

Product Release Notes

Oracle Banking Supply Chain Finance

Release 14.7.0.0.0

Part No. F72110-01

November 2022



Oracle Banking Supply Chain Finance
Product Release Note
November 2022
Version 14.7.0.0.0

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>

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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 14.7.0.0.0 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 14.7.0.0.0 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.

1.5 Release Highlights

The key highlight of this release is to release new functionalities and enhancements made in the existing features with 14.7.0.0.0 version, required for supply chain finance industry with cutting-edge technology.

Functional:

- Excess Payment Handling for excess payments received against invoices or finances
- Changes to Accounting for Excess Payment Refund
- Changes to Accounting for Interest Refund
- Payment Management Changes to Mark a Payment for Refund
- Exception Handling Mechanism introduced for Payment Excess and Interest Refund
- Changes to Payments Inquiry for Refund Handling
- Enhancement to Finance Inquiry to drill down on Interest Refund
- Enhancement to Finance Inquiry to search by Delinquency Status
- 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
- Changes in the Disbursement process for a borrower with NPA status or one who is delinquent
- 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
- 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
- Margin and Interest Refund fields moved in Product Maintenance
- Enhancements to Maker Checker Workflow
- Reconciliation Rule Enhancements
- Charge on Invoice Assignment
- Dashboard Enhancements

Non-Functional:

- OJET Migration
- Margin and Interest Refund fields layout in Product Maintenance
- Extensibility in Maintenance Screen
- Integration with OBCL for EOD
- Oracle Banking Microservices Architecture Installer

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

1.6 **Functional Features**

1.6.1 **Excess Payment Handling for excess payments received against invoices or finances**

When a payment is made in excess of the outstanding invoice amount or outstanding finance amount, the excess amount can be:

- Refunded to the payment party or the beneficiary party
- Auto-reconciled as per existing reconciliation rule
- Manually reconciled
- Auto-reconciled and refunded

For the refund, the payment mode can be set as: EFT, Cheque or Account Transfer.

Three new parameters have been introduced for implementing this feature: Excess Handling, Excess Refund Party, and Refund Payment Mode. These parameters have been introduced in the following sections (screens): Relationship Management, Product Parameters, Program Parameters and Spoke Parameters (Link Spokes).

1.6.1.1 **Product Parameters**

The three new parameters mentioned above, have been introduced at the product-level, in the following screens:

Supply Chain Finance > Product Parameters > Create and View screens > Repayment Parameters

The 'Get Product' API has been modified to include these parameters.

1.6.1.2 **Program Parameters**

The three new parameters mentioned above, have been introduced at the program-level, in the following screens:

Supply Chain Finance > Program Parameters > Create and View screens > Finance Parameters
And

Supply Chain Finance > Program Parameters > Create and View screens > Link Spokes

The 'Get Program' API has been modified to include these parameters.

1.6.1.3 **Relationship Management**

The three new parameters mentioned above, have been introduced at the relationship-level for a corporate party, in the following screens:

Receivables & Payables > Relationship Management > Create Relationship and View Relationship

These parameters are available at both the parent level and the child levels in this screen. The relationships file upload template has also been modified to include these fields. They however remain blank when relationships are created through the portal by the corporate and can only be defined by the bank user.

1.6.2 Changes to Accounting for Excess Payment Refund

A new event for Excess Refund has been created in Accounting Entries mapping UI, to enable the application to identify the mode of repayment and the credit account number to refund the excess payment amount to. These events have been created for the Receivables & Payables application and the Supply Chain Finance application. Accounting entries maintained in Receivables & Payables are used for excess payments against invoices and those in SCF are used for excess payments against finances. Similarly, Excess Refund event has been created in Internal Account Mapping and External Account Mapping Screens as well.

1.6.3 Changes to Accounting for Interest Refund

A new event for Interest Refund has been created in Accounting Entries mapping UI in SCF, to enable the application to identify the mode of repayment and the credit account number to refund interest to. Similarly, Interest Refund event has been created in Internal Account Mapping and External Account Mapping screens as well.

1.6.4 Payment Management Changes to Mark a Payment for Refund

A new action called 'Mark Refund' has been introduced in the Payment Management screen, to mark the unreconciled portion of a payment for refund. The excess amount marked for refund is refunded to the relevant party based on a batch job. This action is applicable only to unreconciled or part-reconciled payments, which are not in processing stage, and which have flags set to 'I' (invoice), or 'F' (finance), or null.

In connection with this feature, the following changes have also been made:

- The 'Recon' Queue under Tasks menu has been renamed as 'Recon and Payment'.
- The 'Recon Type' label in the Tasks grid has been renamed as 'Workflow'.
- The 'Recon Category' label in the Tasks grid has been renamed as 'Category'.

1.6.5 Exception Handling Mechanism introduced for Excess, Interest and Margin Refunds

The excess payment amount from settling outstanding invoices/finances is handled automatically based on the parameters set at Program / Product / Relationship / System-level. However, if any exceptions arise during the processing, such transactions are now routed to a queue called 'Refunds' under 'Tasks'. This queue was previously called 'Margin' and has now been renamed as 'Refunds'. All tasks related to excess refunds, interest refunds, and margin refunds will now appear in this queue.

1.6.6 Changes to Payments Inquiry for Refund Handling

For a payment that has an excess refund generated against it, the Payment Inquiry screen now shows an additional tab called 'Excess Payment Details', with the details of the excess payment refund. The Payment Service Inquiry API has also been enhanced to support the inquiry of excess payments.

1.6.7 Enhancement to Finance Inquiry to drill down on Interest Refund

Previously, the interest refund amount was just listed in the Finance Inquiry screen. There was no information on how this amount was handled, whether it was reconciled with outstanding finances, or refunded, and if refunded, then to which account. In this release, the Interest Refund Amount is now displayed as a hyperlink, if the refund amount is greater than zero. On clicking this hyperlink, a pop-up window appears which displays details such as, value date, interest refund status, reconciled invoice/finance number, beneficiary name, beneficiary account, and so on.

1.6.8 Enhancement to Finance Inquiry to search by Delinquency Status

Previously, the Finance Inquiry screen did not have the provision to search for finances based on their delinquency status. This feature has now been added. A new multi-select search field, for 'Delinquency Status' has been introduced. This field enables the user to select single or multiple delinquency statuses. The search functions as "AND" between two statuses. If left blank, all delinquency statuses are included.

1.6.9 Provision to set up reconciliation rule to use margin generated to settle overdue finances

The application now provides the required parameters to set up a reconciliation rule so that margins generated can be used to settle overdue finances. In the *Create Reconciliation Rule Definition* UI, a reconciliation rule can be created such that payment records generated internally by the application on account of margin, should be used to reconcile finances with delinquency status other than Normal (regular), 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, 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.

1.6.10 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 refund amount generated 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 with delinquency status other than Normal (regular), 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, 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.

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

Initially, disbursements were completely restricted for borrowers classified as delinquent (NPA). With this release, the application will allow disbursements to be processed for delinquent borrowers based on a newly introduced flag, '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 bank user may confirm. If the flag is set to NO, then no disbursements will be allowed for a delinquent borrower.

1.6.12 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.

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

Overdue invoices and debit notes can be financed. However, the finance processing will be routed to a manual queue if the newly introduced flag, "Allow Auto-Processing for Overdue Borrowers" is set to NO. If set to YES, auto-processing will be allowed. Appropriate warning messages will be displayed during the processing and approval of such finances.

1.6.14 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), other reconciliation and refund details as applicable.

1.6.15 Margin and Interest Refund fields moved in Product Maintenance

The margin and interest refund fields have now been moved to the 'Repayment Parameters' tab from the 'Finance Parameters' tab under Product Maintenance.

1.6.16 Enhancement to Maker-Checker Workflow in Maintenance Screens

The Maker-Checker workflow in maintenance screens has been enhanced to include 'Reject' option from both Maker & Checker screens. The audit has been enhanced to capture both Maker & Checker rejects. Rejection from checker allows the maker to rework on the transaction and submit it again to checker.

1.6.17 Reconciliation Rule Enhancements

Following enhancements have been done in reconciliation rules.

1.6.17.1 Additional Attributes for Matching

Reconciliation Rule Definition screen has been enhanced to provide more options for attributes against which rules can be set intuitively for margin and interest refund. Attributes like Payment Indicator to identify type of payment, i.e., Margin, Interest Refund or Excess Payment and Delinquency Status for Finance allow the bank users to set up reconciliation rules easily.

1.6.17.2 Creation of Rules with “Fixed Values” and Case Sensitivity Flexibility

A Case Sensitive switch (Yes or No) is introduced in the exact recon condition to select whether the system needs to check the case sensitivity of the field value while recon execution.

1.6.17.3 Addition of new pattern type “Contains”

A new pattern type Contains is introduced in Recon rule definition maintenance screen to check at the time of reconciliation that the LHS attribute field selected should contain any specified words or phrases entered as VALUE.

1.6.18 Charge on Invoice Assignment

The factoring workflow may involve a commission or fee which is due to banks or factors on invoice assignment. The application has been enhanced to allow the bank to maintain fee or commission-based charges on invoice assignment.

1.6.19 Dashboard Enhancements

Below dashboards have been enhanced in this release to include date range/days-based filters which would enable bank users to take business decisions related to transaction processing.

1.6.19.1 Facility Near Expiry Dashboard

A days-based filter has been provided to enable bank users to see limits expiring in next 30 days or 60 days and so on in future which would help them to streamline interactions with credit department.

1.6.19.2 Facility Expired Dashboard

A date range-based filter has been provided which would enable bank users to see facilities which have expired before today basis which they can trigger actions for facility renewal if required.

1.6.19.3 Finances Maturing Dashboard

This dashboard has been made more intuitive by displaying timeline for each week on X-axis while earlier it was showing only the week number.

1.7 Non-Functional Features

1.7.1 OJET Migration

The User Interface has been upgraded to OJET 13.

1.7.2 Margin and Interest Refund fields layout in Product Maintenance:

The margin and interest refund fields have now been moved to the 'Repayment Parameters' tab from the 'Finance Parameters' tab under Product Maintenance.

1.7.3 Extensibility in Maintenance Screen

Below maintenance screens have been made extensible in this release.

- Limits screen has been made extensible to allow override of limit expiry date validation.
- Program screen has been made extensible to support pre-population of fields from product and addition of new fields

1.7.4 Integration with OBCL for EOD

OBSCF EOD is now integrated with OBCL EOD wherein OBCL EOD runs first while OBSCF waits for its response and based on response from OBCL, OBSCF EOD progresses further. The EOD monitoring screen captures the OBCL EOD step, and its status is shown on UI along with other events of OBSCF. A system parameter has been introduced basis which the integration can be enabled or disabled during implementation.

1.7.5 Oracle Banking Microservices Architecture Installer

Oracle Banking Microservices Architecture Installer is introduced to create the infrastructure required for Oracle Banking Product(s) and install the product (Fresh install) at the customer site.

For more information, refer to Oracle Banking Microservices Architecture Installer Guide.

1.8 Integrations

1.8.1 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 a new flag '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. A mapping of invoice/debit note data against cashflow has been done so that the cashflow engine can consume the relevant data.

1.8.2 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’). The Exclude Recon flag ensures that cashflow records are not directly reconciled with payments. Instead, their reconciliation will be governed by the reconciliation of corresponding invoices with payments or credit notes. The existing cashflow API has been used for this purpose. A mapping of the required recon data against cashflow has been done so that the cashflow engine can consume the relevant data.

1.9 Platform Changes

NA

2. Deprecated Functionality

NA

3. Patches and Bugs

BugID	Bug Description	Fix Description

4. Security Fixes

NA

5. Limitations and Open issues

5.1 Limitations and open issues

BugID	Bug Description
34719489	Missing ALT tag for the Logo in Login page
34719512	When zoomed to 200%, content in the header section is lost
34719532	When the display orientation is set to portrait/landscape mode, the page is lost
34719539	When zoomed at 400%, the page does not reflow
34719550	Documentation does not cover the accessibility features of the product

6. Components of the Software

6.1 Documents accompanying the software

The various documents accompanying the software are as follows:

- Release Notes
- User Manuals and Installation manuals

6.2 Software Components

Software Components of OBSCF 14.7.0.0.0 that form part of this release are as follows:

- Core
 - UI Components (OJET)
 - The Swagger / YAML for the services supported
 - Configuration files for the services
 - Service Components
 - Tables, Sequences, Static Data
- Installation utilities
 - Installer zips containing installation scripts for installing microservices and UI.

7. 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 341 or JDK 11.0.16
		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	19.16.0.0.0 (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: <ul style="list-style-type: none"> **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. 			

8. Annexure – B: Third Party Software Details

Sr No	Copyright Holder	Licensed Item ID	Licensed Item Name	Licensed Item Version	BA ID
1	Eclipse Foundation	59202	EclipseLink	2.7.7	86580
2	Google	79781	GSON	2.9.0	119139
3	The Apache Software Foundation	78236	POI	5.2.0	118139
4	Project Lombok	62966	Lombok	1.18.16	90843
5	The Apache Software Foundation	75480	Kafka	2.8.1	119497
6	jsoup.org	85700	jsoup	1.15.3	130116
7	QOS.ch	79864	jcl-over-slf4j	1.7.36	119133
8	Google	63149	Guava	30.0	109707
9	Benjamin Peterson	71336	six	1.16.0	119532
10	FasterXML, LLC	80038	jackson-jaxrs-json-provider	2.13.2	129935
11	jsonwebtoken.io	60118	jjwt	0.11.2	86581
12	FasterXML, LLC	79912	jackson-dataformat-xml	2.13.2	130452
13	Alec Koumjian	62697	datefinder	0.7.1	87889
14	Olli-Pekka Heinisuo	81068	opencv-python	4.5.5.62	121371
15	Edouard Belval	79856	pdf2image	1.16.0	119301
16	Vladimir Goncharov	67226	pyap	0.3.1	95480
17	OpenJS Foundation	67576	lodash	4.17.21	104985
18	Pivotal Software, Inc	62730	spring-cloud-starter-netflix-zuul	2.2.5.RELEASE	87944
19	Pivotal Software, Inc	79892	spring-cloud-starter-netflix-zuul	2.2.10.RELEASE	127027
20	Python Software Foundation	74350	python-dateutil	2.8.2	119525
21	Boxfuse GmbH	61597	flyway-core	6.5.5	86517
22	Zalando SE	79675	connexion	2.12.0	118749
23	Kalle Stenflo	80611	json-path	2.7.0	129299
24	Saxonica Limited	73656	Saxon-HE	10.5	106703
25	Scrapinghub	80095	dateparser	1.1.0	119619
26	The Netty Project	86152	netty-transport-native-epoll	4.1.79.Final	129866
27	Jason R. Coombs	79451	configparser	5.2.0	118362
28	scikit-learn developers	78074	scikit-learn	1.0.2	119624
29	SmartBear Software	64411	swagger-ui	3.39.0	91487

Sr No	Copyright Holder	Licensed Item ID	Licensed Item Name	Licensed Item Version	BA ID
30	SmartBear Software	60156	swagger-annotations	1.6.2	86668
31	Zaxxer.com	59481	HikariCP	3.4.5	86719
32	QOS.ch	61711	log4j-over-slf4j	1.7.30	87045
33	JSON.org	59359	JSON in Java	20200518	86802
34	Oracle	84482	JavaScript Extension Toolkit (JET)	13.0.0	128654
35	Spring IO	86136	spring-security-core	5.6.4	129842
36	Pivotal, Inc.	87344	spring-boot-starter-data-jpa	2.5.14	131943
37	Pivotal, Inc.	87343	spring-boot-starter-logging	2.5.14	131934
38	Pivotal Software, Inc	62732	spring-cloud-netflix-eureka-client	2.2.5.RELEASE	87947
39	Pivotal, Inc.	87347	spring-boot-starter-hateoas	2.5.14	131947
40	Jonathan Halterman	59507	modelmapper	2.3.8	86669
41	Pivotal, Inc.	85759	spring-boot-starter-web	2.5.14	131918
42	Pivotal, Inc.	87349	spring-boot-starter-jdbc	2.5.14	131951
43	Pivotal, Inc.	87352	spring-boot-starter-jersey	2.5.14	131952
44	Pivotal, Inc.	85640	spring-boot-starter-aop	2.5.14	131906
45	Alex Clark and contributors	82932	Python Imaging Library (Pillow)	9.1.1	124787
46	The Apache Software Foundation	86154	tika-core	1.28.4	129868
47	Adam Hupp	80062	python-magic	0.4.25	119530
48	The Apache Software Foundation	62389	ZooKeeper	3.6.2	87164
49	The Apache Software Foundation	62385	HttpComponents HttpClient	4.5.13	109610
50	Matthias Lee	79679	pytesseract	0.3.9	118752
51	The Apache Software Foundation	77662	XMLBeans	5.0.3	121106
52	The Apache Software Foundation	77256	Avro for Java	1.11.0	130115
53	QOS.ch	59317	jul-to-slf4j	1.7.30	109608
54	MapStruct Authors	67120	mapstruct	1.4.2.Final	95329
55	Pivotal, Inc.	87340	spring-boot-starter-json	2.5.14	131926
56	Google	82572	tesseract	5.1.0	124137
57	The Apache Software Foundation	77328	velocity-tools-generic	3.1	114544
58	Eclipse Foundation	72504	Jakarta Mail	2.0.1	117187

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59	Chef	74474	Oracle Replacement Configurator (ORC)	16.13.16	117501
60	The Apache Software Foundation	53857	cglib	3.3.0	109776
61	The Apache Software Foundation	76333	Ant	1.10.12	116261
62	Pivotal Software, Inc	55822	spring-cloud-stream-schema	2.2.1.RELEASE	130443
63	The Apache Software Foundation	49220	Commons FileUpload	1.4	109779
64	FasterXML, LLC	80675	jackson-dataformat-cbor	2.13.2	131240
65	Spring IO	86143	spring-security-web	5.6.4	129848
66	Spring IO	86142	spring-security-config	5.6.4	129847
67	The Netty Project	86150	netty-codec-http	4.1.79.Final	129863
68	VMware	67360	micrometer-registry-prometheus	1.6.4	96451
69	The Apache Software Foundation	80090	camel-core	3.14.1	119612
70	The Apache Software Foundation	80093	camel-cxf	3.14.1	119618
71	The Apache Software Foundation	80092	camel-resilience4j	3.14.1	119617
72	Pivotal, Inc.	85758	spring-boot-starter-tomcat	2.5.14	131916
73	The Apache Software Foundation	78505	Commons CSV	1.9.0	119498
74	The Apache Software Foundation	84312	spring-cloud-starter-netflix-eureka-client	3.0.6	126953
75	Quan Nguyen	85336	tess4j	5.2.1	128655
76	Pivotal, Inc.	61216	Spring Boot	2.3.3.RELEASE	86910
77	Pivotal, Inc.	87354	spring-boot-starter-batch	2.5.14	131955
78	Pivotal, Inc.	87345	spring-boot-starter-validation	2.5.14	131940
79	The Apache Software Foundation	71860	PDFBox	2.0.24	103589
80	The Apache Software Foundation	82561	PDFBox	2.0.26	129193
81	Apache Software Foundation	59221	Apache FOP	2.5	87059
82	NumPy Developers	78285	Numpy	1.22.2	119534
83	Pivotal Software, Inc	62706	spring-cloud-starter-config	2.2.5.RELEASE	87900
84	Netflix	80005	Conductor	3.5.2	119416
85	Michael McLaughlin	78430	bignumber.js	9.0.2	116696

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86	The Apache Software Foundation	71044	velocity-engine-core	2.3	114542
87	Triad National Security, LLC	82571	pyxDamerauLevenshtein	1.7.0	124118
88	Apache 2.0	78089	shedlock-spring	4.30.0	116185
89	Apache 2.0	78091	shedlock-provider-jdbc-template	4.30.0	116182
90	Jason R. Coombs, Barry Warsaw	80097	importlib-metadata	4.11.2	119622
91	The Apache Software Foundation	77682	ant-launcher	1.10.12	121181
92	Pallets	86550	Flask	2.2.2	130625
93	SmartBear Software	84025	swagger-parser-core	2.1.1	129510
94	The Apache Software Foundation	84324	spring-cloud-sleuth-zipkin	3.0.6	126964
95	The Apache Software Foundation	84325	spring-cloud-starter-zipkin	2.2.8.RELEASE	127025
96	The Apache Software Foundation	84319	spring-cloud-netflix-eureka-server	3.0.6	126960
97	Spring IO	86141	spring-security-ldap	5.6.4	129845
98	The Apache Software Foundation	84435	spring-security-oauth2	2.5.2.RELEASE	129938
99	The Apache Software Foundation	84366	spring-cloud-config-server	3.0.7	127033
100	Matthieu Darbois	79452	pybase64	1.2.1	118363
101	SmartBear Software	83736	swagger-parser-v2-converter	2.1.1	129593
102	The Apache Software Foundation	84320	spring-cloud-starter-sleuth	3.0.6	126963
103	Apache Software Foundation (ASF)	84364	spring-cloud-netflix-hystrix	2.2.10.RELEASE	127029
104	SmartBear Software	83618	swagger-parser-v3	2.1.1	130024
105	Spring IO	86140	spring-security-crypto	5.6.4	129843
106	Spring IO	86148	spring-security-saml2-service-provider	5.6.4	129855
107	The Apache Software Foundation	84315	spring-cloud-starter-config	3.0.7	126957
108	QR Capital Management, LLC, Lambda Foundry, Inc. and PyData Development Team	78736	Pandas	1.4.1	119623
109	Schibsted Marketplaces Products & Technology As	80021	jslt	0.1.11	119440
110	Pivotal Software, Inc	62727	spring-cloud-starter-netflix-eureka-client	2.2.5.RELEASE	87948

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111	The Apache Software Foundation	84317	spring-cloud-netflix-eureka-client	3.0.6	126958
112	The Apache Software Foundation	84862	spring-cloud-starter-stream-kafka	3.1.6	127863