



Portfolio

# Informatica Cloud Connector

Amit Sen

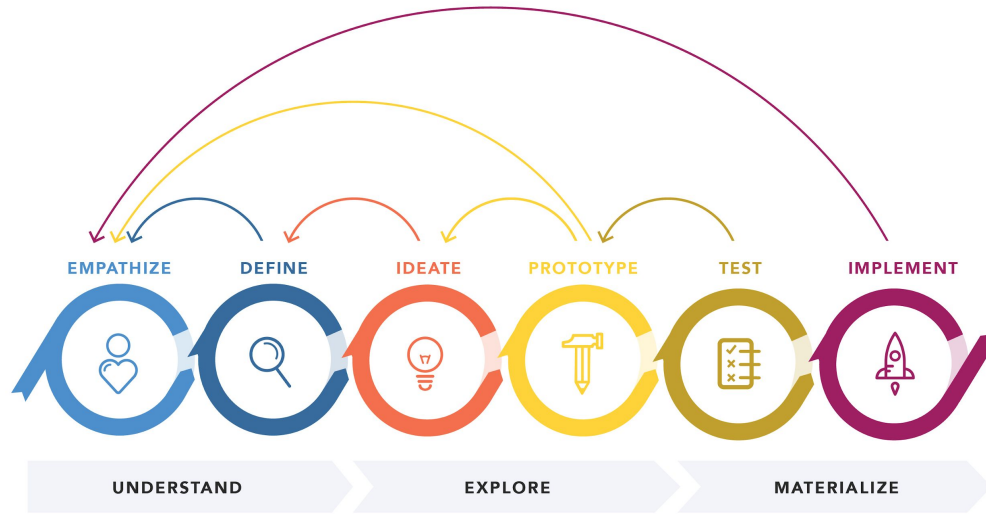
# Informatica Cloud Connector

- Easy to use and configure with high reliability and optimal performance.
- Connect data and apps in minutes.
- Reduce Total Cost of Ownership with connections to efficiently build data pipelines.

## Problem Statement

- Configuring Data Connectors are a critical step in building data integration, data quality, data governance and any data warehouse solution. **Informatica's previous data connector framework was difficult and confusing to use, resulting in loss of customers and revenue.**

# Design process



+

- ✓ Company Goals
- ✓ Company Brand

# Persona

## Data Steward

- ✓ Maintains data quality
- ✓ Maintains security & governance
- ✓ Organizes data

John Gates



*I'm a database nerd focusing on data governance and compliance.*

### Demographics

Age: 35

Gender: Male

Marital Status: Married

Location: Santa Clara, California

### Defining Traits

1. Self-motivated
2. Creative
3. Enthusiastic

### Professional Background

#### Education

B.S. in Computer Engineering, U. California at Davis

#### Company / Job Title

Data Architect at Crossmovies, Inc.

#### Work Experience

I make sure all incoming data at CrossMovies is scalable, searchable and of high quality.

I also make sure all data adheres to our company and international compliance and governance policies.

### Personal Preferences

#### Interests

Reading, Writing, Blogging, Yoga, Music and Meditation.

#### Favorite Brands & Products

Target, Sony, Apple

### Psychographics

#### Values

Efficiency, responsiveness and clear communication, work-life balance

#### Goals

- Help organize and maintain high quality data for all teams

#### Challenges & Frustrations

- Connecting to data sources take forever and is a slow process. Process is confusing as well.

### Communication Style

Casual Professional



General Technical



# Persona

## Data Analyst

- ✓ Explores data insights
- ✓ Builds reports
- ✓ Enables data-driven decision making

### William Reynolds



*I'm a Data Analyst. I help organizations make data-driven decisions!*

#### Demographics

Age: 43

Gender: Male

Marital Status: Married

Location: Los Angeles, CA

#### Defining Traits

1. Creative
2. Risk-taker
3. Inventor

#### Professional Background

##### Education

B.S. in Electrical Engineering, U. Oregon

##### Company / Job Title

Senior Data Analyst at AdvantEdge IT

##### Work Experience

After graduating with a bachelors in EE, William began his career as an IT Systems Engineer.

#### Personal Preferences

##### Interests

Video gaming, AR/VR, mentoring, hiking, mountain climbing

##### Favorite Brands & Products

Google, Nike, BMW

#### Psychographics

##### Values

Efficiency, responsiveness and clear communication, work-life balance

##### Goals

- Collect and analyze data and build in dashboards and reports for the organization.

##### Challenges & Frustrations

- Connecting to data sources is complex and requires a lot of time.

#### Communication Style

Casual Professional



General Technical



# Legacy Product Issues - *No available help*

The screenshot shows the Informatica Data Integration interface with a 'New Connection' dialog box open. The dialog box has a title bar with a close button (X) and a help button (?). Below the title bar, there is a subtitle: 'Create a connection to access a database, file, application, or platform. Enter the connection properties, and click OK.' The dialog is divided into two main sections: 'Connection Details' and 'Box Connection Properties'. In the 'Connection Details' section, there are three fields: 'Connection Name:' (required, indicated by an asterisk), 'Description:', and 'Type:' (with a help icon). The 'Type:' dropdown menu is highlighted with a pink rectangular box and shows 'Box (Informatica)' as the selected option. Below this, the 'Box Connection Properties' section contains several fields: 'Runtime Environment:' (required, with a help icon and a dropdown menu showing 'Select...'), 'OAuth Access Token:' (with a 'Get Token...' button), 'URI Request Parameters:', 'Source File Path:', 'Target File Path:', and 'Response Folder path:'. At the bottom of the dialog, there are three buttons: 'Test', 'OK', and 'Cancel'. The background shows the Informatica Data Integration workspace with a sidebar on the left containing 'New...', 'Home', 'Explore', 'My Jobs', and 'Data Transfer Task1'. The top right corner of the workspace shows 'Liveweave' and other navigation icons.

# Legacy Product Issues - *Long connector list*

The screenshot shows the Informatica Data Integration 'New Connection' dialog. On the left, there are sections for 'Connection Details' (Name, Description, Type) and 'Box Connection Properties' (Runtime Environment, OAuth Access Token, URI Request Parameters, Source/Target File Paths, Response Folder path). The main area is a scrollable list of connectors, with 'Google BigQuery V2' highlighted. A pink double-headed arrow indicates the length of the list. A white callout box with a yellow border contains three warning icons and the text: '300+ connectors', 'Long scroll', and 'No connector help'. The dialog has 'Test', 'OK', and 'Cancel' buttons at the bottom.

**Connectors List:**

- Adobe Analytics (Informatica)
- Amazon Athena
- Amazon Redshift v2 (Informatica)
- Amazon S3 v2 (Informatica)
- Amplitude (Informatica)
- Amazon Aurora (Informatica)
- Microsoft Azure Data Lake Storage Gen2 (Informatica)
- ✓ Box (Informatica)
- Coupa (Informatica)
- Cvent (Informatica)
- Databricks Delta (Informatica)
- Eloqua Bulk API (Informatica)
- Google Analytics (Informatica)
- Google BigQuery V2
- Google Cloud Spanner (Informatica)
- Google Cloud Storage V2 (Informatica)
- JDBC V2
- Jira (Informatica)
- Klaviyo (Informatica)
- Magento V1 (Informatica)
- Mailchimp (Informatica)
- Marketo V3 (Informatica)
- Microsoft Azure Blob Storage V3 (Informatica)
- Microsoft Azure Cosmos DB SQL API (Informatica)
- Microsoft Azure Synapse SQL
- Microsoft CDM Folders V2
- Microsoft Dynamics 365 for Operations (Informatica)
- Microsoft Dynamics 365 for Sales (Informatica)
- Mixpanel (Informatica)
- MongoDB (Informatica)
- OData (Informatica)
- Pardot (Informatica Cloud)

**Warning:** 300+ connectors, Long scroll, No connector help

# Legacy Product Issues - *Excessive use of tooltips*

Need SOC2 compliance, customer support, or unlimited rows? Upgrade to Cloud Data Integration-PayGo here!

**New Connection**

Create a connection to access a database, file, application, or platform. Enter the connection properties, and click OK.

Type\* ? ● Google BigQuery V2

Runtime Environment\* ? ● Select...

Service Account Email\* ? ●

Service Account Key\* ? ●

Project ID\* ? ● The ID of the project in the Google service account that contains the dataset that you want to connect to.

**Advanced Settings**

Enable BigQuery Storage API ? ●

Storage Path ? ●

Connection Mode ? ● Simple

Use Legacy SQL for Custom Query ? ●

Dataset Name for Custom Query ? ●

? Test OK Cancel

Chat with an Expert



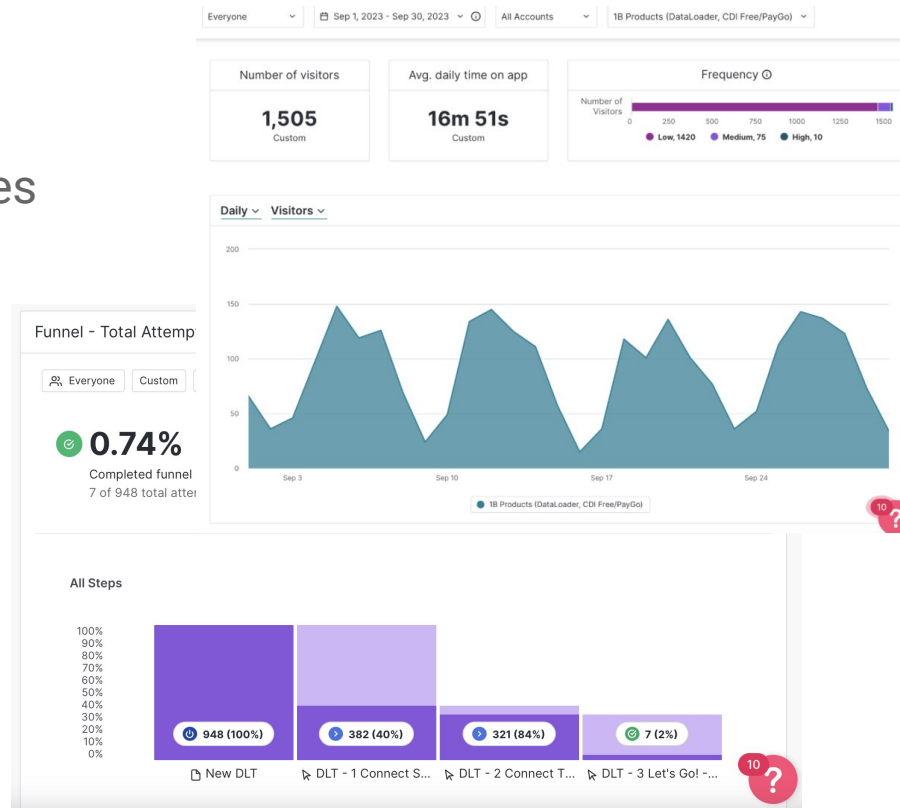
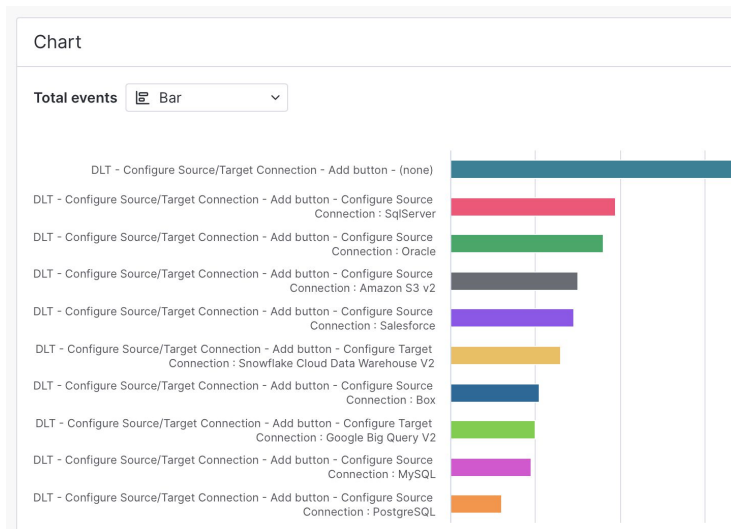
# Competitive Analysis

- ✓ Review similar use cases
- ✓ Explore gaps and opportunities
- ✓ Review secondary research data
- ✓ Look for inspirations



# Web Analytics Data (Last 6 months)

- ✓ Most widely used data connectors
- ✓ Least used data connectors
- ✓ Average time spent on connector pages
- ✓ Determine “drop-off” points and rates



# User Research

## Interviews with users and focus groups

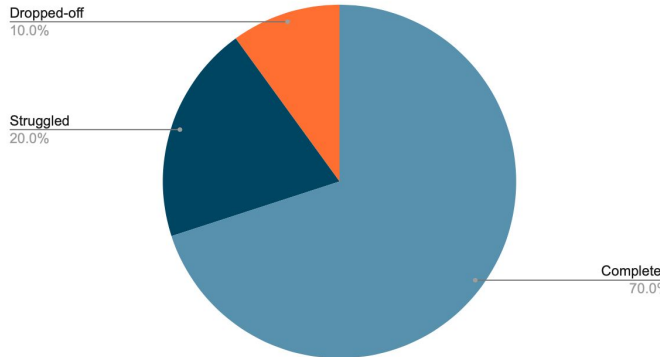
- Duration over 4 months
- 60+ users (data stewards, data analysts)
- At least 60% users were technically strong
  - Background in data analysis, data management and data connectors
- At least 90% users were knowledgeable about Informatica products
  - Background in Data Integration, Data Governance, Data Quality and Administrator products
- 20+ customers/companies
- Partnered with customer outreach and Global Support (GSO) teams
- User research data was based on both individual users and occasionally focus groups (3+ users)



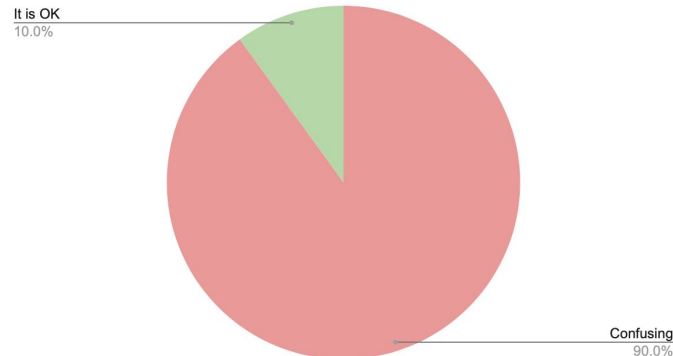
# User Pain Points & Insights

- ⚠️ Difficult to configure
- ⚠️ User will have to search online for the data connector to learn more
- ⚠️ A lot of times user will use trial-error for the configuration
- ⚠️ Very minimal tutorials available in Informatica documentation
- ⚠️ Difficult to search for the right connector

Points scored



Points scored



300+  
Total #  
Connectors

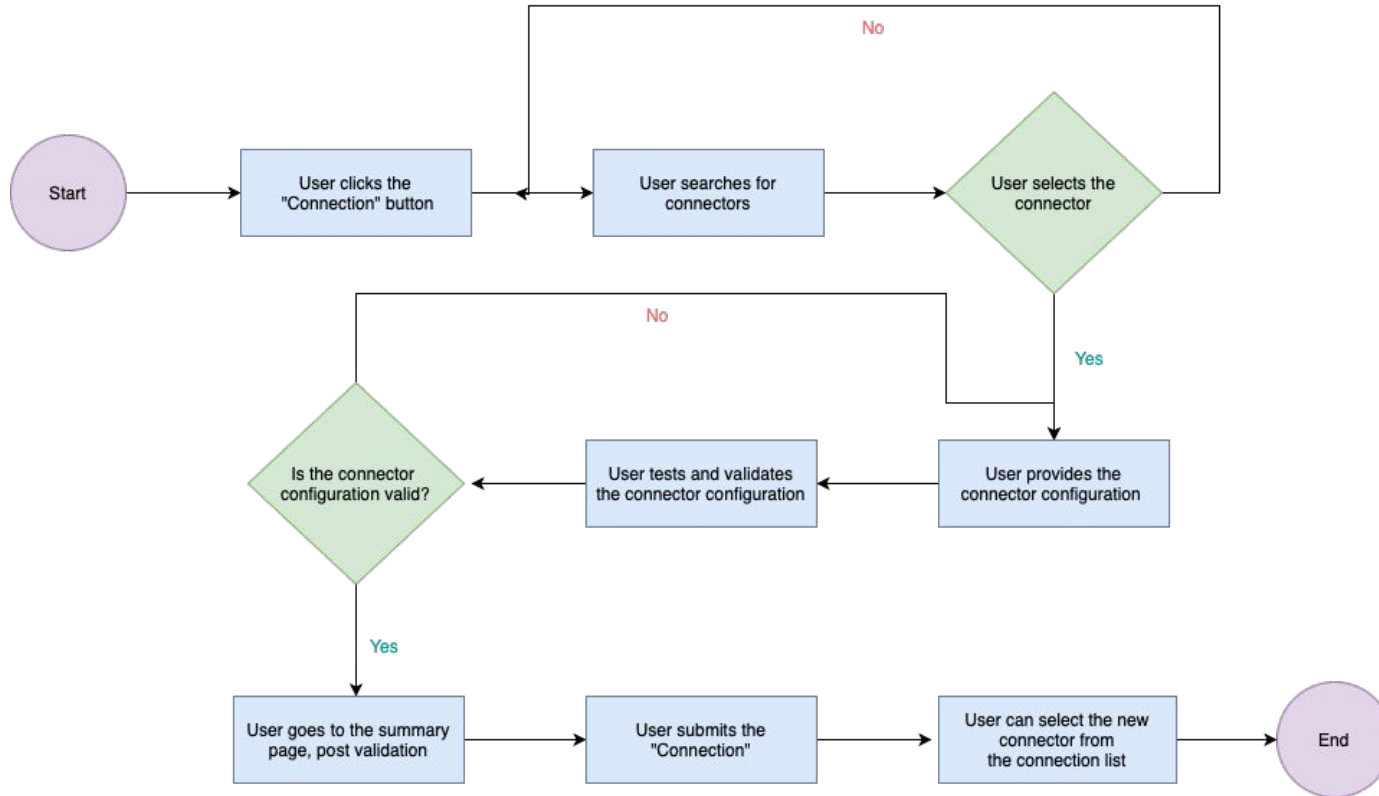
6000+  
Total #  
Parameters

# Define



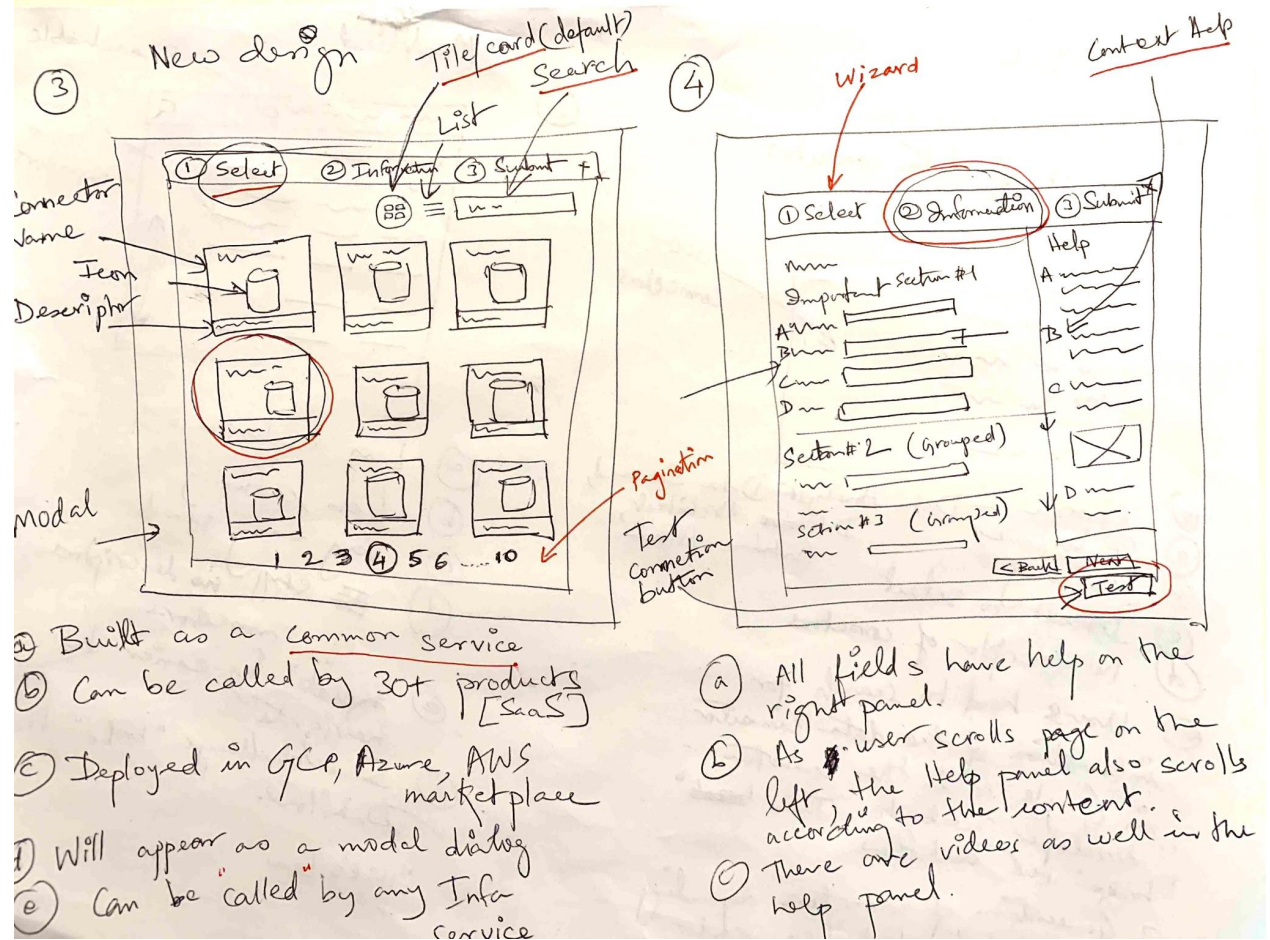
- Brainstorming with all Product Managers
- Review initial user research data with Product Managers
- Review whether user goals align with Informatica

# User flow



# Ideation

- Basic paper prototyping
- Focus on the interaction design, not visual design



- a) Built as a common service
- b) Can be called by 30+ products [SaaS]
- c) Deployed in GCP, Azure, AWS marketplace
- d) Will appear as a modal dialog
- e) Can be called by any Info service

- a) All fields have help on the right panel.
- b) As user scrolls page on the left, the Help panel also scrolls according to the content.
- c) There are videos as well in the help panel.

# Design Systems - “Droplets”

- Ensure all UI components are available
- Collaborate with the Design System team if not
- Ensure all UX artifacts comply with the Design System guidelines
- 50+ UI components based on ReactJS
- Advanced micro-interactions
- **I am the Product Manager for Informatica’s Design System and coordinate with almost 30 product teams.**

The screenshot displays the Informatica Droplets Design System interface. On the left is a navigation sidebar with the Informatica logo at the top, followed by the text 'Droplets Design System - v2'. Below this is a search bar and a list of menu items: 'Getting Started', 'Components' (which is highlighted with a blue bar and a downward arrow), 'Avatar', 'Breadcrumbs', 'Button', 'Card', 'Card Layout', 'Charts', 'Date Range Picker', 'Dialog', 'Expand Container', 'Filter Group', and 'Find Input'. The main content area is titled 'Components' and has a sub-header 'Design'. Below the sub-header is a paragraph: 'Components are one of the key building blocks of the Droplets design system. All of the components in Droplets are designed to work harmoniously together, and contribute to a uniform holistic Informatica product experience.' Below this text is a 3x3 grid of component preview cards. Each card has a title and a representative image: 'Avatar' (a simple square), 'Breadcrumbs' (a horizontal sequence of boxes with arrows), 'Button' (a rectangular button with the text 'Button'), 'Card' (a card with a header and several lines of text), 'Charts' (a pie chart), 'Checkbox' (a list of items with checkboxes), 'Dialog' (a modal dialog box), 'Dropdown Select' (a dropdown menu), and 'Expand Container' (a container with a 'Show Less' toggle and text).



# Information Hierarchy



## Configure Connection : MySQL

Follow the setup guide on the right to configure the connection

Host:\*

Port:\*

Database Name:\*

Code Page:\*

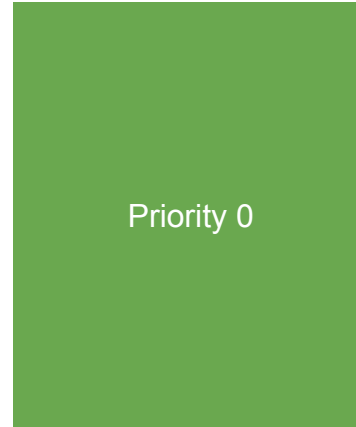
Metadata Advanced  
Connection Properties:

Runtime Advanced Connection  
Properties:

▶ **SSL Attributes (For MySQL 8.X driver)**

▶ **JDBC**

▶ **ODBC**



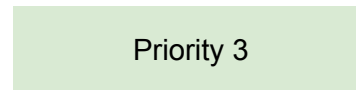
Priority 0



Priority 1



Priority 2



Priority 3

300+  
Total #  
Connectors

6000+  
Total #  
Parameters  
and form fields

Fields not often used  
were placed under  
collapsible sections

1

Select data connector

2

Configure connection & test

3

Submit & save

Search connector...



Filter By Category



Sort By

ActiveCampaign >

## ActiveCampaign

Read data from the ActiveCampaign data



## Active MQ

Read data from the ActiveMQ datasource



## Adabas

Read data from the Adabas datasource



## Adaptive Insights

Read data from the Adaptive Insights application



## Adobe Analytics

Read data from the Adobe Analytics application



## Adobe Experience Manager

Read data from the Adobe Experience Manager application



## Amazon Aurora

Read data from the Amazon Aurora



## Amazon S3 v2

Read data from the files or directories in

Next



Select data connector

2

Configure connection & test

3

Submit & save



## Configure Connection: Microsoft Azure Data Lake Gen 2

Follow the setup guide on the right to configure the connection

Connection Name *	<input type="text"/>
Runtime Environment *	Informatica Cloud Hosted Agent
Account Name *	<input type="text"/>
Authentication Type	Service Principal Authentication
Client ID *	<input type="text"/>
Client Secret *	<input type="text"/>
Tenant ID *	<input type="text"/>
Account Key	<input type="text"/>
File System Name	<input type="text"/>

### Setup Guide



#### Microsoft Azure Data Lake Storage Gen2 connection properties

When you set up a Microsoft Azure Data Lake Storage Gen2 connection, configure the connection properties.

The following table describes the Microsoft Azure Data Lake Storage Gen2 connection properties:

Property	Description
Connection Name	Name of the connection. Each connection name must be unique

Back

Test

Add

Cancel



Select data connector



Configure connection & test

3

Submit & save

## Configure Connection: Microsoft Azure Data Lake Gen 2

Follow the setup guide on the right to configure the connection

Connection Name \* MSFT DLG2 Connector

Runtime Environment \* Informatica Cloud Hosted Agent

Account Name \* MSFT-DLG2-CON

Authentication Type Service Principal Authentication

Client ID \* 6779ef20e75817b79602

Client Secret \* \*\*\*\*\*ae78728739

Tenant ID \* abf988bf-86f1-41af-91ab-2d7cd011db46

Account Key

File System Name

## Setup Guide



### Microsoft Azure Data Lake Storage Gen2 connection properties

When you set up a Microsoft Azure Data Lake Storage Gen2 connection, configure the connection properties.

The following table describes the Microsoft Azure Data Lake Storage Gen2 connection properties:

Property	Description
Connection Name	Name of the connection. Each connection name must be unique

Back

Submit

Cancel



Select data connector



Configure connection & test



Submit & save



## MSFT DLG2 Connector has been created!

You can now access the connector from the list of connections

If you would like to make changes to this connection, you can do so from the [connection list](#). All users in your org will be able to make changes to the connection as well. To prevent that, you change the [permission level](#) as needed.

Close

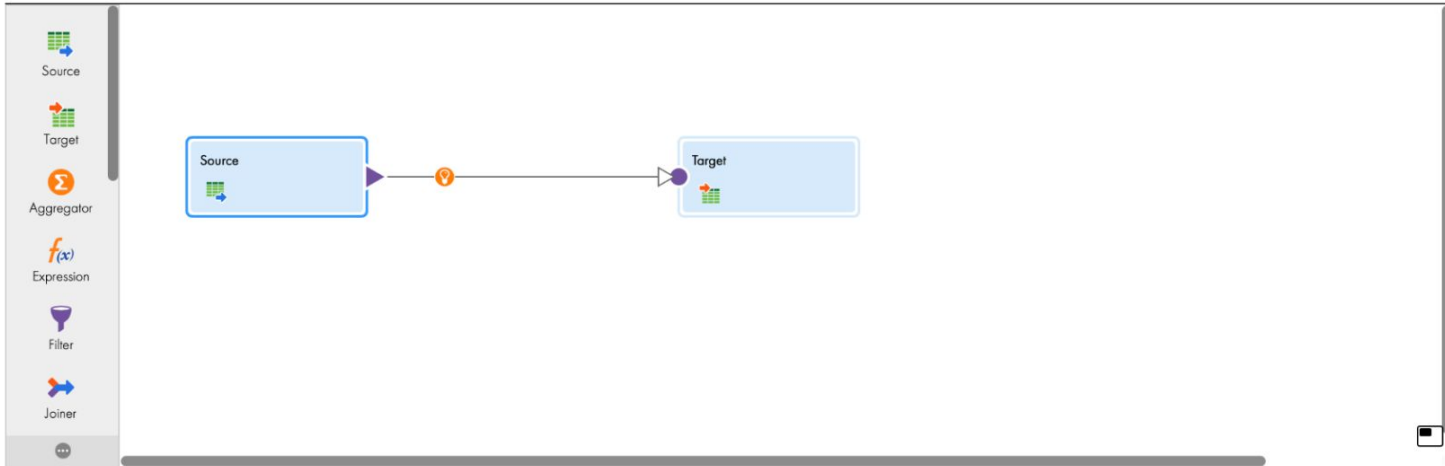
- New...
- Home
- Explore
- My Jobs
- Mapping1

Mapping1 Invalid

Save Run

Design

Lightbulb ON Grid Trash Scissors Copy Paste Search



Properties Preview Source

General

Details

Connection: \* [Dropdown] View... New Connection... New Parameter...

Source Type: \* [Dropdown]

Query Options

- New...
- Home
- Explore
- My Jobs

- 1 Select data connector
- 2 Configure connection & test
- 3 Submit & save

Search connector...



Filter By Category



Sort By



ActiveCampaign >

ActiveCamiagn

Read data from the ActiveCampaign data



Active MQ

Read data from the ActiveMQ datasource



Adabas

Read data from the Adabas datasource



Adaptive Insights

Read data from the Adaptive Insights application



Adobe Analytics

Read data from the Adobe Analytics application



Adobe Experience Manager

Read data from the Adobe Experience Manager application



Amazon Aurora

Read data from the Amazon Aurora

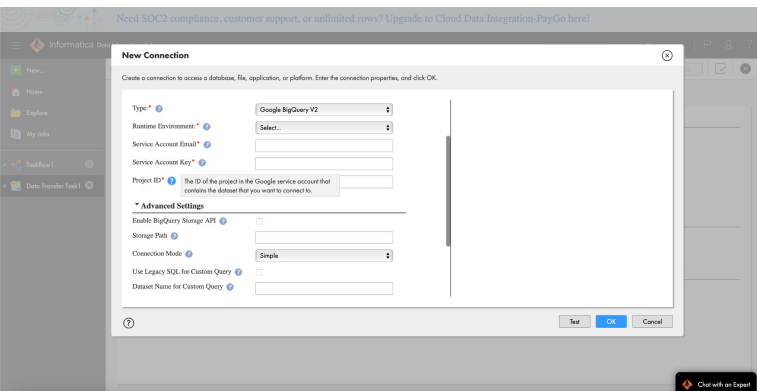
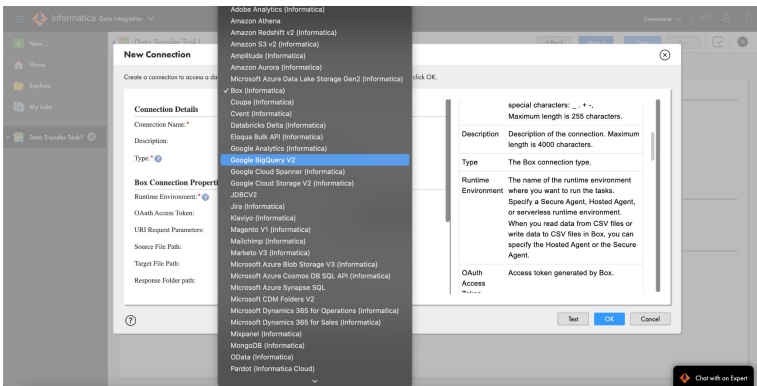


Amazon S3 v2

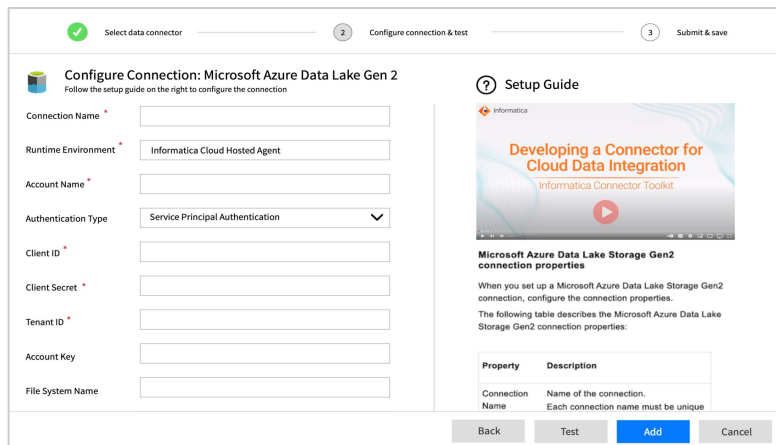
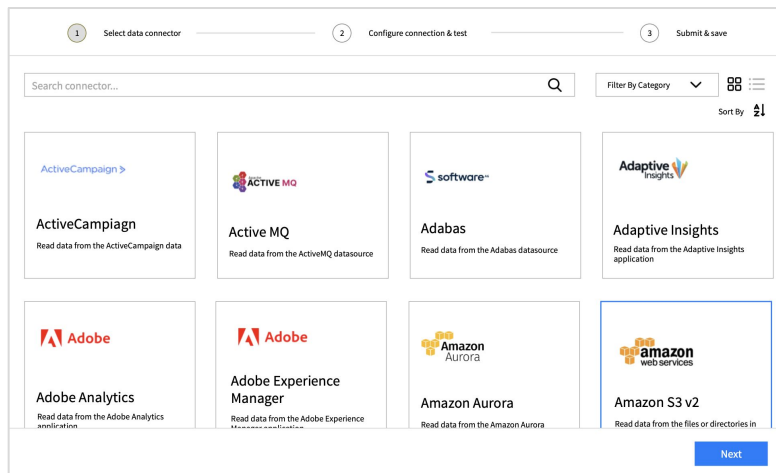
Read data from the files or directories in

Next

# Before



# After





# Outcome of the new design

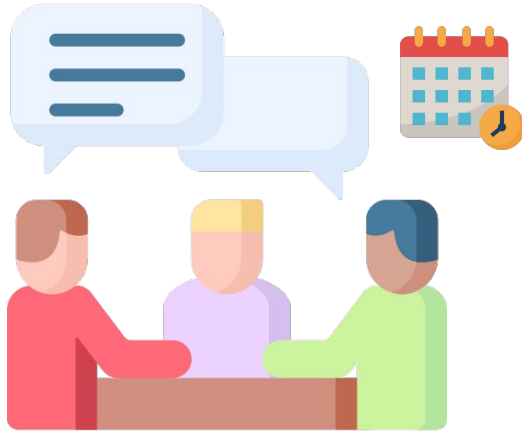
- ✓ Much easier **wizard-based** and guided approach
- ✓ **Better descriptors**, images, icons for easier understanding
- ✓ Realtime **search capability**
- ✓ **Context sensitive help** and guidance that includes videos
- ✓ Much **better scalability**
- ✓ **Optimized information hierarchy** for easier understanding

# User Testing

Total participants 10+ users

- List of specific tasks given to the users with no guidance
- **Task Success Rate** is 100% in less than 3 mins
- **Qualitative Research**, 1:1 User Interviews via Zoom/Teams call
- **A/B Testing**, with 2 variants
  - Form fields grouped differently
  - Different labeling in complex forms
  - Inclusion of more icons, images

# Implementation - Meetings with Engineering, PMs



## Engineering Meeting

- Review meetings with Engineering teams every week or bi-weekly
- Make minor modifications based on Engineering feedback and technical feasibility
- File UI defects
- Review changes and fixes made by Engineering
- Review Accessibility

## Product Management Meeting

- Review meetings with PMs every week or bi-weekly
- Make minor modifications based on PM feedback

## Conflict of a solution or design

- If there are gaps between Engineering and PMs, or there are disagreements on scope, review them with both teams.
- Based on a decision, review or change/update design or user flow.

# UX Review of Product UI and Product Launch



## Feedback to Engineering

- Test development and UAT
- File UI defects
- Review changes and fixes made by Engineering
- Review Accessibility

## Feedback from other PMs and UX Designers (outside teams)

- Are there any similarities with other company products?
- Can other product teams consume any part of this product?
- Could we have designed the user flow or design differently?

# Post Launch

Total participants 50+ customers, 3 months after launch

- System Usability Score (SUS) came to be 85 (out of 100)
- Surveys had 10 questions with 5 responses (strongly agree to strongly disagree)
- Additional user feedback/expressions

Love it!

Much  
better

Cool!

Easy

Time  
Saver!



Thank you!

