	87900
29	Pivotal Software	62708	spring-cloud-netflix-core	2.2.5.RELEASE	87901
30	The Apache Software Foundation	62730	spring-cloud-starter-netflix-zuul	2.2.5.RELEASE	87944
31	The Apache Software Foundation	62732	spring-cloud-netflix-eureka-client	2.2.5.RELEASE	87947
32	The Apache Software Foundation	62727	spring-cloud-starter-netflix-eureka-client	2.2.5.RELEASE	87948
33	NumPy Developers	78285	Numpy	1.22.2	119534
34	Alex Clark and contributors	78379	Pillow	9.0.1	119300
35	Jason R. Coombs, Barry Warsaw	80097	importlib-metadata	4.11.2	119622
36	The Apache Software Foundation	62793	camel-cxf	3.5.0	88107
37	The Apache Software Foundation	62794	camel-resilience4j	3.5.0	88108
38	The Apache Software Foundation	62141	Commons IO	2.8.0	88241
39	The Apache Software Foundation	62725	spring-cloud-starter-netflix-eureka-server	2.2.5.RELEASE	88488
40	The Apache Software Foundation	62973	spring-cloud-netflix-eureka-server	2.2.5.RELEASE	88509
41	Project Lombok	62966	Lombok	1.18.16	90843
42	SmartBear Software	64411	swagger-ui	3.39.0	91487
43	MapStruct Authors	67120	mapstruct	1.4.2.Final	95329
44	Google	64214	Tesseract	4.1.1	95479
45	Vladimir Goncharov	67226	pyap	0.3.1	95480

ORACLE

Sr No	Copyright Holder	Licensed Item ID	Licensed Item Name	Licensed Item Version	BA ID
46	Oracle	61232	JavaScript Extension Toolkit (JET)	9.1.0	96367
47	VMware	67360	micrometer-registry-prometheus	1.6.4	96451
48	OpenJS Foundation	67576	lodash	4.17.21	104985
49	Jason R. Coombs	79451	configparser	5.2.0	118362
50	The Apache Software Foundation	71860	PDFBox	2.0.24	103589
51	The Apache Software Foundation	62385	HttpComponents HttpClient	4.5.13	109610
52	Saxonica Limited	73656	Saxon-HE	10.5	106703
53	The Apache Software Foundation	53857	cglib	3.3.0	109776
54	Josdejong	51995	math.js	5.9.0	109790
55	The Apache Software Foundation	49220	Commons FileUpload	1.4	109779
56	FasterXML, LLC	77722	jackson-dataformat-xml	2.13.1	115440
57	Chef	74474	Oracle Replacement Configurator (ORC)	16.13.16	117501
58	Schibsted Marketplaces Products & Technology As	80021	jslt	0.1.11	119440
59	Adam Hupp	80062	python-magic	0.4.25	119530
60	Python Software Foundation	74350	python-dateutil	2.8.2	119525
61	QR Capital Management, LLC, Lambda Foundry, Inc. and PyData Development Team	78736	Pandas	1.4.1	119623
62	Scrapinghub	80095	dateparser	1.1.0	119619
63	scikit-learn developers	78074	scikit-learn	1.0.2	119624
64	Edouard Belval	79856	pdf2image	1.16.0	119301
65	Pivotal Software	80416	spring-batch-integration	4.3.5	120055
66	The Netty Project	77435	netty-transport-native-epoll	4.1.72.Final	115262
67	The Netty Project	77098	netty-codec-http	4.1.72.Final	116376

ORACLE

Sr No	Copyright Holder	Licensed Item ID	Licensed Item Name	Licensed Item Version	BA ID
68	QOS.ch	79864	jcl-over-slf4j	1.7.36	119133
69	Matthias Lee	79679	pytesseract	0.3.9	118752
70	The Apache Software Foundation	77256	Avro for Java	1.11.0	118741
71	Pivotal, Inc.	72374	spring-security-oauth2	2.5.1	115904
72	Apache Software Foundation	79866	tika-core	1.28.1	119136
73	Benjamin Peterson	71336	six	1.16.0	119532
74	The Pallets Team	79419	Flask	2.0.3	118360
75	Pivotal Software, Inc	74057	spring-security-saml2-service-provider	5.5.1	107584
76	Netflix	80005	Conductor	3.5.2	119416
77	Apache 2.0	78091	shedlock-provider-jdbc-template	4.30.0	116182
78	Google	63149	Guava	30	109707
79	The Apache Software Foundation	78505	Commons CSV	1.9.0	119498
80	Stuart Knightley et. Al	51994	JSZip	3.2.1	109787
81	The Apache Software Foundation	71044	velocity-engine-core	2.3	114542
82	jsoup.org	75717	jsoup	1.14.3	114382
83	Python Software Foundation	71112	Python	3.9.5	117355
84	Joe Walnes	73846	XStream	1.4.18	115267
85	Matthieu Darbois	79452	pybase64	1.2.1	118363
86	The Apache Software Foundation	77328	velocity-tools-generic	3.1	114544
87	Michael Mclaughlin	78430	bignumber.js	9.0.2	116696
88	Tim Wood, Iskren Chernev, Moment.js contributors	80691	Moment.js	2.29.2	120937
89	Pivotal, Inc.	72546	spring-security-config	5.5.1	120780
90	Google	79781	GSON	2.9.0	119139
91	Zalando SE	79675	connexion	2.12.0	118749
92	Apache 2.0	78089	shedlock-spring	4.30.0	116185
93	Eclipse Foundation	58484	Eclipse Yasson	1.0.6	109709

ORACLE

Sr No	Copyright Holder	Licensed Item ID	Licensed Item Name	Licensed Item Version	BA ID
94	The Apache Software Foundation	78236	POI	5.2.0	118139
95	The Apache Software Foundation	75480	Kafka	2.8.1	119497
96	Pivotal, Inc.	72544	spring-security-core	5.5.1	120783
97	The Apache Software Foundation	76333	Ant	1.10.12	116261
98	Pivotal, Inc.	72547	spring-security-web	5.5.1	120781
99	Eclipse Foundation	72504	Jakarta Mail	2.0.1	117187
100	The Apache Software Foundation	77662	XMLBeans	5.0.3	121106
101	The Apache Software Foundation	77682	ant-launcher	1.10.12	121181
102	Pivotal Software, Inc	80167	spring-security-ldap	5.5.1	120513
103	Pivotal Software, Inc	80168	spring-security-crypto	5.5.1	119717
104	FasterXML, LLC	77718	jackson-dataformat-cbor	2.13.1	115437
105	Quan Nguyen	68626	tess4j	4.5.4	98076

ORACLE