

TUTORIAL GUIDE

Designing the application



Creating the Loan Application Blueprint..... 3

Refining Application Workflows 8

Configuring Case Lifecycle Stages and Steps12

Configuring Personas.....16

Configuring Routing and Service Level Agreements19

Configuring Business Rules and Decisions22

Configuring the Case Data Model26

Configuring Case Type Settings29

Working with AI Agent Steps32

Configuring Data and Integrations37

Configuring Step Fields for Preview.....44

Validating the Blueprint with Stakeholders49

Creating the Loan Application Blueprint

Scenario

U+Bank's lending team is losing good applicants to faster lenders because today, a personal loan decision takes days, sometimes weeks, of manual work to reach a decision. The bank can't afford months of design workshops to fix that; they need a working design quickly; drawn from the materials they already have. That is exactly what Pega Blueprint™ is for.

As the Solution Designer, your first and most influential task is to turn U+Bank's business context into a first-draft application design. In this lab, you will generate a Blueprint two ways: first, from a written description alone, and then by enriching it with U+Bank's realistic documents and see how much better the design becomes when the AI is given more business context. Everything you refine in the labs that follow grows from what you create at the beginning.

Creating a Blueprint: High-level overview

Pega Blueprint is a web-based SaaS application, accessible at pega.com/blueprint, and does not require a Pega Infinity license. Because Blueprint is constantly evolving, its interface may change over time. The steps below focus on the underlying design process and concepts rather than exact screen-by-screen navigation.

Start from the Blueprint dashboard

Log in to your Blueprint Dashboard at pega.com/blueprint/dashboard. All your Blueprints are listed here, both those you own and those you have been invited to collaborate on. Click Create a Blueprint to begin.

The screenshot displays the Pega Blueprint Dashboard. At the top left is the title 'Blueprint Dashboard'. On the top right is a purple button labeled 'Create a Blueprint'. Below the title, there are tabs for 'My Blueprints', 'Pega's Enterprise Infrastructure', and 'Pega's Autonomous Vision'. To the right of these tabs are 'Filters' and a list icon. The main content area shows three blueprint cards. Each card has a small icon, a title, a description, and a status bar with 'Owner', a star icon, and a menu icon. The first card is 'How to plan a birthday party' (BP-2061011) with a description 'An app that helps planning'. The second card is 'Clinical Supply Optimization' (PHARMACEUTICALS • BP-1953078) with a description about clinical supply management. The third card is 'Retail Loan Origination' (RETAIL BANKING • BP-1562442) with a description about streamlining the loan application process and a 'Show more' link.

Blueprint Dashboard

Create a Blueprint

My Blueprints ⓘ Pega's Enterprise Infrastructure Pega's Autonomous Vision Filters

BP-2061011 Owner ☆ ...
How to plan a birthday party
An app that helps planning

PHARMACEUTICALS • BP-1953078 Owner ☆ ...
Clinical Supply Optimization
Effective clinical supply management is crucial for maintaining trial integrity, meeting regulatory requirements, and ultimately ensuring the successful execution of clinical trials and studies. This encompasses various activities, but here we focus on the supply request process including scheduling, planning, materials, equipment, all aimed at ensuring the availability of required supplies while minimizing waste, cost, and risk.

RETAIL BANKING • BP-1562442 Owner ☆ ...
Retail Loan Origination
Streamline the loan application process, from submission to approval, ensuring efficient communication with applicants. This includes Application Submission and Data Entry, Data and Document Verification, Credit Scoring and Risk Assessment, Approval Workflow, Communication with Applicant, and Funding and Disbursement. This could be for any Retail Lending domains like Mortgage, Secured Retail Lending like vehicle loans or Unsecured loan like retail credit card, consumer credit or open line...
[Show more.](#)

Screenshot: Blueprint dashboard - Create a Blueprint

Define application context

Select your Industry and Sub-industry to unlock relevant templates and domain-specific best practices. Then choose how Blueprint will generate your design:

- Pre-built templates: industry-tested case designs based on proven real-world deployments. Choose this when your scenario matches a standard pattern.
- Pega GenAI (custom): AI generates a tailored design from your inputs. Choose this for unique workflows or when no template fits.

Complete the remaining context fields:

- Application purpose: a concise title for your application.
- Functional description: a rich narrative of what the application must achieve. The more detail you provide, the higher the quality of the AI-generated design. Use the built-in 'What should I write?' guidance for prompts.
- Organization name and language: Blueprint supports multiple languages, so teams worldwide can collaborate in their preferred language

[< Dashboard](#)Pega  **Blueprint™**

Share more about your Retail Banking application: ⓘ

Application purpose *

Retail Loan Origination

Functional description * ⓘ

Streamline the loan application process, from submission to approval, ensuring efficient communication with applicants. This includes Application Submission and Data Entry, Data and Document Verification, Credit Scoring and Risk Assessment, Approval Workflow, Communication with Applicant, and Funding and Disbursement. This could be for any Retail Lending domains like Mortgage, Secured Retail Lending like vehicle loans or Unsecured loan like retail credit card, consumer credit or open line of credits.

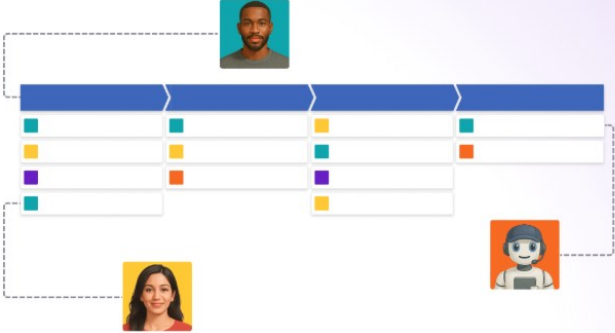
Organization name *

 Company, Inc.

Language *

English

Location (optional)



 Upload supporting assets

Back

Cancel

 Generate

Screenshot: define application context

Upload supporting assets

Use the Upload supporting assets feature to give Blueprint's AI additional context beyond your written description. This improves the quality and relevance of the generated design and supports a high-fidelity Blueprint. Supported asset types include:

Requirements documents	.pdf, .docx, .txt, .md
Data schemas and integrations	.sql, .yaml
Code analysis documents	AWS Transform, Google MAT
Legacy application media	.mov, .mp4, .png, .jpeg, .avi
Process diagrams	.bpmn, .jpg, .jpeg
Additional assets	.blueprint

TIP	More is not always better. Large volumes of documents increase processing time and can introduce noise if the content is inconsistent. Blueprint interprets and synthesizes these assets rather than reproducing them exactly, so the output should always be reviewed and refined. Focus on high-quality, relevant, complementary inputs.
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U+Bank business challenge

U+Bank originates unsecured personal loans entirely by hand. Applications arrive by branch, phone, and email with no unified digital intake, and are tracked in a single shared spreadsheet with no validation or backup. Credit-bureau lookups and affordability calculations are done manually, underwriting decisions vary from individual to individual, and adverse-action notices are drafted by hand. A loan can take days, sometimes weeks, to decide, while an estimated 97% of borrowers now research online and 37% are willing to complete a loan entirely digitally. The gap between what customers expect and what U+Bank can deliver is costing both revenue and compliance standing.

Who feels it	What's happening	Business impact
Applicants	Apply by email, branch, or phone with no confirmation or status; ask for the same documents repeatedly; wait days to weeks for a decision.	Lost trust, abandoned applications, business lost to faster lenders
Loan Officers	Re-key every application into a shared spreadsheet; chase documents across inboxes; recalculate rates by hand.	Time lost to admin, inconsistent records, capped capacity
Credit Analysts / Underwriters	Manual bureau lookups and affordability sums; no standard scorecard; borderline cases on judgment.	Inconsistent decisions, weak responsible-lending evidence
Compliance	Adverse-action notices drafted by hand and often late; KYC evidence scattered; no reliable audit trail.	Regulatory-breach risk, complaints, findings that can't be evidenced
Head of Lending	No pipeline visibility, approval rates, or time-to-decision data; exceptions handled ad hoc.	Can't plan for growth, revenue leakage, decisions on instinct

End goals

By completing this tutorial, you will have a generated Blueprint for U+Bank's Personal Loan Origination application, seeded from a deliberate description and enriched with supporting artifacts. The draft will contain an initial set of Case Types, lifecycles, Data Objects, and Personas — a starting point you will curate and refine in the labs that follow. You will also understand how the quality of your inputs shapes the quality of the generated design.

Step instructions: Creating the Loan Application Blueprint

You will act as the Solution Designer for U+Bank and use Pega Blueprint to transform this business challenge into a high-fidelity application design. U+Bank has prepared a set of supporting artifacts to give you context for this exercise.

Step 1: Review the U+Bank artifacts	
Instruction	Download the supporting artifacts from the Mission Challenge and review them before you generate. They represent the real-world documents a Solution Designer receives from a client before a Blueprinting engagement. UPB-MAN-001.pdf Operations Procedure (SOP): Current loan origination process, hand-offs, and pain points. UPB-BRD-001.pdf Business Requirements: Platform objectives, Personas, requirements, integrations, and Release 1 scope. UPB-BRU-001.pdf Business Rules: Rules for eligibility, DTI, credit, documents, adverse action, and KYC/AML. UPB Swim Lane.jpg Process Flow: Current origination workflow across roles and phases.
Step 2: Start from the Blueprint dashboard	
Instruction	Log in to your Blueprint Dashboard at pega.com/blueprint/dashboard and click Create a Blueprint to begin.
Context	All Blueprints that you own or collaborate on are listed here.
Step 3: Generate your Blueprint	
Instruction	Create a new Blueprint for U+Bank. The activity has two rounds. In each round, generate or refine a Blueprint using a different level of supporting context, then compare the results.
Context	Each generation may produce slightly different results because of the nature of generative AI. A single generation does not produce a fully high-fidelity Blueprint. You will refine the design iteratively across the labs that follow.

Round 1: Blueprint from a description only

Generate your first Blueprint using no uploaded artifacts. Use only the information you type into the Application Purpose and Functional Description fields.

Suggested inputs:

- **Industry:** Banking → **Sub-industry:** Retail Banking
- **Department/function:** Lending
- **Application purpose:** Personal Loan Origination

- **Functional description:**

A digital application for U+Bank that manages the complete personal loan process from application through funding. Applicants apply online, providing income, employment status, loan amount, term, and purpose. The bank verifies documents, retrieves a credit score, assesses affordability (debt-to-income), underwrites and decides, issues an adverse-action notice on decline, and disburses approved funds.

- **Organization name:** U+ Retail Bank

As you review the generated Blueprint, note:

- How many Case Types did Blueprint suggest? Do they reflect the lending process?
- How complete is the Case Lifecycle for the Loan Application Case Type?
- How accurate are the Data Model fields and their types?
- Are the Personas correct and complete?

Expected output: A Round 1 baseline that you can compare with the enriched Blueprint. Because GenAI output varies, your result may differ. A description-only generation is expected to be relatively generic and incomplete, particularly around credit, affordability, adverse-action logic, and the Underwriter and Compliance Officer Personas.

Round 2: Blueprint enriched with supporting artifacts

Return to your Blueprint and use **Upload supporting assets** to add the artifacts you downloaded, then compare the enriched design with your Round 1 result.

Suggested approach:

1. Start by adding UPB-BRD-001 (Business Requirements) and observe how the design changes.
2. Then add UPB-BRU-001 (Business Rules) and note the decision logic that appears.
3. Then add UPB Swim Lane (Process flow) and note the process changes.
4. Finally, add UPB-MAN-001 (SOP) and review the full effect of comprehensive context.

As you review the enriched Blueprint, compare with Round 1:

1. Did the number and accuracy of Case Types improve?
2. Are Decision points now present for credit scoring, affordability (DTI), and adverse action?
3. Are business-rule-driven fields (credit bands, DTI thresholds, term options, document requirements) present in the Data Model?
4. Are the correct Personas and their routing relationships represented?

Expected output: A richer Blueprint that you can compare with Round 1. Compare your result with the target design: five Case Types (Loan Application, Document Verification, Credit Scoring, Loan Approval, and Loan Disbursement); a richer Loan Application lifecycle aligned with Submission → Quality Check → Risk Review → Fulfilment; data fields with the intended picklists; decision points for credit and affordability; and all four Personas (Applicant, Loan Officer, Underwriter, and Compliance Officer).

GenAI output varies between runs. The goal of this round is not a perfect design but to see firsthand how much richer and more detailed the Blueprint becomes when the AI is given additional business context. You'll curate and refine this generated draft across the labs that follow.

Refining Application Workflows

Scenario

U+Bank can't build everything at once and shouldn't. The fastest way to deliver value is to identify processes or journeys that are low to moderately complex, high-value, and higher-volume and that produce a working end-to-end outcome, then continue from there. For U+Bank, that first journey is the Loan Application Case Type, the process that was drowning in email and spreadsheets.

Pega Blueprint™ has generated a first-draft design based on the context you provided; your job now is to confirm and scope it. Following the Blueprint Delivered™ methodology, you deliver one journey at a time, so your focus for this first release is making the Loan Application Case Type high-fidelity as its first Minimum Lovable Product (MLP1). Along the way, you will also catch a requirement that never made it into the documents but came up when you talked to the people who do the work, exactly the kind of gap the solution design must handle.

Designing a journey for one outcome at a time

A Blueprint typically represents a long-term business vision that spans multiple releases. Blueprint Delivered structures delivery around implementing that vision one journey at a time: selecting a high-value business journey, along with its essential data, integrations, and dependencies, and deliberately limiting scope to what is required to deliver a complete, end-to-end outcome.

Each journey results in working, usable software that delivers measurable value, while deferring lower-priority elements to future iterations. As each journey is delivered, the Blueprint is updated to reflect what has been built and what remains planned, maintaining it as a living, single source of truth.

In practice, by delivering one high-value journey at a time, organizations realize value sooner, reduce delivery risk, and continuously evolve a working solution aligned to business priorities. For U+Bank, that first journey is the Loan Application Case Type.

Review and refine workflows

Blueprint generates an initial set of Case Types: the distinct business processes your application will manage. Each includes a description and an AI-generated explanation of its purpose. Review each Case Type with your stakeholders and add missing ones, remove those that don't apply, and modify descriptions to reflect your organization's terminology and intent.

✦ INSIGHT

Align each Case Type to a distinct Microjourney, a discrete end-to-end business outcome. Decisions made in this step directly impact the fidelity and completeness of the Blueprint.

Case Type specification

Use this specification to reconcile the Case Types in your Blueprint. Your refined Workflows step should contain exactly these five Case Types.

Case Type	Description
Loan Application	Manages the entire loan application process from submission, through data entry and document collection, ensuring accurate and complete application data.
Document Verification	Handles verification of submitted documents and data accuracy, ensuring all documentation meets regulatory and internal guidelines before proceeding.
Credit Scoring	Coordinates credit scoring, risk assessment, and debt-to-income calculation to determine loan eligibility and terms.
Loan Approval	Manages the approval workflow including underwriter review, conditional approvals, and final decision communication to applicants.
Loan Disbursement	Processes the funding and disbursement of approved loans, including account setup and initial payment scheduling.
Release 1	
All five Case Types belong in the design, but Release 1 develops only the Loan Application Case Type end to end. The other four remain in the Blueprint and are deferred to later releases (you'll set this in release planning).	

Handling missing requirements

Not every requirement makes it into a requirements document. Some surface only when you talk to the people who do the work. During your stakeholder interviews for this release, one such requirement came to light, which is exactly the kind of gap Blueprint Delivered expects you to catch and design for.

The missing requirement

During interviews, U+Bank's fraud and risk team raised a gap: none of the supporting documents call out screening the application itself for fraud. The documents cover KYC and identity checks for onboarding, but do not detect application fraud (synthetic identities, misrepresented income, or first-party fraud) before a lending decision is made. Catching fraudulent applications early is a real operational and regulatory need. You will add a fraud / identity-verification check to the Quality Check stage in the steps below, once you have imported the workflow.

End goals

By fulfilling these specifications, you will have a curated set of Case Types that accurately represent U+Bank's personal loan origination process; a Loan Application Case Type seeded with a standard baseline lifecycle from the imported BPMN; and the interview-surfaced fraud check designed into that workflow, ready for detailed configuration in the Workflow Details step.

Step instructions: Refining Application Workflows

These steps are intentionally concise because you have already generated your Blueprint. If you need detailed, click-by-click actions, refer to the corresponding Solution Guide.

Step 1: Review and manage the Blueprint-generated Case Types	
Instruction	Review the Case Types Pega Blueprint initially generated and confirm they align to the required scope. Refine the generated list into a scoped, ordered set by renaming close matches, deleting out-of-scope items, adding missing items, and reordering them.
Context	Pega Blueprint generates an initial Case Type list based on the application context. Reviewing the suggestions early helps you validate coverage before you start renaming, deleting, and adding. In this step, you turn that initial list into a clean set that represents the end-to-end loan process.
Expected output	You have identified what needs to be renamed, removed, or added so the list can be reconciled to the five U+Bank Case Types. The Workflows step contains exactly the five required Case Types, correctly named and ordered to reflect the loan origination flow.
Step 2: Save a version of your Blueprint	
Instruction	Save a version of your Blueprint to capture your current, AI-generated design.
Context	In the next step, you will import a BPMN file and choose Save and Regenerate. This replaces the AI-generated Loan Application lifecycle with a standard one. Taking a version first creates a snapshot of your generated design so you can compare the two and return to it if needed.
Expected output	You have a saved point-in-time version of your Blueprint.
 Note	The version is a saved snapshot of your Blueprint. Nothing you have done so far is lost. After the import, you can switch between versions to see how your own AI-generated lifecycle differed from the standardized baseline.
Step 3: Build a Case Lifecycle from a BPMN file	
Instruction	Import the Loan Application BPMN file provided by the lending department to create the Case Lifecycle from an existing process definition.
 Note	A BPMN file contains a business process diagram written in Business Process Model and Notation (BPMN). It is a standardized way to describe a workflow so that different tools can understand the same process structure.
Context	Blueprint analyzes the BPMN diagram and maps tasks and sequencing into Pega concepts such as Stages, Steps, and decision points. Because Blueprint's GenAI produces a different design on every run, importing this BPMN gives every learner the same baseline lifecycle, keeping the labs that follow consistent for everyone.
 Insight	BPMN import is valuable when your organization has existing process documentation. It aligns the implementation with documented processes while reducing manual design work.
Expected output	The Loan Application Case has a baseline lifecycle from the BPMN: Submission, Quality Check, Risk Review, and Fulfilment. It also includes a stray Notifications Stage that came across in the import and does not belong. You'll tidy that up when you refine the lifecycle in the next lab.

Step 4: Review the BPMN generated workflow

Instruction	Open the Loan Application workflow and review the lifecycle the import produced, then compare it with the version you took beforehand.
Context	This is the workflow you'll refine across the labs that follow. Reviewing it now confirms the baseline and makes clear why the import matters.
Expected output	You can see the standardized Loan Application workflow: Submission → Quality Check → Risk Review → Fulfilment, plus the stray Notifications Stage to be removed later. You can also explain how it differs from the design the AI generated for you.
📌 Note	Your pre-import version likely had different Stage names and steps. This comparison shows why the BPMN import exists: to provide instructional continuity across self-study, ILT, and workshop delivery.

Step 5 Add the application fraud check

Instruction	Add a fraud / identity-verification check to the Quality Check Stage to handle the requirement surfaced during your stakeholder interviews.
Context	U+Bank's fraud and risk team requires each application to be screened for fraud before a lending decision. The workflow the BPMN produced does not include this, so you add it now to design for a requirement that never made it into the documents.
💡 Insights	Catching gaps like this, meaning real requirements missing from the supporting documents, and designing for them is a core solution-design skill. Blueprint makes it easy to add the step where it belongs.
Expected output	The Quality Check stage now includes a 'Screen for application fraud' step, and the interview-surfaced requirement is designed into the workflow.
📌 Note	Placing the fraud check in Quality Check means it runs after identity and document verification but before the credit and risk decision in Risk Review. As a result, a fraudulent application is stopped before any lending decision is made. Its detailed configuration (the service it calls and how its result routes the Case) is refined later in Workflow Details.

Configuring Case Lifecycle Stages and Steps

Scenario

Remember U+Bank's problem: today, a personal loan has no single, visible path from application to decision. Every loan officer handles it in their own way in a spreadsheet, applications stall unseen, and no two borderline cases are handled alike. The whole reason for the new application is to give every loan one clear, consistent, auditable journey, so nothing gets lost and every application is handled consistently.

That journey is the Case Lifecycle, and shaping it is what this lab is about. You will take the lifecycle of the BPMN generated in the previous lab and refine it into the path U+Bank needs, renaming the stages into the language the business uses, removing what does not belong, and adding the missing steps. Following the Blueprint Delivered™ methodology, your focus for this first release (MLP1) is making that journey high-fidelity. The rename, delete, add, and reorder actions you practice here are the everyday moves you will use on every engagement.

Understanding Smart Shapes

Every Step in a Pega Blueprint™ Case Lifecycle is represented by a Smart Shape: a visual element that communicates the required action, how the work is performed, and how it will be implemented in Pega Infinity™ when the Blueprint is imported. There are nine Smart Shape types, in two categories: those that require a user to act, and those the system performs automatically. Choosing the right Smart Shape for each Step is one of the most impactful decisions a Solution Designer makes.

User-driven shapes

These shapes pause the workflow and wait for a user to act. Every User-driven Step should have a Route To target and, where applicable, an SLA.

Shape	What it does	Loan example
Collect information 	Presents a form for a user to enter or review data.	Upload required documents; Review loan terms
Approve / Reject 	A specialist reviews the Case and approves or rejects it.	Underwriter approves a high-value loan application

System-driven shapes

These shapes execute without user interaction; the workflow continues immediately after the system action completes.

Shape	What it does	Loan example
Automation 	An operation that needs no human input.	Retrieve credit score; Calculate debt-to-income ratio
Create Case 	Creates a child Case from the current Case.	Create the Document verification Case
Decision 	Evaluates a Business Rule and branches the workflow.	Determine eligibility → Approve / Refer / Decline
Send notification 	Notifies a user when the Case needs action or an update.	Send acknowledgement; Send adverse action notice
Robotic automation 	Automates repetitive, manual tasks using the user interface of existing applications.	Logging into a legacy application with customer records. Extract data from a legacy system.
Generate document 	Creates and attaches a document to the Case.	Generate the loan agreement
AI Agent 	AI-powered or UI-based automation of work.	Summarize supporting documents
Wait 	Holds the Case until it can continue, based on timing or updates.	Waiting 10 days for the applicant to accept before withdrawing the offer if there is no response.

❖ INSIGHT

Choosing the right Smart Shape matters. Using an Automation where a Collect information step is needed, or vice versa, creates significant rework during the Authoring phase. Confirm Smart Shape selection with the Solution Builder and validate that it reflects the intended process.

Case Lifecycle specification

Use this specification to refine your lifecycle. After the BPMN import in the previous lab, your Stages are Submission · Quality Check · Risk Review · Fulfilment, plus a stray Notifications Stage. You'll refine them to the four Primary Stages and one Alternate Stage below, and add the Steps shown. SLAs, routing, Business Rules, and AI Agent configuration are covered in the next tutorials.

Stage	Process	Steps (Smart Shape type)
Submission		Collect applicant information (Collect information) Validate data (Automation) Send acknowledgement (Send notification)
Verification		Upload required documents (Collect information) Extract data from documents (AI Agent) Screen for application fraud (Automation) Create Document verification (Create Case)
Underwriting	Credit Assessment	Retrieve credit score (Automation) Determine eligibility (Decision)
Underwriting	Terms Review	Research and summarize (AI Agent) Review loan terms (Collect information)
Fulfilment	Document Signing	Sign loan documents (Collect information) Craft response (AI Agent) Send confirmation (Send notification)
Fulfilment	Case Closure	Disburse funds (Create Case) Close loan Case (Automation) Consolidate Case information for audit (AI Agent)
Rejection	Rejection	Craft response (AI Agent) Send adverse action notice (Send notification)
Rejection	Case Closure	Update external reporting (Automation) Resolve Case as rejected (Automation) Consolidate Case information for audit (AI Agent)

End goals

By completing this lab, you'll have a Loan Application lifecycle with four Primary Stages (Submission, Verification, Underwriting, Fulfilment) and one Alternate Stage (Rejection), each containing the correct Steps and Smart Shape types. The result is a clean, complete lifecycle ready for routing, SLAs, AI Agent, data, and Business Rule configuration in the labs that follow.

Step instructions: Configuring Case Lifecycle Stages and Steps

These steps are intentionally concise. If you need detailed, click-by-click actions, refer to the corresponding Solution Guide.

Step 1: Review the Loan Application Case Lifecycle	
Instruction	Review how Blueprint translated the BPMN into Stages and Steps for the Loan Application Case.
Context	Before making changes, review the generated lifecycle to understand what Blueprint created and identify what needs refinement.
💡 Insights	Use the generated lifecycle as a starting point, then apply design judgment to improve clarity, naming, and milestone structure.
Expected output	You can identify the changes needed to align the generated lifecycle with the specification.
📌 Note	Notice that Quality Check and Risk Review are generic names and need to be updated to match business needs. The Notifications Stage does not belong in the lifecycle because notifications should be Steps within the appropriate Stages.
Step 2: Refine the Stages	
Instruction	Rename, remove, add, and reorder the Stages to match the U+Bank loan process.
Context	Refining the lifecycle before adding detailed configuration gives you a clean structure to build on in later labs.
💡 Insights	Validate structure and naming right after import, so all downstream configuration work happens on a clean, consistent lifecycle.
Expected output	The lifecycle contains four Primary Stages, Submission, Verification, Underwriting, and Fulfilment, and one Alternate Stage, Rejection.
📌 Note	Renaming Quality Check to Verification instead of deleting it preserves the Screen for application fraud Step created in Lab 02. The Step remains with the Stage when the Stage is renamed. Notifications belong within the Stages where they occur, so the separate Notifications Stage is not needed.
Step 3: Add the missing Processes and Steps	
Instruction	Add the missing Processes and Steps to each Stage to complete the workflow skeleton. Use the Case Lifecycle specification to create the required Process groupings and add only the Steps that are missing.
Context	Build the full step list first, creating a complete skeleton before configuring routing, SLAs, AI Agent steps, fields, and Rules in the next labs. Choose the Smart Shape type shown in the specification for each Step.
📌 Note	Some Steps already exist from the BPMN import (for example Collect applicant information, Retrieve credit score, Review loan terms, Sign loan documents, Close loan Case, and your Screen for application fraud step). Add only the ones that are missing and confirm the types of those already present.
Expected output	Each Stage contains the required Steps in the correct order and with the correct Smart Shape types.

Configuring Personas

Scenario

U+Bank's loan application now has a clear, visible journey through the Stages and steps you refined in the previous lab. But a lifecycle only describes what happens; it does not yet say who does it. In the manual process, ambiguity was a problem: an application sat in a shared inbox or a spreadsheet row with no owner, and work stalled simply because no one knew it was theirs.

Before work can be assigned, the people who perform it must be included in the design. In this lab, you will reconcile the Personas that Pega Blueprint generated with the four roles used in U+Bank's loan process, so that in the next lab every User-driven Step has a valid owner to route to.

Understanding Personas

A Persona in Blueprint represents a type of user who interacts with the application, not a named individual. It represents a role: the customer who applies, the officer who processes the application, or the specialist who decides. Personas are how a Blueprint expresses who does the work.

Personas do more than document who is involved. A User-driven Step can route to a Persona or another supported target, such as Current User. A Persona must exist before it can be selected as a routing target. Personas also carry the Case, data, and Channel access that define what each role can see and do. These are configured later in the Personas lab. When the Blueprint is imported into Pega Infinity, Personas become the basis for the access roles in the generated application.

Blueprint generates an initial set of Personas from the context you supplied. As with every other generated artifact, treat that set as a starting point.

The Loan Application Personas

Applicant: The external customer who applies to U+Bank for an unsecured personal loan. The Applicant submits the application along with the requested loan amount, term, and purpose, and provides supporting documents, including proof of identity and proof of employment. They may change the requested amount or term, or withdraw, before a decision is reached. In the new platform, the Applicant self-serves through web and mobile channels, replacing the old branch, phone, and email intake. Their goal is to apply quickly, track progress, and receive a timely, clearly explained decision.

Loan Officer: The U+Bank front-line owner of an incoming loan application. The Loan Officer registers the application, contacts the applicant, and collects and quality-checks the supporting documents against the requirements. They manage in-flight changes such as amount or term adjustments and withdrawals, and once a decision is made, they prepare the loan agreement and arrange signing and funding. They also handle applicant communications throughout. Their goal is to move each application cleanly from intake to fulfillment so that work no longer stalls and documents are never lost.

Underwriter: The U+Bank decision-maker responsible for assessing risk and determining loan eligibility. The Underwriter reviews the application against the system-retrieved credit report and the calculated debt-to-income (affordability) figure, applies U+Bank's credit and affordability policy, and records an approve, refer, or decline decision. In the new platform, the manual credit-bureau lookup and debt-to-income spreadsheet calculations previously performed by a Credit Analyst are automated, so the Underwriter works from consistent, system-supplied data rather than hand-keyed figures. Their goal is to make consistent, defensible lending decisions that can be explained to a regulator.

Compliance Officer: The U+Bank role accountable for regulatory and policy compliance across origination. The Compliance Officer oversees adverse-action notices for declined applications, ensures KYC/AML evidence is captured, and maintains the regulatory review and audit trail that the manual process lacked. Their goal is to ensure every application, approved or declined, is handled lawfully, with clear reasons recorded and a reliable audit trail.

End goals

By completing this lab, your Blueprint will contain the four Personas the Loan Application needs: Applicant, Loan Officer, Underwriter, and Compliance Officer. Each will be named and described in U+Bank's language, so every User-driven Step has a valid owner to route to in the labs that follow.

Step instructions: Configuring Personas

These steps are intentionally concise. If you need detailed, click-by-click actions, refer to the corresponding Solution Guide. You can also use the AI Assistant for help.

Step 1: Reconcile the Personas	
Instruction	Review the Personas that Blueprint generated and reconcile them with the four Personas the loan process needs, renaming close matches and adding any that are missing. Then move Applicant, Loan Officer, Underwriter, and Compliance Officer to the top of the list in that order. Leave any additional Personas in place.
Context	User-driven Steps can route work to Personas, so the roles that own the work must exist before you can select them as routing targets. Blueprint generates an initial set of Personas from the application context; your job is to reconcile that starting point with the roles U+Bank's loan process will use.
 Note	You are only naming and describing the Personas here. Their Case, data, and Channel access are configured in a later lab. Use the four Personas described in The Loan Application Personas above. Clear descriptions help Blueprint's AI generate the initial case data and channel access design
Expected output	The Personas list contains Applicant, Loan Officer, Underwriter, and Compliance Officer at the top of the list, in that order, each named and ready to use as a Route To target.
 Note	If additional Personas are present, leave them in place. Assume they were identified in the supporting documentation and may be needed for Case Types in later releases.
Step 2: Confirm the Personas	
Instruction	Validate the final Persona list against the specification: all four Personas are present, correctly named, and each carries its description.
Context	A final pass catches a missing or misnamed Persona before stakeholder validation.
Expected output	The Personas list contains Applicant, Loan Officer, Underwriter, and Compliance Officer, each with a description and ready for the SLAs and Routing lab.

Configuring Routing and Service Level Agreements

Scenario

In U+Bank's manual process, no one truly owned an application. It sat in a shared inbox or a spreadsheet row, and days could pass before anyone picked it up. That is exactly how good applicants were lost to faster lenders. Two things prevent that: making it unambiguous who is responsible for each piece of work and putting a clock on how long it should take, with an escalation when it runs late.

With the Loan Application Case Type lifecycle in place, you will now add both to the User-driven Steps: routing, which assigns ownership, and Service Level Agreements (SLAs), which set the expected timeframe and what happens when it is missed. Together, they keep work from quietly stalling.

Routing and Service Level Agreements

Collect information and Approve/Reject Steps pause the workflow and wait for a person to act. For a high-fidelity Pega Blueprint, each should carry a Route To target and, where the work has an operational commitment, an SLA.

Routing

Routing defines who is responsible for completing a User-driven Step. In Blueprint, routing is expressed conceptually using Personas and common assignment patterns, such as a role, the current user, or a manager. It describes the intended ownership of work, not the exact technical routing. In Pega Infinity, these definitions are translated into assignment behavior (worklist or work queue) based on how roles and access are implemented during the Authoring phase.

When you configure an Assignment for Agentic Assignment Processing, a Pega AI Agent contacts the Assignment owner through email and resolves the Assignment based on the response, reducing manual handling of routine tasks.

Service Level Agreements

An SLA defines how long work should take and what happens if it runs late. It has two thresholds: a Goal (the target completion time) and a Deadline (the maximum allowed time). When either threshold is reached, the system can escalate by raising urgency, notifying someone, or reassigning the work.

SLA field	Blueprint setting	Loan example (Review loan terms)
Target Completion Time	Number + unit (Minutes / Hours / Days / Weeks)	4 hours
If goal not met: Urgency	Low / Medium / High / Critical	Medium
If goal not met: Notify	Assignee or Manager	Assignee (Underwriter)
If goal not met: Transfer	Manager or Persona	Transfer to Manager
Maximum Allowed Time	Goal time + buffer (Minutes / Hours / Days / Weeks)	4 hours + 4 hours (8 hours total)
If deadline missed: Urgency	Low / Medium / High / Critical	High
If deadline missed: Notify	Assignee or Manager	Manager
If deadline missed: Transfer	Manager or Persona	Loan Officer

❖ INSIGHT

SLA thresholds should reflect the real operational window for the task rather than aspirational targets. A 4-hour goal on underwriter review reflects the service commitment U+Bank makes time-to-decision. If it is not met, the Loan Officer coordinating the application needs to know so the applicant isn't left waiting.

Routing and Service Level Agreement specification

Apply the routing and SLAs below to the User-driven Steps in your Loan Application lifecycle.

Routing

Step	Stage	Route To	Rationale
Collect applicant information	Submission	Current User	The applicant enters their own details through self-service.
Upload required documents	Verification	Applicant	The applicant uploads proof of identity and income. Enable agent assignment processing.
Review loan terms	Underwriting	Underwriter	The underwriter reviews terms for referred or high-value applications.
Sign loan documents	Fulfilment	Applicant	The applicant signs the loan agreement.

Service Level Agreements

Step	Goal	If goal missed	Deadline	If deadline missed
Upload required documents	3 days	Medium urgency; notify Assignee	5 days total	High urgency; notify Assignee; transfer to Loan Officer
Review loan terms	4 hours	Medium urgency; notify Assignee	8 hours total	High urgency; notify Assignee; transfer to Loan Officer
Sign loan documents	5 days	Medium urgency; notify Assignee	7 days total	High urgency; notify Assignee; transfer to Loan Officer

End goals

By completing this lab, every User-driven Step in the Loan Application lifecycle has a routing target, and the steps that carry an operational commitment have SLAs with goals, deadlines, and escalation actions. The design therefore captures how work is owned and prioritized in practice.

Step instructions: Configuring Routing and Service Level Agreements

These steps are intentionally concise. Refer to the corresponding Solution Guide for detailed, click-by-click actions.

Step 1: Set routing on the user steps	
Instruction	For each Collect information step in the Loan Application lifecycle, set the Route To target from the specification.
Context	Routing establishes the intended ownership of work early in the design. When the Blueprint is imported, these intent seeds the generated application's assignment behavior in Pega Infinity.
✦ Insights	Define routing on every User-driven Step. A step with no owner is a gap that surfaces during Authoring.
Expected output	Every Collect information step shows a Route To target matching the routing specification. You also have a note for the Solution Builder that explains the expected agent-processing experience.
📌 Note	Now that agentic processing is enabled, the next time you use Preview my App, BlueprintAgent@pega.com will send you an email to complete the step. You can modify notification behavior on the Personas tab.
Step 2: Add SLAs	
Instruction	Add SLAs to the steps listed in the SLA table, setting the goal, deadline, and escalation for each.
Context	SLAs capture how work is prioritized and escalated, reducing interpretation during build and ensuring the application reflects U+Bank's operational commitments.
Expected output	Each specified step has an SLA with a goal, a deadline, and escalation actions if the goal or deadline is missed.

Configuring Business Rules and Decisions

Scenario

One of U+Bank's biggest risks today is that lending decisions are inconsistent: two officers can look at the same borderline application and reach different conclusions, and when a regulator asks why a loan was declined, there is no clear business rationale. The new Loan Application Case Type fixes that by making the decision logic explicit: one Rule is applied consistently to every application, with the reasoning captured.

With the Case lifecycle in place, you will now define that logic: the Business Rule that determines loan eligibility from credit score and affordability, and how the Decision Step routes each application to Approve, Refer, or Decline.

Business Rules and Decision Steps

Decision Steps

A Decision Step (the orange diamond in a Case Lifecycle) is a branching point: the workflow evaluates a condition and routes to a different step, Stage, or process depending on the outcome. Unlike a Collect information or Approve/Reject step, a Decision does not wait for a user; it evaluates automatically as part of the workflow.

Business Rules

The condition that drives a Decision Step is defined by a Business Rule, Pega Blueprints term for an 'if this, then that' instruction. You describe the Rule in plain language, and Blueprint's AI generates a Decision Table from that description. The Decision Step then routes the Case based on the value the Rule returns.

✦ INSIGHT

Description, not the table, is the source of truth. The Decision Table is generated from your description, so if it is wrong, improve the description and regenerate rather than editing the table directly. Manual edits are overwritten on the next regeneration. Think of the description as the specification and the table as the output.

The Business Rules tab

Business Rules are managed centrally on a dedicated tab within each Case Type, alongside the Case Lifecycle and Case Data Model. A Rule defined here can be attached to any Decision Step in that workflow, and a single Rule can be reused by multiple Decision Steps. Define it once rather than duplicating the logic.

How Decision Steps route the workflow

Once a Rule is attached, Blueprint reads its return values and gives you one routing row per value (plus an otherwise catch-all). For each return value, you choose an option:

Option	What it does	When to use it
Steps	Routes to a specific step within the workflow	Use when the outcome should move to a specific action.
Stage	Routes to a defined Stage in the Case Lifecycle	Use when the process needs to move to a different Stage.
Alternate Stage	Routes to a Stage defined as an exception or alternate path	Use for exception handling.
Next Stage	Advances to the next Stage in the lifecycle	Use when the process should continue sequentially without deviation.
Previous Stage	Returns to the Stage immediately before the current one	Use to loop back.
Continue Process	Continues along the default path within the current process	Use when the decision outcome means 'carry on with the current process without jumping'; this is the most common option for the 'no action needed' path.
End Process	Terminates the current process (but not necessarily the entire Case)	Use when the outcome should stop the current process entirely.

Decision Steps and Business Rules in Pega Infinity

When a Blueprint is imported into Pega Infinity, Decision Steps and their associated Business Rules are translated into the application's decision logic and flow structure.

Each Decision Step becomes a decision point within the Case Lifecycle, and Business Rules defined in Blueprint are used to generate an initial version of the decision logic. This includes the evaluation conditions and the routing paths that determine how the workflow proceeds.

This generated logic provides a strong starting point for implementation, reducing the need to build decision behavior from scratch. However, Solution Builders may refine or extend this logic during the Authoring phase to manage more complex scenarios, data conditions, or organization-specific requirements.

Loan Eligibility Rule specification

Create a Business Rule named Evaluate Loan Eligibility and attach it to the Determine eligibility Decision Step in the Underwriting Stage. Use the description below. It names the fields and values Blueprint should use to build the Decision Table.

Rule description (enter this in Blueprint)

Determine whether an applicant qualifies for a personal loan based on their credit score and debt-to-income ratio. An applicant with a credit score of 720 or above and a debt-to-income ratio of 36% or below is Approved. An applicant with a credit score of 620 or above and a debt-to-income ratio of 43% or below is Referred to an underwriter. All other applicants are Declined. The Rule evaluates Credit Score and Debt-to-Income Ratio and returns Approve, Refer, or Decline.

Expected Decision Table:

Credit Score	Debt-to-Income Ratio	Return
720 or above	36% or below	Approve
620 or above	43% or below	Refer
otherwise		Decline

Decision Step routing (Determine eligibility):

Return value	Routes to
Approve	Next Stage (Fulfilment)
Refer	Continue Process through Research and summarize, then Review loan terms
Decline	Rejection (Alternate Stage)

The Refer outcome continues through the remaining Underwriting process rather than jumping directly to the Underwriter. The Research and summarize AI Agent Step prepares the relevant application, credit, affordability, and Case information before the Underwriter reaches Review loan terms.

End goals

Conditions that drive a decision in a workflow can also be based on historical patterns or adapt in real time. Pega supports these use cases with Statistical AI using both Predictive and Adaptive models. In these situations, identify the decision in Blueprint and add notes to explain the use case and scenario.

Use Agentic AI when the decision requires generating, translating, summarizing, or interpreting unstructured content with human-like comprehension.

By completing this lab, you will have an Evaluate Loan Eligibility Business Rule that reflects U+Bank's credit and affordability policy, attached to the Determine eligibility Decision Step. It routes each application to Approve, Refer, or Decline, making the application's decision behavior explicit in the design.

Step instructions: Configuring Business Rules and Decisions

These steps are intentionally concise. Refer to the corresponding Solution Guide for detailed, click-by-click actions, or use the AI Assistant for help. Using the AI Assistant demonstrates how AI can support design-time work that is converted into Business Rules that run predictably at runtime.

Step 1: Create the Business Rule	
Instruction	On the Business Rules tab, create the Evaluate Loan Eligibility Rule from the description in the specification, then review the generated Decision Table. If a Business Rule already exists, modify the description and regenerate it.
Context	The description is the specification Blueprint's AI reads to generate the decision logic. A precise description naming the fields and values produces an accurate Decision Table in one pass.
❖ Insights	Always review AI-generated decision logic against the intended policy. If the table doesn't match, refine the description and regenerate - don't edit the table by hand.
Expected output	An Evaluate Loan Eligibility Rule exists with a Decision Table returning Approve, Refer, or Decline.
Step 2: Link the Rule to the Decision Step	
Instruction	Attach the Evaluate Loan Eligibility Rule to the Determine eligibility Decision Step and map each return value to its routing target.
Context	Attaching the Rule turns the Decision Step into a live branching point. Blueprint populates one routing row per return value for you to direct.
Expected output	Determine eligibility routes approved applications to Fulfilment, declined applications to Rejection, and referred applications through Research and summarize before the Underwriter reviews the loan terms.

Configuring the Case Data Model

Scenario

U+Bank's manual process captured applicant information inconsistently: free text in a spreadsheet, missing fields, and no validation. That is a large part of why decisions were unreliable and why applications stalled while staff chased missing details. The Data Model addresses that at the source by defining what every Loan Application must capture in a structured, consistent form.

In this lab, you will configure the Case Data Model for the Loan Application Case Type so it captures the loan details, the applicant's employment and income, the credit result, and supporting documents. This ensures every application carries complete data from the moment it is submitted.

Understanding the Case Data Model

Fields represent the individual pieces of information a Case captures. The Case Data Model defines the full scope of that data: what the application stores and displays at runtime. Getting it right here means every step, view, and decision downstream has the data it needs.

Field Types

Pega Blueprint offers scalar types (Text, Boolean, Currency, Date, DateTime, Time, Decimal, Integer, Percentage, Email, Phone, URL), plus User Reference and Attachment, and two structural types: an Embedded field (a nested sub-object) and a Data or Case reference (a link to another Data Object or Case Type in the Blueprint).

User input or derived automatically by the system

Each field is captured as User input (a person enters it), Calculated (the system derives it), or Picklist (the user chooses from defined options). Choose the capture method deliberately. For example, a value the system derives should be Calculated rather than entered by a user.

Primary Fields

Primary Fields are the handful that best summarize a Case; Blueprint uses them to generate default Views. Mark only the fields a user needs to identify a loan application at a glance.

✦ INSIGHT

Field descriptions are not optional. Blueprint uses them to generate realistic test data in Preview and to configure the field when the Blueprint is imported into Pega Infinity. A field with no description produces no test data and gives the builder nothing to work from. Write a clear description for every field.

Case Data Model specification

Configure the Case Data Model for the Loan Application Case Type to match the specification below.

Field	Type	Method	Primary	Description
Loan Amount	Currency	User input	Yes	The total amount requested by the applicant
Loan Term	Integer	Picklist	Yes	Repayment period in months (12, 24, 36, 48, 60)
Loan Purpose	Text	Picklist	No	Reason for the loan (Debt, Medical, Other)
Interest Rate	Percentage	Calculated	Yes	Annual rate based on the credit assessment
Application Date	DateTime	Calculated	No	Date the application was submitted
Is First-Time Borrower	Boolean	User input	No	Whether the applicant has no prior loans
Assigned Loan Officer	User Reference	Calculated	No	The loan officer assigned to the application
Applicant Details	Data (reference)	User input	No	Reference to applicant's personal information
Credit Report	Data (reference)	Calculated	No	Reference to credit assessment data
Supporting Documents	Attachment	N/A	No	Uploaded files supporting the application

Embedded field - Employment Information (multiple record):

Subfield	Type
Employer Name	Text
Job Title	Text
Annual Income	Currency
Employment Start Date	Date

End goals

By completing this lab, you will have a complete Case Data Model for the Loan Application, including the loan details, calculated affordability and pricing values, applicant and credit references, supporting documents, and Employment Information required by the workflow and eligibility decision.

Step instructions: Configuring the Case Data Model

These steps are intentionally concise. Refer to the corresponding Solution Guide for detailed, click-by-click actions, or ask the AI Assistant for help.

Step 1: Review the Case Data Model	
Instruction	Review the fields Blueprint generated for the Loan Application and identify what to add, edit, or keep against the specification.
Context	Blueprint generates an initial set of fields from the application context. Reviewing them first prevents duplicates and shows which AI-generated fields can be reused.
Expected output	You know which fields already exist, which need adding, and which need editing to match the specification.
Step 2: Add and configure the fields	
Instruction	Add each field from the specification with the correct Field Type, capture method, description, and Primary flag.
Context	Fields must exist in the Data Model before they can be assigned to Step forms in the labs that follow.
💡 Insights	Set the capture method deliberately: Interest Rate and Application Date are calculated because the system derives them; Loan Term and Loan Purpose are picklists, so their values stay constrained to the allowed options.
Expected output	All required fields appear in the Data Model with the correct types, capture methods, and the three Primary Fields (Loan Amount, Loan Term, and Interest Rate) marked.
Step 3: Add the embedded Employment Information field	
Instruction	Create an embedded field to group the applicant's employment details together.
Context	Embedded fields group related data that belongs together and is specific to this Case. That makes them the right choice for employment details, which are not reused elsewhere.
Expected output	An Employment Information embedded field exists with four subfields.
Step 4: Confirm the Data Model	
Instruction	Review the final field list against the specification and tidy the order.
Context	A final pass confirms the model is complete before it is used to build Step forms and the Preview.
💡 Insights	During design, evaluate whether each field strengthens the design or should be removed before importing into Pega Infinity. As the Solution Designer, you should be able to articulate why each attribute belongs in the Data Model.
Expected output	The Case Data Model matches the specification, with Primary Fields marked and a description on every field.

Configuring Case Type Settings

Scenario

The last piece of a high-fidelity Case Type is easy to overlook: the settings that control how a Case is created, organized, and planned. For U+Bank, these settings make the loan application manageable at scale by capturing the right information when an application starts, breaking the work into trackable child Cases, and organizing documents so nothing is lost. This directly addresses a failure point in the old manual process, where paperwork was scattered across inboxes.

With the Loan Application lifecycle and Data Model in place, you will now configure the Case Type settings: Case-creation fields, Case hierarchy, attachment categories, and release planning.

Understanding Case Type Settings

The Case Type Settings dialog has four tabs, each controlling a different aspect of how the Case behaves:

Case creation fields

The information collected when a new Case is started. Marking a field as required ensures critical data is captured before any work begins.

Case hierarchy

The parent-child relationships between Case Types. A child Case handles a sub-process that must complete before the parent resolves; use when the sub-process has its own lifecycle, different actors, or separate reporting needs.

Attachment categories

Categories that classify the documents attached to a Case, so users can find and organize them and confirm all required documentation is collected.

Release planning

A release tag and effort estimate that support delivery planning and give stakeholders visibility into what is being built and when.

✦ INSIGHT

Require only information that is essential when the Case is created. Applicants contact information is part of the Applicant Details business entity. Where Blueprint exposes individual applicant fields at Case creation for the Preview experience, treat them as representations of Applicant Details rather than separate business data that should be maintained independently on the Loan Application Case.

Case Type Settings specification

Use this specification to configure the Case Type Settings for the Loan Application Case Type.

Case creation fields

Field	Required?	Purpose
Applicant name	Yes	Critical for contact
Applicant phone number	Yes	Critical for contact
Loan Amount	Yes	Critical for initial assessment
Loan Term	Yes	Required for rate calculation
Loan Purpose	No	Helpful context for review
Is First-Time Borrower	No	May qualify for special programs

Case hierarchy

Setting	Value
Top-level Case Type	Yes; users can create it directly
Child Case Types	Document Verification, Loan Disbursement

Attachment categories

Category	Examples
Identification Documents	Government-issued ID, passport, driver's license
Proof of Income	Pay stubs, tax returns, and employment letters
Financial Statements	Bank statements, investment accounts
Additional Documentation	Any other supporting documents

Release planning

Setting	Value
Release	Release 1
Effort	Large

End goals

By completing this lab, you will have fully configured Case Type Settings for the Loan Application Case Type: streamlined creation with the required fields, a defined hierarchy with Document Verification and Loan Disbursement as child Cases, four attachment categories, and Release 1 with a Large effort estimate. The Release 1 tag will be visible next to the Case Type.

Step instructions: Configuring Case Type Settings

These steps are intentionally concise. Refer to the corresponding Solution Guide for detailed, click-by-click actions, or use the AI Assistant for help.

Step 1: Access Case Type Settings	
Instruction	Open the Settings dialog for the Loan Application Case Type.
Context	The Settings dialog contains four tabs - Case creation Fields, Case Hierarchy, Attachments, and Release planning.
Expected output	The Settings dialog opens on the Case creation Fields tab.
Step 2: Configure Case creation fields	
Instruction	Add the fields users provide when creating a new Loan Application, marking the required ones.
Context	Case creation fields capture the minimum information needed to start the Loan Application. Applicant name and phone number represent contact information associated with Applicant Details, while Loan Amount and Loan Term provide the initial loan information needed to begin processing.
💡 Insights	Require only essential information upfront. Collect applicant contact details, Loan Amount, and Loan Term first, then gather remaining fields as the Case progresses.
Expected output	Six creation fields are configured, with Applicant name, Applicant phone number, Loan Amount, and Loan Term required.
Step 3: Define the Case hierarchy	
Instruction	Set Loan Application as a top-level Case Type and add its child Cases.
Context	Child Cases handle sub-processes that must be completed before the parent resolves. Here, they handle document verification and loan disbursement.
📌 Note	If a Case Type is not marked top-level, it can only be created by another Case through a Create Case step. Avoid circular hierarchies where a child references its parent.
Expected output	Loan Application is top-level, with Document Verification and Loan Disbursement as child Cases.
Step 4: Define attachment categories	
Instruction	Create categories to organize documents attached to the Loan Application Case Type.
Context	Well-defined categories make documents easy to find and help confirm that all required documentation is collected. This directly addresses the scattered paperwork problem in the manual process.
Expected output	Four attachment categories are configured.
Step 5: Specify release planning	
Instruction	Assign the release and effort estimate for the Loan Application Case Type.
Context	Release and effort information help the delivery team plan timelines and communicate progress. The release tag displays next to the Case Type.
Expected output	Release 1 and Large effort are assigned.
Step 6: Confirm the settings	
Instruction	Verify all settings are configured correctly and the release tag is visible.
Context	A final review confirms the settings match the specification and that the Release 1 tag displays for stakeholder visibility.
Expected output	All Case Type settings match the specification, and the Release 1 tag shows next to the Loan Application Case Type.

Working with AI Agent Steps

Scenario

U+Bank's new Loan Application is now a real, end-to-end lifecycle: applications are captured, checked, risk-assessed, and either funded or rejected. But look closely at the work that still lands on a person's desk and a pattern appears. Before a human can act, they often have to prepare: read the file, extract relevant information, research across sources, analyze the available information, draft a response, or assemble information for audit. In the old manual process, this preparation was slow, inconsistent, and error-prone.

AI Agents are especially useful for first-pass work such as reading, extracting, classifying, drafting, reasoning, and summarizing.

In this tutorial, you'll learn the practitioner habit of scanning a workflow for those "prepare-before-you-act" moments and inserting an AI Agent to do the first pass - with a person still reviewing what matters. You'll apply it to U+Bank's Rejection Stage, but the thinking transfers to any Pega Blueprint you design.

AI Agent Steps

An AI Agent Step is a system-driven Smart Shape that performs a generative or reasoning task inside your Case Lifecycle - summarizing, drafting, extracting, or synthesizing information - using the Case's data and a task description.

✦ INSIGHT

AI in front, human in the loop. An AI Agent is at its best when it does the preparation a person used to do by hand, then hands a draft to that person to review, adjust, and approve. It accelerates the work without removing human judgment.

As a best practice, surround an AI Agent Step with deterministic controls: predictable, Rules-based safeguards that prevent the workflow from relying only on the agent's judgment or generated output. Make sure the right data is available before the agent runs, constrain what it should generate, and require a human or system check after it produces the output.

Agents an workflows

Bounded Agent cognition, deterministic rails on either side.



- **Pre-checks before the AI Agent runs:** Confirm required inputs are present, such as decision reasons, applicant details, credit factors, or Case data.
- **Explicit task boundaries:** Tell the agent exactly what to use, what to produce, what tone to follow, and what not to include.
- **Post-checks after the AI Agent runs:** Validate that the output is complete, appropriate, and ready for review.
- **Human-in-the-loop review:** A person reviews and approves the output before it affects the customer or the Case outcome.

Example practitioner pattern: find the “before the human” moment

Work with stakeholders to review the Case Lifecycle and, at every point where a person is expected to do something, ask:

“Before this person acts, is there a task an AI Agent could do first - so the person reviews and decides instead of starting from a blank page?”

Most Collect Information Steps have one of these first-pass tasks: reading and summarizing, drafting a response, extracting fields from a document, or pulling several sources together. Each is a candidate for an AI Agent step to be placed just before human action.

Four common placements

1. **AI Agent in front of a Decision.** Pre-summarize or enrich the inputs so the Decision Step (or the person who acts on its outcome) works from a clean, consistent narrative rather than raw data.
 - Loan example: an AI Agent drafts a short credit narrative from the credit report and affordability figures just before the Determine eligibility Decision, so a referred Case reaches the Underwriter already summarized.

2. **AI Agent before or after an Automation or integration point.** Summarize information going to or coming back from an integration so that what flows through the workflow is human-readable and decision-ready.
 - Loan example: after the credit bureau retrieval, an AI Agent condenses the raw Credit Report response into a plain-language risk summary for the Case.
3. **AI Agent for research and synthesis across sources.** Gather relevant information from multiple internal or external sources, summarize the key findings, and present them in a decision-ready format so a person can accept or decline the request with better context.
 - Loan example: before an Underwriter reviews a referred application, an AI Agent researches the applicant’s submitted documents, credit factors, affordability data, and any Case notes, then summarizes the factors that support approval or decline.
4. **AI Agent before a human review/wrap-up.** Draft the correspondence or assemble the package a person would otherwise prepare by hand and route the draft to them for approval.
 - Loan example: the worked example below, where an AI Agent drafts the decline response before it is reviewed and sent.

Example AI Agent tasks across the lending journey (illustrative)

These illustrate the range of first-pass tasks an AI Agent can own. Some reach beyond U+Bank’s Release 1 unsecured-loan scope and are shown as “what’s possible,” not as steps to build here.

NOTE

Potential business outcomes. Stakeholders often frame the value as faster time-to-decision, lower intake cost, reduced risk and manual error, and less revenue leakage from abandoned applications. These outcomes are useful for the “why,” but a practitioner’s job is the “where and how.” Keep the design conversation focused on which specific manual first-pass tasks to hand to an agent.

Using the Blueprint AI Assistant to configure the Step

Don’t write these task descriptions from a blank page - use the Blueprint AI Assistant to draft and sharpen them, and to write the Notes for the Solution Builder that carry your design intent forward into Pega Infinity.

Good ways to use it here:

- **Draft the task description.** Tell the Assistant what the step should produce (“draft a compliant decline letter from the eligibility reasons using the Decline letter template”) and let it propose a fuller description. Refine the wording, then paste it into the step.
- **Write the Solution Builder note.** Ask the Assistant to turn the human-review guardrail and any constraints into a concise note for the Solution Builder, for example: “This letter is customer-facing; require human review before sending.”
- **Pressure-test the description.** Ask the Assistant whether the description names the inputs and tone clearly enough to produce a consistent result - the same “the description is the specification” habit you use elsewhere in Blueprint.

✦ INSIGHT

Descriptions and notes power what comes next. Whatever you (or the AI Assistant) write in a step's description and its Solution Builder note isn't just for this Blueprint - it's the design intent the Solution Builder reads when the Blueprint is imported and implemented. A vague note loses information at import; a precise one carries your intent all the way into the built application.

End goals

By completing this tutorial, you'll be able to recognize where an AI Agent step belongs in a workflow, write a clear task description for it, and keep the right human review in place. You'll have configured at least one AI Agent step in U+Bank's Rejection Stage.

Step instructions: Working with AI Agent Steps

These steps are intentionally concise. Refer to the corresponding Solution Guide for detailed, click-by-click actions.

Step 1: Locate the AI Agent steps in the lifecycle	
Instruction	Open the Loan Application Case Lifecycle and find the two AI Agent steps already present in the Rejection (Alternate) Stage: Craft response and Consolidate Case information for audit.
Context	These two steps were added when you built the lifecycle skeleton. They are natural first-pass tasks in a rejection: writing the applicant's decline letter and assembling the file for audit. In this lab, you'll configure Craft response.
Expected output	Both AI Agent Steps are visible in the Rejection Stage, ready to configure.
Step 2: Craft a response	
Placement pattern	AI Agent before a human review (drafting correspondence), with the draft preceding the Send adverse action notice notification.
Where it sits	Rejection Stage, ahead of Send adverse action notice.
The first-pass task	When an application is declined, a person used to draft the adverse-action letter by hand, explaining the principal reasons for decline in clear, compliant language. The AI Agent drafts it instead using a template and the relevant Case information, decision reasons, and Case data; a person reviews it before it is sent.
AI Agent task description (paste-ready)	Draft a clear, respectful adverse-action notice to the applicant explaining that their personal loan application has been declined. State the principal reasons for the decision based on the eligibility outcome and the factors that drove it (for example, credit score band and debt-to-income). Use the Adverse-Action template to craft the response. Add the Case information and narrative that explains why the Case is being rejected.
Inputs it uses	eligibility decision outcome and reasons; Applicant Details (name/contact); Credit Report factors (score band, debt-to-income) surfaced as reasons.
Human review that follows	The Loan Officer reviews and can edit the AI-generated rejection response before it is included in the adverse-action notification. The reviewed response is then used when the applicant notification is sent.
Expected output	The Craft response AI Agent produces the rejection response in the Crafted rejection response field, ready for Loan Officer review.
Step 3: Review the response before sending	
Instruction	Add a user-driven review between Craft response and Send adverse action notice so the Loan Officer can review and edit the AI-generated rejection response before it is sent.
Context	AI prepares the first draft, but customer-facing adverse-action content requires human review. The review Step gives the Loan Officer an opportunity to verify the response and make corrections before the notification uses it.
Expected output	The Rejection Process follows this sequence: Craft response → Review rejection response before sending → Send adverse action notice

Configuring Data and Integrations

Scenario

A loan application never works in isolation. To decide on a personal loan, U+Bank's new application has to reach the systems where the data lives - the core banking system that master's every existing customer and the credit bureau that returns an applicant's credit score. In the manual process, this was done by hand: an officer looked up customers on one screen and keyed a bureau result from a PDF into a spreadsheet. Defining these connections in the design enables those interactions to become automatic, consistent, and auditable.

Before developing the application further, you first define the core Data Model in Pega Blueprint: the key Data Objects - such as customer details sourced from the existing core banking system - and the loan application itself, a new Pega-native object. In this lab, you'll shape the application's Data Model and its integrations, deciding which data U+Bank maintains and which is sourced from an external system.

Review and refine the Data Model

The Case Data Model and Data Objects define the information the application captures, stores, and uses. Together, they describe the data required to support the workflow and how it should be structured. As a rule of thumb: if data represents a reusable entity (such as a customer or a Credit Report), model it as a Data Object rather than a Case field.

The Data & Integrations step is where a Solution Designer defines how the application interacts with external systems and, critically, where data is sourced, stored, and managed. A key design decision is determining whether each Data Object is:

- Managed locally in Pega, or
- Sourced and maintained in an external system of record.

This decision directly impacts integration effort, delivery risk, and whether the Blueprint reflects a buildable design.

The Integration Designer

The Data & Integrations screen has three panels: Data Objects, Integrations, and Inbound Events. In this activity, focus on which systems are involved, how data flows between them, and where data ownership sits across the application.

Integrations panel - a quick tour

The Integrations panel lists all external connectors your application will use. For each integration, you can define the name, the external system it connects to, and the individual operations (GET, POST, PUT, DELETE). For U+Bank, you'll represent connections to the Core Banking System (customer lookup) and the Credit Bureau (credit report retrieval).

Integrations can be configured in two ways:

- **Manual entry** - you define the integration name, endpoint, and operations directly in Blueprint. Use this when the external system does not have an OpenAPI specification available.

- **OpenAPI import** - you provide an OpenAPI (Swagger) specification URL or file (.yaml, .sql, .ddl), and Blueprint auto-populates the available operations, field mappings, and Data Model from the specification. This significantly reduces manual configuration effort.

Once an Integration is created, it exposes two configuration tabs - Data Model and Settings. The Data Model tab shows the fields Blueprint has mapped for each operation. The Settings tab captures the endpoint URL, the authentication scheme (API key, OAuth 2.0, Basic Auth, etc.), and the field-level mapping between Blueprint’s Data Model and the external system’s payload format.

The Inbound Events panel - a quick tour

The Inbound Events panel defines how external systems or users can trigger your application - for example, an incoming email that creates a new Case, or an external platform posting a webhook that starts a workflow. Blueprint supports a range of inbound event types:

- **DX API** - an external consumer calls Pega’s DX API to create or update a case directly (for example, U+Bank’s self-service web form submitting a new loan application).
- **Pega Infinity portal** - an operator creates a case manually through the Pega Infinity operator portal (for example, a loan officer entering a phone application).
- **Model Context Protocol (MCP) integration** - an AI agent or tool calls Pega using the Model Context Protocol to initiate or progress a case.
- **Email** - an inbound email triggers case creation via Pega’s Email Listener.

Local Data Storage vs External Data Storage

For each Data Object, decide whether Pega owns the data or references data owned by another system.

	Local Data Storage (Pega)	External Data Storage
What it means	Pega is the system of record. The application creates, manages, and owns the lifecycle of this data.	The data is owned and maintained in an external system (for example, a core banking system, credit bureau, or payment platform). Pega interacts with it via integrations.
Build effort	Lower complexity. No integration to design or build. Pega auto-generates data classes and storage on import.	More variable and often higher complexity. Requires integration design, API connectivity, authentication, data mapping, and error handling. Typically implemented by the Solution Builder during Authoring.
Estimation impact	More predictable. Data structures follow standard patterns and require less custom implementation.	Less predictable. Effort depends on the external system, API quality and readiness, authentication method, data-model complexity, and integration constraints.
Typical examples	Loan Application, Applicant Details, and the Risk Assessment result - created and managed in Pega.	Customer from the core banking system, and Credit Report from a credit bureau - read by Pega but owned elsewhere.

❖ INSIGHT

Data ownership is a high-fidelity design decision. Incorrect assumptions can create rework later, especially for external objects that require integration design, authentication, mapping, error handling, and testing during Authoring.

Field Types in Blueprint

Field Types define data intent at design time. In this lab, focus on relationship fields and clear descriptions, because both affect Preview and downstream implementation.

The following Field Types define relationships to other objects in the Blueprint:

Field type	What it represents	When to use
Case	Reference to another Case Type	Link related cases (e.g. Loan Application → Document Verification). The dropdown lists all Case Types currently in your Blueprint.
Data	Reference to a Data Object	Link reusable business entities (Customer, Credit Report). The dropdown lists all Data Objects currently in your Blueprint.
Embedded	Nested data structure within a parent	Child data that exists only in the context of the parent (e.g. Employment Information within a Loan Application).
+ Create new Embedded	Define a new embedded structure	When you need a new nested object inside a case or Data Object.

ARCHITECTURAL INTENT

References describe relationships in the design. Implementation details (Data Pages, sourcing, caching, integration patterns) are refined during Authoring.

Field descriptions power Blueprint’s AI in two ways

Blueprint uses field descriptions to generate realistic test data in Preview and to give the Solution Builder useful context on import. A clear description helps stakeholders review believable scenarios and gives builders a better starting point for configuration.

NOTE

Preview shows a functional representation of each step, but not every UI control. If a specific control is required, add a Note to the step so the Solution Builder sees it during Authoring.

Data and Integration specification

Configure the following Data Objects and Systems of Record for the Personal Loan Origination application.

Data Object	Local (Pega)	External	Rationale
Loan Application	✓		Pega owns the application record from submission through funding - there is no prior system of record.
Applicant Details	✓		Applicant personal and contact information, captured in the Loan Application Case Type and owned by U+Bank; referenced from the case.
Customer		✓	Existing customers are mastered in U+Bank’s core banking system. Pega reads customer data but does not own the record of truth.
Credit Report		✓	Retrieved from an external credit bureau during Underwriting. Pega consumes the result but does not own it.

Import artifact

An OpenAPI (Swagger) definition file accompanies this lab for download - Customer - Core Banking - OpenAPI.yaml. You import it to create the Customer Data Object with its System of Record. The Credit Report external object is created by hand, without a file (a Credit Report - Credit Bureau - OpenAPI.yaml is provided as a spare that illustrates a bureau schema import).

End goals

By the end of this lab, your Blueprint will contain the four required Data Objects for the personal loan application, with Customer and Credit Report sourced externally, Loan Application and Applicant Details managed locally, and field descriptions refined enough to support Preview and downstream build work.

Existing API specifications or data schemas can accelerate Data Modeling, but they should be treated as a starting point. Imported schemas may reflect technical system design rather than a business-friendly logical model.

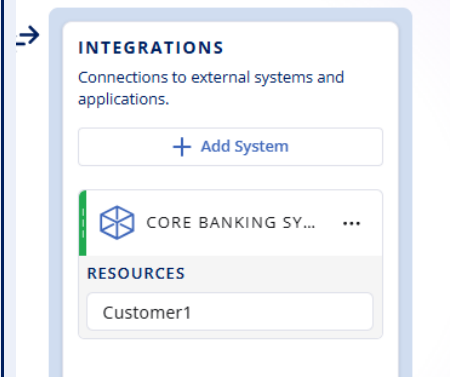
❖ INSIGHT

Treat schema import as input to the design, not the design itself. The responsibility remains with the Solution Designer to validate, simplify, and align the model with how the business understands and uses the data.

Step instructions: Configuring Data and Integrations

These steps are intentionally concise and reflect the current Blueprint Data & Integrations screen. Refer to the corresponding Solution Guide for detailed, click-by-click actions, or use the AI Assistant for help.

Step 1: Access the Data & Integrations step									
Instruction	Navigate to the Data & Integrations step to manage all data-related aspects of your application.								
Context	Before defining your application’s Data Model, access the dedicated screen in Pega Blueprint where all Data Objects are managed. This ensures you are in the correct part of the tool to begin configuring the data for the Personal Loan application.								
❖ Insights	Pega Blueprint centralizes Data Model management within the Data & Integrations step. This promotes a data-first approach - define the foundational entities before building out processes and user interfaces - leading to a more robust, scalable architecture.								
Expected output	The screen displays all the Data Objects Blueprint generated for you based on the context you previously provided.								
Step 2: Review and manage existing Data Objects									
Instruction	Review the initial list of AI-generated Data Objects to ensure they are relevant to the personal loan application process and remove any that don’t belong.								
Context	Blueprint generates an initial set of Data Objects from your application context. Review the list to ensure it reflects the entities the loan application actually needs (Loan Application, Applicant Details, Customer, Credit Report).								
Expected output	Your list of Data Objects is refined to represent the entities required for the personal loan application, specifically those needed to support the first release of the Loan Application Case Type and its Loan Disbursement child case.								
Step 3: Import the Core Banking System									
Instruction	Import the provided OpenAPI definition to add the Core Banking System integration to the Blueprint.								
Context	Customer profiles already exist in U+Bank’s Core Banking System. Importing the provided integration definition establishes the external system that will supply customer data to the application. <table><tr><th>Field</th><th>Input</th></tr><tr><td>Integration definition file</td><td>Customer - Core Banking - OpenAPI.yaml</td></tr><tr><td>Integration System name</td><td>Core Banking System</td></tr><tr><td>Describe what this System provides</td><td>This integration connects the Personal Loan Origination application to U+Bank's existing Core Banking System, which is the system of record for customer master data. It provides read-only access to customer profiles that are already mastered in core banking; the Loan Application references these records rather than duplicating or re-capturing them.</td></tr></table>	Field	Input	Integration definition file	Customer - Core Banking - OpenAPI.yaml	Integration System name	Core Banking System	Describe what this System provides	This integration connects the Personal Loan Origination application to U+Bank's existing Core Banking System, which is the system of record for customer master data. It provides read-only access to customer profiles that are already mastered in core banking; the Loan Application references these records rather than duplicating or re-capturing them.
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Expected output	The Core Banking System is displayed in the Integrations section and is ready to be associated with the Customer Data Object.								

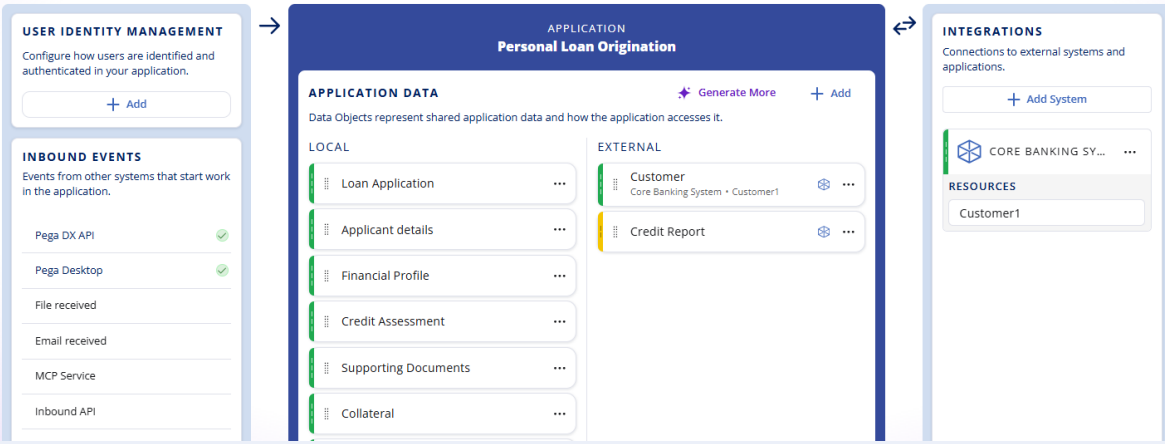


Step 4: Link the Customer Data Object to the Core Banking System

Instruction	Edit the Customer Data Object to use the Core Banking System as the external system of record.
Context	Customer represents existing customer information mastered in U+Bank’s Core Banking System. Linking the Data Object to the imported system identifies the external source of record for customer data.
Expected output	The Customer Data Object is now in the external column.

Step 5: Create a new Data Object manually

Instruction	Create Applicant Details as a locally sourced object (with an AI-generated field list) and Credit Report as an external object, both created by hand without a specification file.										
Context	Applicant Details is new and unique to this application, so you define it manually and let Blueprint’s AI generate fields from a description. Credit Report is retrieved from an external bureau during Underwriting; when no specification file is available, represent the source by naming its System of Record directly. <table> <tr> <th>Field</th><th>Input</th></tr> <tr> <td>Data Object name</td><td>Applicant Details</td></tr> <tr> <td>Data Object description</td><td>“Represents the personal and contact information of an individual applying for a personal loan. Each record should capture the applicant’s full legal name, date of birth, residential address (address line, city, postal code, country), primary email and phone number, nationality, marital status (Single, Married, Divorced, Widowed), number of financial dependents, and residential status (Homeowner, Renting, Living with family). This information is entered by the applicant through the self-service application and is owned by U+Bank within this application.”</td></tr> <tr> <td>Data Object name</td><td>Credit Report</td></tr> <tr> <td>Data Object description</td><td> Credit Report - An external Data Object representing an applicant's credit assessment retrieved from a third-party credit bureau, which is its system of record. The bureau owns the data; the Loan Application references it read-only and does not create or maintain it. A Credit Report is retrieved for an applicant during the Underwriting Stage and provides the risk inputs used to decide loan eligibility. Each Credit Report includes: • Report ID - unique identifier for the credit report • Applicant ID - the applicant the report relates to • Credit score - the applicant's numeric credit score • Score band - the credit-score band: Prime, Near-prime, or Subprime • Total monthly debt - the applicant's total monthly debt obligations, used to calculate debt-to-income • Open accounts - the number of open credit accounts </td></tr> </table>	Field	Input	Data Object name	Applicant Details	Data Object description	“Represents the personal and contact information of an individual applying for a personal loan. Each record should capture the applicant’s full legal name, date of birth, residential address (address line, city, postal code, country), primary email and phone number, nationality, marital status (Single, Married, Divorced, Widowed), number of financial dependents, and residential status (Homeowner, Renting, Living with family). This information is entered by the applicant through the self-service application and is owned by U+Bank within this application.”	Data Object name	Credit Report	Data Object description	Credit Report - An external Data Object representing an applicant's credit assessment retrieved from a third-party credit bureau, which is its system of record. The bureau owns the data; the Loan Application references it read-only and does not create or maintain it. A Credit Report is retrieved for an applicant during the Underwriting Stage and provides the risk inputs used to decide loan eligibility. Each Credit Report includes: • Report ID - unique identifier for the credit report • Applicant ID - the applicant the report relates to • Credit score - the applicant's numeric credit score • Score band - the credit-score band: Prime, Near-prime, or Subprime • Total monthly debt - the applicant's total monthly debt obligations, used to calculate debt-to-income • Open accounts - the number of open credit accounts
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Data Object name	Credit Report										
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	• Derogatory marks - the count of derogatory marks on file • Bankruptcy flag - whether an undischarged bankruptcy is present • Report date - the date the report was generated The credit score and total monthly debt provide inputs to U+Bank's loan eligibility process. Total monthly debt is combined with the applicant's Annual Income from Employment Information to calculate the Debt-to-Income Ratio. The calculated Debt-to-Income Ratio and credit score are then evaluated by the eligibility rule to route the application to Approve, Refer, or Decline.
📌 Note	You also need a Loan Application Data Object sourced from Pega (Local); it usually already exists from the generated design.
💡 Insights	The quality of the AI output depends on the quality of your description. A vague description ('applicant information') produces generic fields; a description that names specific fields and their picklist values gives Blueprint enough context to generate a precise, usable Data Object in one pass. Spend time on the description - it is the most valuable input in this activity.
Expected output	An Applicant Details Data Object exists, sourced from Pega (Local), with an AI-generated field list; and a Credit Report Data Object exists with the Credit Bureau identified as its external system of record. 

Configuring Step Fields for Preview

Scenario

With the Loan Application Case Type Data Model and the Personas defined, U+Bank's Pega Blueprint now knows what data exists and who uses it. What it does not yet show is what each person sees and captures at each step of the journey - and that is what makes Preview come alive.

In this lab, you decide which fields appear on each Collect Information Step of the Loan Application lifecycle, so a stakeholder walking Blueprint Preview sees a loan application from submission to decision, and the Solution Builder inherits a deliberate, well-described field list to build from.

Configure step fields for Blueprint Preview

Every Collect Information Step in Blueprint has a Fields list - the set of data fields presented to the user when a user performs that step. Configuring these fields is what turns a Blueprint from a workflow diagram into a meaningful preview of the application's user experience. It is also one of the most important inputs the Solution Builder receives, because the fields you define here drive form generation, test data, and the Pega Infinity Data Model on import.

The Case Data Model - What it is and what it isn't

When you add a field to a step in Blueprint, you are selecting from the Case Data Model - the collection of fields associated directly with the case and accessible throughout its lifecycle.

The Case Data Model is intended for fields that are primarily specific to the case and its process - decisions, flags, and transient values created as part of the workflow, such as an eligibility decision or an adverse action reason.

Data that represents reusable business concepts - such as customers or credit reports - should be defined as Data Objects, where they can be managed independently and referenced across the application.

Decision guidance

Question to ask	→ Case Data Model	→ Data Object
Does this data describe a reusable business concept?	No - it is specific to this case's process (for example, Eligibility Decision, Adverse-Action Reason).	Yes - it describes a Customer or a Credit Report.
Could multiple Case Types use this data?	Unlikely - the field is tightly coupled to this workflow only.	Yes - Customer data is relevant to Loan Application, Credit Scoring, and Loan Approval.
Are multiple related attributes needed?	Only a small set of case-specific fields.	Yes - multiple customer or credit-report attributes. Create a Data Object or define an embedded object.
Is this data used outside the case context?	No - it only matters within this case.	Yes - a customer profile must be readable across all applications.

NOTE

If you find yourself defining fields such as Customer Name, Customer Email, and Customer Phone, you are modeling the Customer entity incorrectly in the Case Data Model.

These fields belong to the Customer Data Object, with the case holding a reference to that object rather than duplicating its attributes. This distinction becomes critical during Authoring, when the Solution Builder wires up Data Pages and views.

A practical limitation in Blueprint - and a trade-off

In Pega Infinity, a Solution Builder can place individual fields from a Data Object directly onto a form - for example, showing just the Credit Score and Score Band from the Credit Report object, rather than the entire object. Blueprint does not currently support this level of field selection. When you reference a Data Object on a step in Blueprint, the whole object appears as a single field reference in Preview. This creates a design trade-off.

Approach	Blueprint Preview	Architectural correctness	Build-phase impact
Add entity fields directly to the Case Data Model	Rich, realistic field-level form; generates meaningful test data.	Lower - introduces technical debt to address during Authoring.	Moderate rework possible. Flag in a Note so the builder knows the intent.
Reference the Data Object	Preview shows a single reference field - less representative as a stakeholder demo.	Higher - data sits in the correct object from the start; no refactoring needed.	Cleaner build. The Solution Builder has a clear structure to follow.

INSIGHT

From an architectural perspective, modeling Data Objects correctly is the preferred approach. However, where Preview quality is critical (such as stakeholder demos), it can be acceptable to use case-level fields as a temporary representation.

In such cases, always add a clear Note describing the intended field purpose or Data Object structure so the Solution Builder can implement the correct model during Authoring.

Step Fields specification

Configure the fields for each Collect Information Step in the Loan Application lifecycle. Every field is drawn from the Case Data Model you built previously; Applicant Details and Credit Report are Data Object references. Only the four Collect Information Steps present a form - the other steps are automations, decisions, and notifications.

Collect Information Step (Stage)	Route to	Fields to add	Required
Collect applicant information (Submission)	Current User	Applicant Details (ref); Loan Amount; Loan Term; Loan Purpose; Employment Information (embedded); Is First-Time Borrower	All except: Is First-Time Borrower
Upload required documents (Verification)	Applicant	Supporting Documents (proof of identity, proof of employment)	Yes
Review loan terms (Underwriting)	Underwriter	Credit Report (ref); Loan Amount; Loan Term; Interest Rate	Credit Report

Sign loan documents (Fulfilment)	Applicant	Supporting Documents (signed loan agreement); Interest Rate; Loan Amount	Signed agreement
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End goals

By the end of this lab, each Collect Information Step in your Blueprint carries the required fields, so Blueprint Preview renders a meaningful loan-application experience, and the Solution Builder inherits a well-described Data Model.

Configuring step fields is where the Blueprint becomes practical: it defines what each user sees and captures at runtime and turns the lifecycle into a meaningful Preview.

✦ INSIGHT

Step fields should be deliberate and aligned with the underlying Data Model - well-defined fields and descriptions make validation easier, produce more realistic Preview data, and give the Solution Builder a clearer starting point for implementation in Pega Infinity.

Step instructions: Configuring Step Fields for Preview

These steps are intentionally concise because you have already practiced related Blueprint activities. If you need help interpreting a field or deciding how a setting should apply, use the Blueprint AI Assistant or compare your work with the Solution Guide.

Step 1: Review the Collect Information Steps																				
Instruction		Identify the steps in the lifecycle that collect information from a user and confirm each is routed to the intended user or Persona.																		
Context		Only Collect Information and Approve/Reject steps present a form and need a Fields list. Confirming the routing first ensures that the fields you add match the user who will perform the work.																		
Expected output		You know the four steps that need fields and who performs each one. Primary Stages Submission Collect applicant information Validate data Send acknowledgement + Add Step Verification Upload required documents Extract data from documents Screen for application fraud Create Document verification + Add Step Underwriting Credit Assessment Retrieve Credit Score Determine eligibility + Add Step Terms Review Research and summarize Review loan terms + Add Step Fulfilment Document Signing Sign loan documents Craft response Send confirmation + Add Step Case Closure Disburse funds Close loan case Consolidate case information for audit + Add Step																		
Step 2: Add fields to the Collect applicant information step																				
Instruction		Add the applicant-facing fields to the Submission step, where Route To is Current User.																		
Context		This is the self-service form the applicant completes. Its fields drive the most visible part of the Preview, so give every field a clear description to produce realistic test data. <table><tr><th>Field</th><th>Type</th><th>Required</th><th>Description / Notes</th></tr><tr><td>Applicant Details</td><td>Data → Applicant Details</td><td>Yes</td><td>The applicant’s personal and contact information. Appears as a single reference in Preview; field-level display implemented in Authoring.</td></tr><tr><td>Loan Amount</td><td>Currency</td><td>Yes</td><td>The total amount requested. Include a realistic range in the description so Preview generates plausible test data.</td></tr><tr><td>Loan Term</td><td>Integer (picklist)</td><td>Yes</td><td>Repayment period in months - 12 / 24 / 36 / 48 / 60. List the allowed values in the description.</td></tr></table>			Field	Type	Required	Description / Notes	Applicant Details	Data → Applicant Details	Yes	The applicant’s personal and contact information. Appears as a single reference in Preview; field-level display implemented in Authoring.	Loan Amount	Currency	Yes	The total amount requested. Include a realistic range in the description so Preview generates plausible test data.	Loan Term	Integer (picklist)	Yes	Repayment period in months - 12 / 24 / 36 / 48 / 60. List the allowed values in the description.
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Loan Term	Integer (picklist)	Yes	Repayment period in months - 12 / 24 / 36 / 48 / 60. List the allowed values in the description.																	

	Loan Purpose Text (picklist) Yes Reason for the loan - Debt / Medical / Other. Employment Information Embedded Yes Employer name, job title, annual income, employment start date. Is First-Time Borrower Boolean No Whether the applicant has no prior loans.
 Note	Add to the step for the Solution In the Case Data Model, update the Loan Term field description to indicate that Loan Term should render as a picklist with the values 12, 24, 36, 48, and 60 months.
Expected output	The Collect applicant information step displays the applicant fields, and Preview renders a realistic submission form.

Step 3: Add the Credit Report to the Review loan terms step

Instruction	Add the Credit Report reference and the terms fields to the Underwriting step, routed to the Underwriter, and record the field-level intent in a Note.																				
Context	The Underwriter reviews the applicant’s credit result and the proposed terms. This step is where the Data Object trade-off shows up in practice - referencing the Credit Report shows the whole object as a single field in Preview. <table><tr><th>Field</th><th>Type</th><th>Required</th><th>Description / Notes</th></tr><tr><td>Credit Report</td><td>Data → Credit Report</td><td>Yes</td><td>The applicant’s credit assessment (credit score, score band, total monthly debt). Appears as a single reference in Preview.</td></tr><tr><td>Loan Amount</td><td>Currency (read)</td><td>No</td><td>Shown for the terms review; captured at Submission.</td></tr><tr><td>Loan Term</td><td>Integer (read)</td><td>No</td><td>Shown for the terms review; captured at Submission.</td></tr><tr><td>Interest Rate</td><td>Percentage (calculated)</td><td>No</td><td>The annual rate is derived from the credit assessment.</td></tr></table>	Field	Type	Required	Description / Notes	Credit Report	Data → Credit Report	Yes	The applicant’s credit assessment (credit score, score band, total monthly debt). Appears as a single reference in Preview.	Loan Amount	Currency (read)	No	Shown for the terms review; captured at Submission.	Loan Term	Integer (read)	No	Shown for the terms review; captured at Submission.	Interest Rate	Percentage (calculated)	No	The annual rate is derived from the credit assessment.
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Loan Term	Integer (read)	No	Shown for the terms review; captured at Submission.																		
Interest Rate	Percentage (calculated)	No	The annual rate is derived from the credit assessment.																		
 Note	Add to the step for the Solution Builder: In Preview the Credit Report appears as a single reference. Field-level display of Credit Score and Score Band to be implemented in Authoring. Don’t duplicate credit fields on the Case.																				
Expected output	The Underwriting step references the Credit Report and shows the proposed terms, with a Note capturing the field-level intent for the Solution Builder.																				

Step 4: Confirm the Step fields

Instruction	Review the Collect applicant information, Upload required documents, Review loan terms, and Sign loan documents against the U+Bank field list.
Context	A final pass confirms every step has the right fields, Required flags, and descriptions before you walk the Preview.
Expected output	The Blueprint's step fields match the U+Bank field list, and Preview renders a believable end-to-end loan application.

Validating the Blueprint with Stakeholders

Scenario

U+Bank's Loan Application Case Type is now designed end-to-end - the lifecycle, Data Model, Personas, and step fields are all in place. Before importing into Pega Infinity, this is the moment to put the design in front of the people who will live with it: Maya and her loan operations team.

In this lab, you use Pega Blueprint Preview my app to walk stakeholders through the application as an end user would experience it - confirming that the journey, screens, and data are right while change is still cheap. You'll also make live changes from within Preview using the AI Assistant and Content tools and capture the confirmations that make your Pega Blueprint high-fidelity.

Blueprint Preview

Blueprint Preview renders an interactive, Pega Constellation-style representation of the application directly from the Blueprint, with no code or import required. It uses the lifecycle, fields, Personas, and other design information you configured to give stakeholders a functional view of the intended user experience. Preview is designed for validating the application's structure and intent before build. It is not a pixel-for-pixel representation of the final application, and some controls or field-level Data Object behavior are refined later during Authoring.

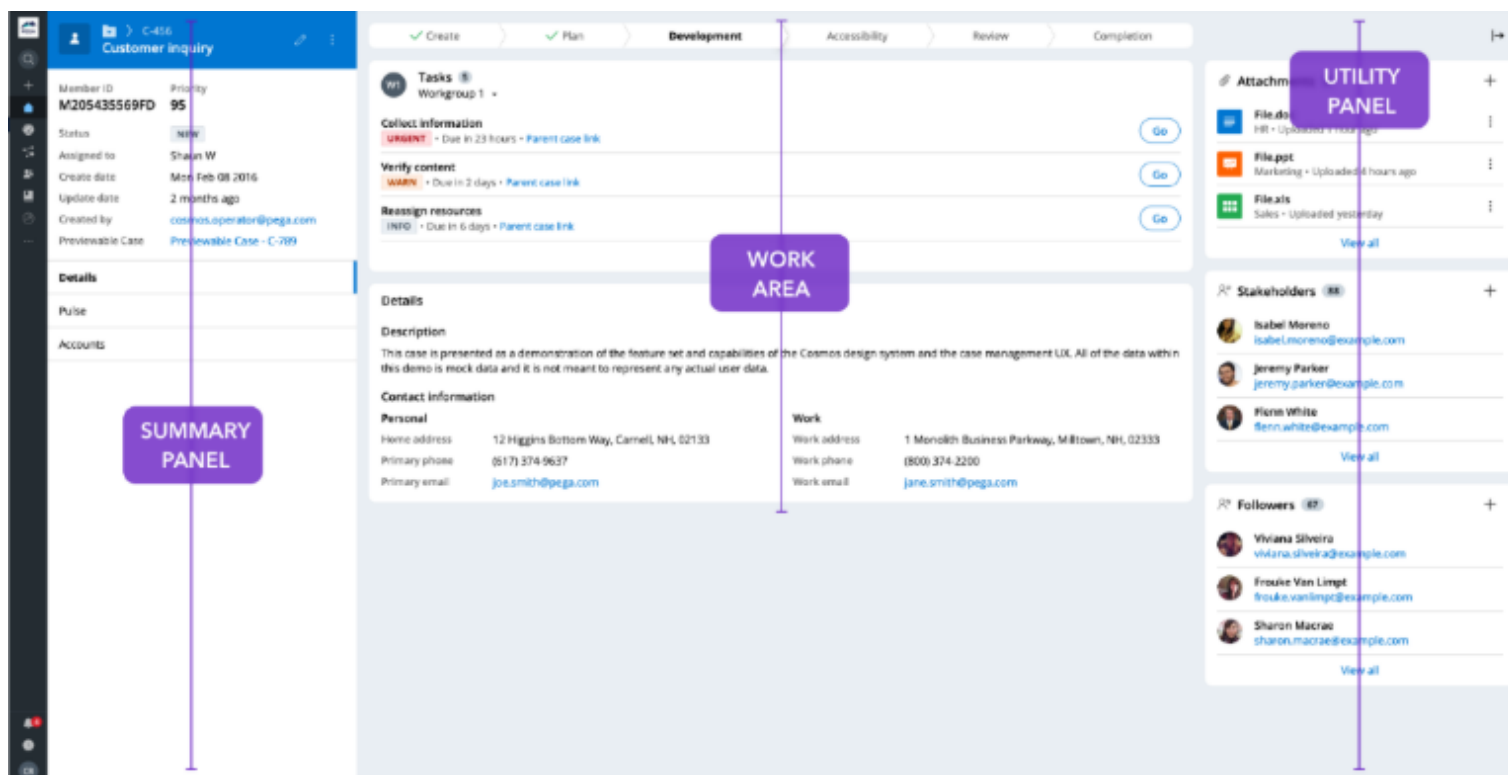
How to access Preview

Navigate through all Blueprint Stages until you reach the Summary screen - the final stage that consolidates your design decisions. After visiting Summary once, the Preview button is available from anywhere in Blueprint for the rest of the session.



Constellation layout

The Preview screen is divided into three main areas, each reflecting a different part of the Blueprint design and fully aligned with Pega Constellation.



Area	What it shows
Work Area (center)	The main working area. Shows the fields configured on the current Collect Information or Approve/Reject step. Embedded data (for example, Employment Information) is rendered inline. This represents what a Persona sees when opening an assignment.
Case Summary Panel (left)	A persistent summary of key Case information. By default, the Primary Fields from the Case Data Model provide the starting point for the summary. During Live Edit, you can add other relevant fields when stakeholders determine that additional information should remain visible throughout the Case.
Utilities Panel (right)	Standard Constellation utilities: Attachments, Followers, and the channel selector. The channel selector represents available channels and portals (Desktop, Mobile, Contact Center, Web Self-Service, DX API) and lets you view how the design appears in different contexts.

Live Edit

The Blueprint live preview uses Constellation components to configure the user interface look and feel, matching the UI authoring experience in Pega Infinity. This consistency reduces context switching when you import a Blueprint into Pega Infinity Studio, making it easier to design and preview the user experience.



The Design tab lets you adjust the visual appearance - select from predefined themes and apply basic configuration to understand how the application might look. These settings help you validate the overall look and feel during Blueprinting; on import, they provide a starting point for theming in Pega Infinity that can be refined during Authoring.



AI Assistant

Design

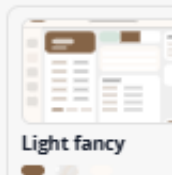
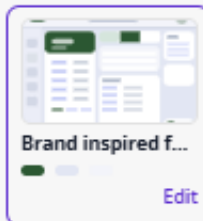
Content

PORTAL

▼ Theme: Brand inspired fancy

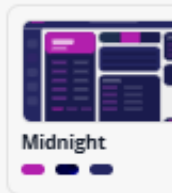
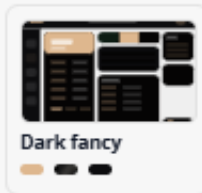
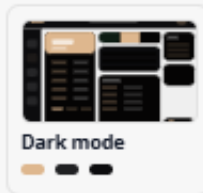
LIGHT

5 ← →

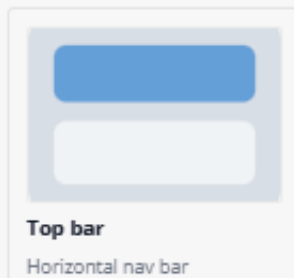
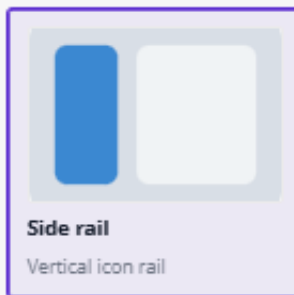


DARK

3 ← →



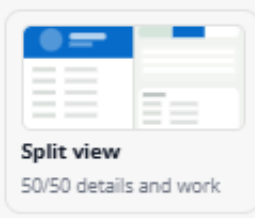
▼ Navigation: Side rail



CASE

▼ Layout: Three columns

← →



Making changes from within Preview

Blueprint Preview is not read-only - you can modify the application design directly from the Preview screen without leaving it. Multiple tools are available:

◆ AI Assistant

A conversational chat panel on the left. Enter plain-English instructions and Blueprint’s AI applies the change - adding fields, updating step configurations, or modifying properties. Example: “Add an Underwriter Notes field to the Review loan terms step.” Changes take effect immediately in Preview.

AI Assistant

Context: 2 fields, 1 view - Change to Full Name

You want to rename two fields to "Full Name" in the "Collect Applicant Data" step. However, both fields currently serve distinct purposes—one is "Applicant full name" (the person's name), while the other is "Applicant phone number" (a phone number). Only the "Applicant full name" field should be renamed to "Full Name."

Renaming a phone number field to "Full Name" would not be accurate. Please confirm if you want only the "Applicant full name" field relabeled to "Full Name," or let me know your intended label for the phone number field.

Proceed with updating...

Specify the new label for...

Add another field to the...

Your message

LAP-2026-08673

LA-354 · LA-354

Status

Applicant full name

Applicant phone num..

OPEN-INPROGRESS

Robert Anthony M...

503-641-7829

Created

Updated

Tara 5 days ago

Tara 1 day ago

C

Collect Applicant Data

Assigned to Current · In LA-354 · Urgency 10

Applicant full name

Robert Anthony Moretti

App (5)

Employment status

Employed

Req \$5

Cancel

Details

Pulse

Application Supporting Documents

Details

Annual income

\$88,600.00

Loan purpose

Debt

Proof of identity document

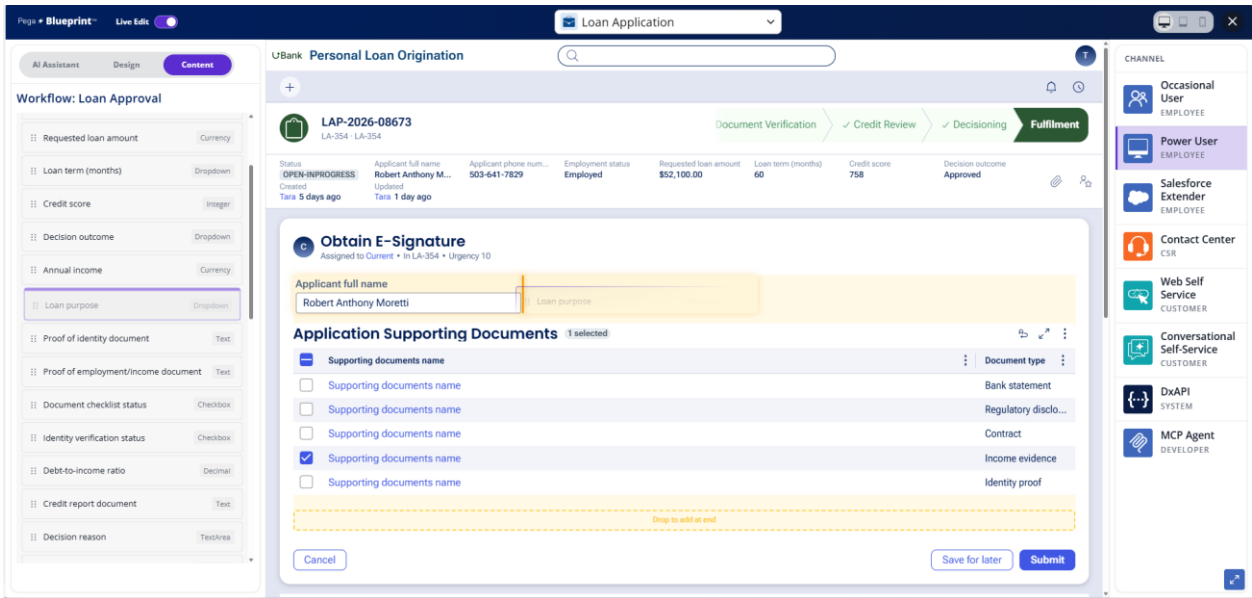
DriverLicense_RAmoretti_082021

Proof of employment/income document

1099Form_RAmoretti_2025.pdf

▣ Content

A drag-and-drop panel exposing the fields in your Blueprint’s Data Model. Switch to the Content tab to browse Case Data Model and Data Object fields and drag any field directly onto the current step’s form. Use it when you know which field you want and where to place it.



Changes are reflected immediately in Preview when successfully applied. Depending on the action, Blueprint will either create a new field in the Data Model or link an existing field to the current step, updating both the Data Model and the step configuration.

IMPORTANT

Preview is not a separate sandbox; changes made here directly update the Blueprint design. This makes Preview both a validation tool and a fast way to iterate on your application design.

Areas to focus on when previewing with stakeholders

Use the Preview session to validate the things that are expensive to change later. Walk the case from start to finish and confirm each of the following with the business:

What to validate	What good looks like
The end-to-end journey	Submission → Verification → Underwriting → Fulfilment matches how U+Bank actually originates a loan, and the Rejection path handles a decline with an adverse-action notice.
Personas & channels	Each Persona sees the right screens through the right channel - the Applicant on Web Self-Service, the Loan Officer and Underwriter on the employee Web portal.
Fields & labels	The right fields appear on each step with clear, business-friendly labels; nothing critical is missing, duplicated, or confusing.
Case summary	The Primary fields (Loan Amount, Loan Term, Interest Rate) let a user identify a loan at a glance.
Decisions & flow	The Determine eligibility decision branches sensibly (Approve / Refer / Decline) and work routes to the right routing target at each step.

End goals

Blueprinting introduces an “early UAT on intent” moment: stakeholders walk through the Preview of a high-fidelity Blueprint to validate journeys, personas, data, and the intended flow of work. The goal is to surface assumptions, risks, and edge cases while change is still cheap, and to create shared clarity on what “done” should mean before build starts.

The key distinction is this: UAT is not pulled forward, but confidence is. Blueprinting and Authoring build confidence progressively through repeated validation against the Blueprint, while Value Activation is the point at which acceptance is finalized and formal sign-off occurs. This keeps final UAT meaningful and predictable - more confirmation than discovery.

✦ INSIGHT

Preview is a stakeholder conversation tool: Use it to get rapid feedback on screen layouts, field labels, and workflow logic - the kind of feedback that becomes significantly more expensive to address after import. It is not a substitute for formal UAT in Pega Infinity, where the full application (detailed UI behavior, integrations, and access control) is implemented and validated. Preview reduces risk before that Stage but does not replace it.

Document the confirmations: When stakeholders say “yes, that looks right” in Preview, document it. That confirmation is the foundation of your high-fidelity Blueprint.

Step instructions: Validating the Blueprint with Stakeholders

Before making any changes, take a few minutes to walk through the case from start to finish. Use the stage navigation bar to progress through each step and validate your design. As you go, note anything that looks wrong, missing, or confusing from a stakeholder’s perspective - these are your change requests.

Step 1: Preview the Loan Application workflow		
Instruction	Activate the Preview screen. Click through the case to become familiar with it from the Applicant and Underwriter perspectives.	
Context	The Applicant initiates the Loan Application and completes the Submission experience. Later, the Underwriter reviews loan terms when a referred application reaches the Underwriting Stage.	
 Note	Fields that the Applicant would normally see are blank and complete will appear populated with sample data to speed up the review process.	
Expected output	You have walked the full Loan Application journey in Preview and noted anything that looks wrong, missing, or confusing.	
Step 2: Improve the Review loan terms screen using the AI Assistant		
Instruction	Use the AI Assistant to add an Underwriter Notes field to the Review loan terms step. Then use the Content tab to add Loan Purpose to the case summary and verify both changes in Preview.	
	What to verify	What correct looks like
	Underwriter Notes field appears on the form	The AI Assistant added the field to the step. It appears below the credit fields as a large text area.
	Key case information appears in the case summary	Loan Purpose now appears in the case summary after you add it from the Content tab, so the Underwriter can see this context without opening the step.
	Test data looks realistic	Field descriptions should produce plausible values - a credit score around 720, a loan amount like \$15,000, a term of 36 months. If test data looks generic or empty, revisit the field descriptions.
Context	You configured the fields on the Review loan terms step in a previous lab. In Preview, you notice the Underwriter has no way to record a note about the credit result or affordability decision, and useful loan context is missing from the case summary. Making both changes closes those gaps while you are still validating the design.	
Expected output	The Review loan terms step now captures an Underwriter note, Loan Purpose shows in the case summary, and Preview renders realistic test data.	
Step 3: Change the application design		
Instruction	Use the Design tab to apply a different theme and update the Preview using the following design settings:	
	Setting	Value
	Type Scale	MD
	Corner radius	Sm
	Spacing density	Spacious
	Font family	Work Sans
	Summary panel	Detached

	Navigation Case layout Top bar Split view
Context	Changing the design settings lets you evaluate how the same functional Blueprint appears with a different presentation while preserving the underlying application design.
Expected output	The Loan Application Preview uses the specified design settings, giving stakeholders a different presentation of the same application to review.
❖ Insights	Obtaining formal stakeholder approval is a necessary step. Document the approval and save a version of the Blueprint at this stage to keep a record of what was approved. Integrate formal sign-off into the customer's existing Software Development Life Cycle (SDLC) or confirm approval through email.