

Simplifying Data Extraction from Oracle Fusion Cloud Applications With **SplashBI Data Pipeline**

We're not just saying that... We've built it for you!



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Executive Summary



Enterprises struggle with utilizing data from cloud-native ERP and SaaS systems. Over the last few months, our Oracle Fusion Cloud Applications customers have shed significant light on this challenge. Most of these customers source technology from multiple vendors. But Oracle provides limited support for integration, and the responsibility eventually falls on the customer. This further exacerbates the challenge and places an additional burden on the customer.

According to a study by *IDC*, almost half the data collected by enterprises remains unused.

Modern organizations generate data like never before, thanks to the increased use of analytics, cloud migration initiatives, and the proliferation of IoT devices. But a staggering 43% of this enterprise data remains unused. One of the most significant reasons for this is how data is distributed in silos across systems like internal data centers, third-party data centers, edge data centers or remote locations, cloud repositories, and other locations.

Typical data distribution in enterprises:

20%

Third-party data centers

30%

Internal data centers

19%

Edge data centers or remote locations

22%

Cloud repositories

9%

Other locations

With increased data generation in their businesses, our customers have invested in tools and technologies to democratize these data streams across the enterprise. The objective is easy accessibility for business users to capitalize on data and insights in their decision-making cycles at scale and pace.

Getting rid of data silos between Oracle Fusion Cloud Applications and other systems and extracting the right data sets for reporting, insights, and decision-making are the holy grails of all modern, data-driven enterprises. But a curious thing has happened on this journey of data-centricity. Heterogenous data formats are spread across a silo of on-prem, cloud, and

This guidebook examines the data extraction challenges among enterprises like yourselves and explains how you can address them with the SplashBI Data Pipeline.

hybrid environments, making data extraction and integration more challenging than they should be.

Ironically, the same data and systems that enterprises invest in to make data accessibility easy often become the biggest obstacles in the journey of data-centricity. Of course, you can address this with extensive coding, data engineering, and manipulation skills, but this brings the objective of data democratization to naught.

Shouldn't there be a self-service solution that doesn't require extensive IT intervention?

Enterprises using
Oracle Fusion
Cloud Applications
now have a more
straightforward
solution to these
challenges.

Data Extraction from Oracle Fusion Cloud Applications

- A Deep Dive



Oracle Fusion Cloud Applications are some of the most influential digital business platforms in the market right now. Thousands of enterprises leverage these SaaS-based systems worldwide to run agile, intelligent business applications and maximize efficiency across diverse workstreams.

Like all SaaS systems, Oracle Fusion Cloud Applications' architecture and technology are complex, although highly effective in the intended use cases. The underlying complex data model with thousands of tables holds organizations back from using the data more and getting better value from these systems. Often, business teams need to extract data from Oracle Fusion Cloud Applications for insights and reporting and make critical decisions on the go. This is challenging because Oracle Fusion Cloud Applications restricts access to data like most SaaS systems.

So, business teams grapple with questions like which data sets to download, how to handle the enormous number of Objects, and how to integrate Oracle Fusion Cloud Applications data with other on-prem, cloud-native, and hybrid systems. This is especially true for organizations that have just started their migration journey from on-premise and fully controlled databases to SaaS-based applications. They are new to the expertise it entails to perform these tasks. Even after years, IT and data

engineering teams struggle to perform data extraction at scale and speed.

At the same time, more and more organizations are now keen on DataOps to operationalize their data environment and merge with analytics tools. Data extraction is an essential component of building data ops.

Enterprises are sentient beings. So are tools and systems like Oracle Fusion Cloud Applications. Data sets change. Data volumes increase. SaaS tools have version updates. Keeping up with these changes is hard work.

In the upcoming pages, we will discuss specific data extraction challenges on Oracle Fusion Cloud Applications.

Typical Challenges of Data Extraction Challenges from Oracle Fusion Cloud Applications



Business users need continuous access and capabilities to create insight reports from diverse, heterogeneous data on Oracle Fusion Cloud Applications. But this is easier said than done.

What Keeps Oracle Fusion Cloud Applications Customers Up at Night?



No database access for data extraction at scale and pace



Data silos across systems and tools in a hybrid environment



The human resource cost of CSV and Excel data manipulation



Performance issues with flexfield columns



Keeping up with incremental data

Now, let's dive into the details of each of these challenges.

- **No database access for data extraction at scale and pace**

Like most SaaS-based applications, Oracle Fusion Cloud Applications restricts access to its underlying database. This is especially challenging for enterprises that are just starting to make the shift from fully controlled on-prem systems to SaaS-based applications.

What this means: Due to the database access restriction, extraction is limited to the fields, entities, and attributes that OTBI provides during the process. BI Publisher is another option, but it has proven to require overwhelming technical expertise to operate correctly.

- **Data silos across systems and tools in a hybrid environment**

Breaking down data silos between different systems is challenging. This challenge worsens when these systems are in a heterogeneous environment like a combination of on-prem and cloud systems. Let's take the example of HR processes on Oracle Fusion Cloud Applications. The back-and-forth flow of data is complex if your employees are onboarded on Oracle Fusion Cloud Applications, but their payroll and check printing process is handled by on-prem software. You have the option of copy-pasting data from Fusion to Excel and then feeding it to the on-prem system. But this cumbersome process will kill your team's productivity.

What this means: As data volume increases, it is impossible to operate in a manual copy-paste model because it is not scalable and requires repetitive tasks that can be automated for higher productivity.

- **The human resource cost of CSV and Excel data manipulation**

When data is extracted from Oracle Fusion Cloud Applications, it generally lands in a file-based format. Oracle Fusion Cloud Applications will deliver an Excel sheet, a CSV, or a PDF. PDF is not functional for data manipulation, while Excel and CSV formats require extensive time. The time and complexity increase in proportion to the volume of data. This massive human resource cost is neither scalable nor sustainable, especially for organizations with large volumes of data sets.

What this means: Using CSV or Excel for data manipulation and integration restricts business users from creating quick reports or gleaning sharp insights for decision-making.

- **Performance issues with Flexfield columns**

SplashBI customers report that they often run custom interfaces that extract data from Oracle Fusion Cloud Applications. This usually needs filter criteria from flexfield segments. The data stored in these segments is not indexed, leading to severe performance and speed issues. This challenge is further exacerbated by a year-on-year increase in the volume of data or the number of users.

What this means: There needs to be a more efficient way of data extraction that is not prone to excessive-performance problems –

a solution that allows customized indexes on flexfield segments. Extracts run much faster in alternate environments than when bogged down by flexfield performance in a SaaS environment.

- **Keeping up with incremental data**

Keeping up with changes in data values and volumes to produce accurate reports for decision-making is a tall order. This problem intensifies when an Oracle Fusion Cloud Applications power user has access to too many OTBI Subject Areas. Questions can bog them down – which columns, folders, and Subject Areas to choose, which ones to leave out, and so much more. The

accuracy of these tasks also depends on the skill and expertise of the user who is pulling out incremental data through coding in tools like BICC.

What this means: Keeping up with incremental data requires IT and data engineering expertise and an extensive understanding of the Oracle Fusion Cloud Applications environment. This renders the business user dependent on other teams for their data needs for decision-making and beats the purpose of data democratization.

But now, you have help at hand, and a fresh opportunity to save time and effort on data extraction and building meaningful reporting processes.



Save Time and Effort on Data Extraction and Reporting with a Data Pipeline



A Look Inside What a Sound Data Pipeline Entails to Make Data Extraction on Oracle Fusion Cloud Applications Efficient and Scalable

A no-code platform for reduced dependency on IT and data engineering teams

Scheduling capability for incremental data extracts

Homogenous data format for manipulation at scale and pace

No data management bandwidth is required with automatic syncing

Complete flexibility in data storage

Easy and self-service connectivity with analytics tools for reporting

Enhanced data security and integrity with permission controls

Complete control over the replicated database

Enhanced standardization

- **A no-code platform for reduced dependency on IT and data engineering teams:**

The data extraction process from the data pipeline should be based on a seamless, easy-to-use user interface, so that users are no longer required to write lines of code to address their data needs.

What this means: Power users no longer need to rely excessively on IT and data engineering teams for every data extraction request.

- **Homogenous data format for manipulation at scale and pace:**

An effective data pipeline replicates the data environment from Oracle Fusion Cloud Applications onto a target database - table by table, column by column. It should deliver this data in a usable, homogenous data format that can be used for quick and scalable manipulation, gleaning insights, and reporting.

What this means: No learning curve is involved as far as the data formats are concerned. If a user understands the Oracle Fusion Cloud Applications schema, they can get started with the replicated data in no time.

- **Easy and self-service connectivity with analytics tools for reporting:**

Users should be able to run their analyses directly on this

replicated database, thereby overcoming the speed and performance issues they face in a SaaS environment.

What this means: Users can connect familiar analytics tools like SplashBI, PowerBI, and Tableau, among others, with the replicated environment to build analytical trends and operational reports quickly and effectively.

- **Complete flexibility in data storage and Downstream Integration:**

Enterprises should have complete flexibility to keep the replicated database on-premise or on the cloud. Authorized users should be able to easily connect traditional database tools like SQL Developer among others to it and develop ad-hoc SQLs as needed. Using the locally replicated data for further Downstream integration with other applications that depend on the Oracle Fusion Cloud Applications as a feed for internal processes provides further immense ROI for organizations.

What this means: Technical users and developers save significant time trying to integrate Oracle Fusion data into other applications and developing interfaces for Oracle Fusion data to be made available for other applications as a subsequent source.

- **Scheduling capability for incremental data extracts:**

An effective data pipeline should come with scheduling capabilities. Different schedules can be set for different modules so the data reach business users in a fast and efficient manner. Further, the data pipeline should only download incremental changes that occur since the last run.

What this means: Business teams constantly will have updated data on hand for reporting and decision-making. What's more – they will have these updates at hand at the frequency their specific workstream requires.

- **Complete control over the replicated database:**

Users should be able to create their own indexes on downloaded flexfield segments, thus beating the performance issues described above.

What this means: With complete data ownership, business users can now create customized optimizations based on their own specific needs.

- **Enhanced data security and integrity:**

Organizations should be able to define data encryption schemes so all information flowing through the pipeline remains secure in transit as well as when at rest.

What this means: Organizations will gain complete control over data security and integrity.

- **No data management bandwidth required with automatic syncing:**

Data pipelines should be synced automatically as Oracle Fusion Cloud Applications releases new versions.

What this means: Organizations will save significant time for IT users every time there is an Oracle Fusion Cloud Applications version update.

- **Enhanced standardization:**

Enterprises should not have to worry about different extraction methods for different kinds of data sets. Their data pipeline should infuse high levels of standardization in extraction methods.

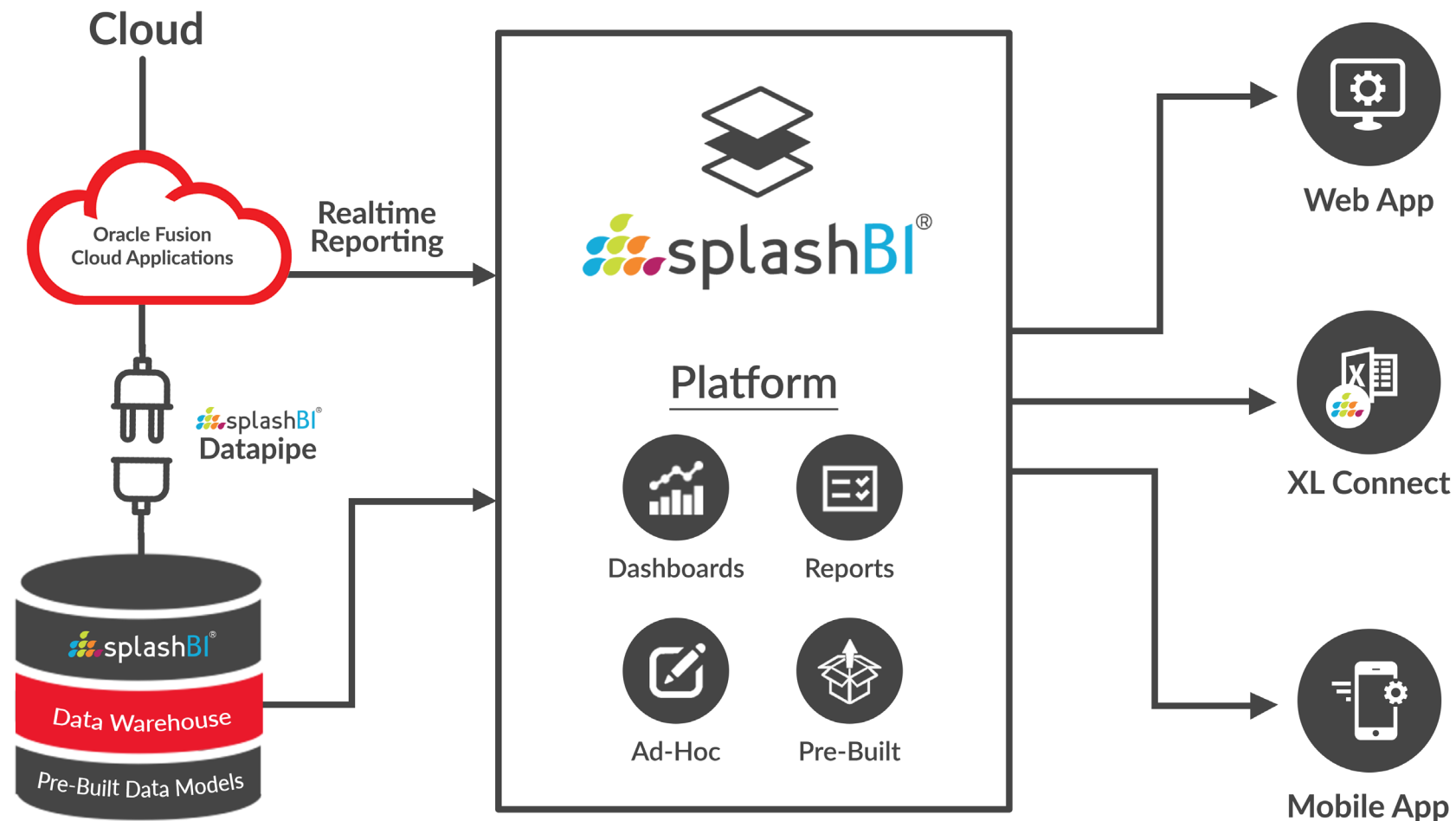
What this means: Users are able to break data silos to a significant degree.

SplashBI Data Pipeline at Work -

How Enterprises are
Becoming More
Data-driven in their
Everyday
Decision-making



SplashBI Data Pipeline is built ground up to intuitively solve your data extraction challenges on the road to data-centricity. We empathize with your business users and IT teams. And we solve all of their challenges without demanding any investment from you in data engineering skills. We partner with you on your journey of becoming a truly data-driven, insight-led organization.



Here's how we have helped Oracle Fusion Cloud Applications customers achieve data-centricity.

Transparent franchisee performance reporting for a global QSR chain

Problem statement:

There were significant silos between the financial data on the QSR chain's Oracle Fusion Cloud Applications and the franchisee operational data residing on diverse on-prem systems. This rendered franchisee-facing corporate reporting heavily manual, incomplete, and in some cases inaccurate. It took business users hundreds of hours each month to manually generate reports individually for each franchisee and subsequently ship them out.

Solution:

With SplashBI Data Pipeline, the data from on-premises franchisee systems could interface with Oracle Fusion Cloud Applications' replicated database, making franchisee reporting much more informed and accurate. The QSR chain can now schedule franchisee reporting at regular intervals saving hundreds of hours of manual effort as well as shipping costs in the process.

Result:

The QSR chain is now able to effectively take account of franchisee performance and incentivize high-performing outlets. Franchisees are consistently aware of their strengths and weaknesses to be able to work on them. The holistic reporting process has improved overall profitability for the franchisees as well as the parent QSR chain.

Informed decision-making to deliver enhanced care in a Senior Care Community

Problem statement:

The customer had recently migrated from Oracle E-business Suite to Oracle Fusion Cloud Applications. The migration was a long and complex process. Two decades' worth of business data continued to sit on E-business Suite. On the other hand, all recent business data was on Oracle Fusion Cloud Applications. This lent tremendous complexity to the customer's reporting processes in this co-existence model.

Solution:

With SplashBI Oracle Fusion Cloud's capability to deliver a replicated Oracle database, the customer can now create holistic reports off data on both E-business Suite and Oracle Fusion Cloud Applications.

Result:

The senior care community is making better decisions on the go with their wealth of heritage and new business data. This translates directly into more substantial, more personalized care for the senior citizens associated with the community.

Fast reporting and decision-making for 500+ business users in an energy company

Problem statement:

The company needed frequent corporate reports for fast and holistic decision-making. However, it had over 500 business users who needed access to data to build these corporate reports. Giving all of them access to the Oracle OTBI Production environment could result in severe latency and system performance issues.

Solution:

With SplashBI Oracle Fusion Cloud, the company could replicate production data and run reports from the replicated environment. This reporting operated at high speed and had zero performance issues.

Result:

Business users got access to all the data they needed without compromising on system performance. The energy company's 500+ users now make better, more insightful decisions on the go with swift, data-informed corporate reports.

Benefits of SplashBI Data Pipeline

Ability to Exclude Columns in Tables (Data sensitive columns like SSN)

Multi-threading technology for enhanced performance

Incremental & Full Download Options

Auto Detects New Columns

Synchronize DFF/KFF Columns

Ability to Add new Tables

- Integration with Data warehouse or custom applications.
- HCM, Finance, CRM, SCM

SaaS/Private Cloud/
On-Premise deployment options

Schedule to run nightly or on-demand

Data Mashups/
Cross Applications

Developers have full access to Oracle Fusion data

Frequently Asked Questions



1. Which technology do you use to extract data from Oracle Fusion Cloud Applications?

We leverage standard Oracle's BI Publisher web services for data extraction. BI Publisher produces encrypted data sets that SplashBI Data Pipeline can natively consume and make available in a target database.

2. How long does it take to replicate the entire database?

Time taken to download the complete database depends on the volume of data. Incremental extractions can take anywhere between 15-45 minutes.

3. Does the extraction process cause any performance issues on the Oracle Fusion Cloud instance?

No, we have not had our customers complain of any performance issues. Since the download process is incremental in nature, only the changed data is downloaded. This means that the footprint of incremental data being replicated could be orders of magnitude smaller

than the size of the entire database. Since Fusion pod has to serve up small data sets, the performance overhead is almost imperceptible for incremental pipeline runs.

4. Does SplashBI Data Pipeline replicate just tables or also the views from Oracle Fusion Cloud Applications?

SplashBI Data Pipeline only replicates tables. It does not replicate views. Users have the flexibility to create their own views in the database because the target database is the traditional Oracle database or a SQL server database.

5. Once the data is migrated to a replicated environment, how secure is the data compared to OTBI?

After data is replicated into a database, authorized users can have full access to the data. This data can be used in tools such as Tableau, PowerBI, or similar for reporting purposes – although these tools will not implement data security. On the other hand, if SplashBI is used for

operational reports then OTBI-like security is automatically inherited from data role definitions.

6. Is the SplashBI Data Pipeline available as a standalone solution?

Yes, the SplashBI Data Pipeline is also available as a standalone solution, and users don't need any additional licenses to start using it.

7. Can the SplashBI Data Pipeline do the reverse and insert or update data on Oracle Fusion Cloud Applications? Can I use it for inbound integrations?

SplashBI Data Pipeline is a read-only application by design. This means that while SplashBI Oracle Fusion Cloud can read and extract data from your Oracle Fusion Cloud Applications environment, it will not write data back into Fusion Applications. We as an organization made this design choice to keep data management in your organization a simple affair.

Become Truly Data-driven with SplashBI Data Pipeline



Your customers demand personalization. Your employees demand enhanced experiences. Your business users demand quick access to data and insights. Whilst your IT and data engineering teams must focus on strategic, value-building tasks instead of repetitive data extraction for reporting and insights. There are many roadblocks in your journey to data-centricity.

But with unlimited ad hoc capabilities, easy installation, and adoption, SplashBI Data Pipeline users can reap the benefits of data collection within your enterprise. Boasting an extensive library of over 600+ pre-built readily available reports, users can explore their data and its many use cases. The quick installation allows SplashBI Data Pipeline users to achieve results instantly.

Our users highlight SplashBI's Data Pipeline's seamless user experience, making it perfect for business users with varying degrees of IT and data engineering skills. Their favorite feature is the enablement of combining diverse data sets for informed decision-making – a unique feature vis-a-vis other similar products in the market.

Reach out to us if you are looking for a one-stop solution for your data extraction challenges. SplashBI Data Pipeline is built for you. Brings you one step closer to your data-centricity ambition.

Let's Connect

Attend our upcoming webinars



Leverage the Full Potential of
Your Oracle Cloud Application Data



Migrating to Oracle Fusion Apps?
You don't have to abandon your data warehouse strategy!

About SplashBI

SplashBI delivers data-driven decisions by providing instant access to data from disparate systems in reports, visualisations, and trends.

Our Philosophy is Data Never Lies and Data, Never Dies. SplashBI offers insightful pre-built content, powerful ad-hoc reporting, and in-depth dashboards through our proprietary data pipe models for faster go-live and quick ROI.



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