BigLedger Blueprint

v1.0

This is the public guide that provides all public use cases of the Akaun Platform. To view this in other formats, click on the following:

- Epub Format
- Single File HTML
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Chapter 1. User Guide

This repository contains all the source code for publishing the Akaun Platform Public Documentation.

1.1. All Users

The very first thing that every akaun-platform users would need to have, is to sign up for and AkaunID. You can do so by visiting https://akaun.com/

1.1.1. Your AkaunID

It is important for you to understand that with a single AkaunID, it is possible for you to have multiple Sign-In methods. You could be using an email with password, a phone number with the same password, you could also be adding access keys to your AkaunID for integration purposes.

1.1.2. The Production, Staging and Development Environment

The very first thing to know is to understand the usage of each of the following environments.

Environment	URL	Custom Domain	Description
Production	https://akaun.com	https://<something>.akaun.net	This is the life environment, used by real businesses in their day to day operations.
Staging	https://akaun.cloud	https://<something>.akaun.app	This environment is usually used for testing by the customers and project managers. New features are tested by the end users here before it gets deployed to the production environment.
Development	https://akaun.dev	https://<something>.akaun.xyz	This environment is usually used by the software developers to do their experiments.

If you have registered an AkaunID to login to the Production environment, that doesn't mean you have the same AkaunID registered in the Staging Environment and vice versa.

1.1.3. Understanding Root vs Tenant

Within a single environment (Production vs Staging vs Development) there's one and only one root database, and there could be MANY tenant databases. Each user could be joining MULTIPLE tenants

and they could have different "RANK" when joining each tenant, for example, OWNER, ADMIN, MEMBER, GUEST, VISTOR.

Rank of a users in a Tenant	Description
OWNER	The OWNER of a tenant is able to add any applets to an "applet catalog" if the person is also the owner/admin of the "applet catalog". The OWNER is able to add, remove or promote another user in the tenant to be the OWNER of the tenant. This RANK is usually granted to the business owners or MIS Manager of a company.
ADMIN	The ADMIN of a tenant can do almost everything that the OWNER can do, except adding , removing or promoting another user in the tenant to become the OWNER. This role is usually granted to the MIS Executive or managers in a company.
MEMBER	The MEMBER Rank does not entitle a user to administer the Tenants , Applet Catalogs, they can however, become the OWNER/ADMIN or MEMBER of an Applet after they installed the specific applet. It is important to understand that the "OWNER/ADMIN of the Tenant" is NOT the same as the "OWNER/ADMIN" of the "Applet"

1.1.4. The Applet Store

By default, a newly signed up user would see the "Applet Store" (applet) upon successful login. From the **Applet Store** , a user would be able to install applets in the public or private applet-catalogs.

It is very important for users to take note that they are able to see "RANK" tag and "TENANT" tag before installing the applet, so that they are installing the right applet for themselves.

If you are NOT the OWNER / ADMIN of a tenant, you can see a list of applet-catalogs and multiple applets in each of the applet-catalog and choose to install any of the applets accordingly.

1.2. Project Implementors

Understanding of the Akaun Platform is a prerequisite for successful implementation of any projects using the BigLedger platform.

In this section, we are going to list down what the Platform System Administrators need to do, in order for a company to start using the Akaun-Platform.

1.2.1. Subscription setup in Akaun Platform

The Platform System Administrator should be using the "Platform SysAdmin Applet" to create a subscription, and then add the OWNER / ADMIN of the tenants (usually the MIS Manager or business owners) as a MEMBER of this subscription. By adding a user to this subscription, he/she will be able to create new Applet Catalogs using the "Tenant Admin Applet".

(*At the time of writing as per 2022-05-19, the new "Platform SysAdmin Applet" and "Tenant Admin Applet" are being redeveloped, hence, we will use the work around method to achieve this for the time being.*)

1.2.2. Tenant setup in Akaun Platform

Only the Akaun Platform system administrators (Wavelet and BigLedger employees) are able power up the tenant for you. The Platform System administrators need to ensure that when creating the Tenant, the correct subscription account is chosen.

Please email jira-mis@wavelet.net to request for the tenant to be created.

(_We do not plan to allow non-System Administrators to create new tenants at the moment, because our Billing engine and FPX recurring payment authorization is not ready yet. Once these are ready, we may consider allowing businesses that have authorized us to bill and charge be able to create tenants in the "Tenant Admin Applet" _)

1.2.3. Applet-Catalogs

Think of applet-catalog as a collection of applets, tagged with RANK and TENANT. When the OWNER/ADMIN of the applet-catalogs can add applets to it, and they have to specify the "rank" and "tenant". This also mean, within the same applet-catalog, it is possible to include the same applet that links to different tenants.

The ADMIN/OWNER of the applet-catalog also need to add users to the applet-catalogs, and they can add them as OWNER/ADMIN/MEMBER to the applet-catalogs. Only OWNER/ADMIN of the catalogs can manage the applet-catalog (adding / removing applets and users from the applet-catalogs).

All OWNER/ADMIN/MEMBER of an applet-catalog can see the applets in this catalog and install these applets when they use the "Applet Store ⇒ Private"

When the users install applets from the "Applet Store" the RANK/TENANT tags will be applied to grant the users the respective permissions when they open the respective applet. Only the OWNER/ADMIN of the applets will be able to see and click on the "Settings" on the left handside

menu of the applets to perform some further configuration for the applet. (This is not the same as the rank of the users in the applet-catalog).

1.2.4. Configuration of Core Modules

The Core Module consist of the following the main applets that are depended by all other applets. For example, in order to issue a sales invoice, we need to ensure that the Company and Branches are setup and configured, the products and services are added into the Item Maintenance applet, the employees of the company is setup so that the users can select the salesman when issuing the sales invoice.

The applets in Core Module should be installed, configured in proper sequence, before you proceed to install the other applets.

See Section 3.1, "Core Module" for more details.

1.3. Tenant Owners

1.3.1. What is a Tenant ?

1.3.2. Managing Users

- You can invite / add a user to a tenant or remove their access to a tenant but you cannot reset their password
- Identity management is handled at the root or platform level

1.3.3. Fees and Charges

1.3.4. Access and Permissions

1.3.5. System Performance

1.3.6. API

1.3.7. Subscriptions , Applet-Catalogs , Applets

1.3.8. Audit Trail

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Guid for applet Developers

1.4.1. Signing up your bigledger account

1.5. Reseller Guide

Guide for resellers

1.5.1. Section 1

1.5.2. Section 2

1.6. System Integrators

Guide for system integrators

1.6.1. Section 1

some sections here

1.6.2. Section 2

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This guide by industry provide :

- use cases
- case study
- key paint points and feature of each industry

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2.1.2. Solutions

2.1.3. Features

2.2. Pharmacy Industry

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2.6. Manufacturing Industry

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2.6.3. Features

2.7. Pet Industry

2.7.1. Problems

2.7.2. Solutions

2.7.3. Features

Chapter 3. Guide by Modules

The Akaun platform is like lego blocks, users will be able to mix and match different applets to formulate a new module, even if it is not in the list below.

3.1. Core Module

3.1.1. Introduction

The intention of this section in the documentation. What this section cover, and not covering… and how it will link to othe other modules. Explaining that certain detail about

Overview

Some background of why this module was developed Provide a summary of what this module does and doesn't do.

Applets

The core module consiste of the following applets:

- Section 4.1.2, "Tax Configuration Applet"
- Section 4.1.3, "Organization Applet"
- Section 4.1.4, "Chart of Account Applet"
- Section 4.1.6, "Doc Item Maintenance Applet"
- Section 4.1.5, "Cashbook Applet"
- Section 4.1.7, "Inventory Item Maintenance Applet"
- Section 4.1.8, "Entity Maintenance Applet"
- Section 4.1.9, "Customer Maintenance Applet"
- Section 4.1.11, "Employee Maintenance Applet"
- Section 4.1.10, "Supplier Maintenance Applet"

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3.1.3. Module Name - Related Applets

3.1.4. Module Name - Project Implementation Steps

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3.2. Accounting Module

3.2.1. Introduction

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3.2.3. Accounting Module - Related Applets

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3.14. Procure to Pay Module

3.14.1. Introduction

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- This is where we define the end results and priorities
- We decide what to do in phase 1, phase 2, phase 3 etc.
- This is where we create the WBS (Work Break Down) as well.

Project Gantt Chart

- Defining Activities
  - List down all the activities involved for each work breakdown
- Sequence Activities

- ◦ Which one first, which one next
  - Estimated Resource Requirements for each activity
    - ◦ Estimate how long it will take, what skills may be required to do this
  - Schedule
    - ◦ Identify the activities dependency, and based on resource availability , developing a schedule
  - Identify Critical Path

Project Kickstart Meeting

Weekly Meeting

Agile Method

Cashflow Projection

Human Resource Management

  - Milestones and Rewards

Communication Management

Risk Management

  - Identify third party dependency
  - Identify backup plans
  - Identify contingency plans

UAT (User Acceptance Test)

Requirement Analysis

Project Goes Live

Post Mortem

3.15. Order To Cash Module

3.15.1. Introduction

The intention of this section in the documentation. What this section cover, and not covering... and how it will link to othe other modules. Explaining that certain detail about

Overview

Some background of why this module was developed Provide a summary of what this module does

and doesn't do.

Applets

Features and Functions

What's New

Getting Started

Module Dependencies

3.15.2. Order To Cash - Unique Value Proposition

3.15.3. Order To Cash - Related Applets

3.15.4. Order To Cash - Project Implementation Steps

Scope Management (End Results)

Begin with the end in mind

- This is where we define the end results and priorities
- We decide what to do in phase 1, phase 2, phase 3 etc.
- This is where we create the WBS (Work Break Down) as well.

Project Gantt Chart

- Defining Activities
  - List down all the activities involved for each work breakdown
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  - Which one first, which one next
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  - Identify the activities dependency, and based on resource availability , developing a schedule
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Human Resource Management

- Milestones and Rewards

Communication Management

Risk Management

- Identify third party dependency
- Identify backup plans
- Identify contingency plans

UAT (User Acceptance Test)

Requirement Analysis

Project Goes Live

Post Mortem

3.16. Warehouse Management Module

3.16.1. Introduction

The intention of this section in the documentation. What this section cover, and not covering... and how it will link to othe other modules. Explaining that certain detail about

Overview

Some background of why this module was developed Provide a summary of what this module does and doesn't do.

Applets

Features and Functions

What's New

Getting Started

Module Dependencies

3.16.2. Warehouse Management - Unique Value Proposition

3.16.3. Warehouse Management - Related Applets

3.16.4. Warehouse Management - Project Implementation Steps

Scope Management (End Results)

Begin with the end in mind

- This is where we define the end results and priorities

- We decide what to do in phase 1, phase 2, phase 3 etc.

- This is where we create the WBS (Work Break Down) as well.

Project Gantt Chart

- Defining Activities

  ◦ List down all the activities involved for each work breakdown

- Sequence Activities

  ◦ Which one first, which one next

- Estimated Resource Requirements for each activity

  ◦ Estimate how long it will take, what skills may be required to do this

- Schedule

  ◦ Identify the activities dependency, and based on resource availability , developing a schedule

- Identify Critical Path

Project Kickstart Meeting

Weekly Meeting

Agile Method

Cashflow Projection

Human Resource Management

- Milestones and Rewards

Communication Management

Risk Management

- Identify third party dependency

- Identify backup plans

- Identify contingency plans

UAT (User Acceptance Test)

Requirement Analysis

Project Goes Live

Post Mortem

3.17. Customer Data Platform

3.17.1. Introduction

The intention of this section in the documentation. What this section cover, and not covering... and how it will link to othe other modules. Explaining that certain detail about

Overview

Some background of why this module was developed Provide a summary of what this module does and doesn't do.

Applets

Features and Functions

What's New

Getting Started

Module Dependencies

3.17.2. Customer Data Platform - Unique Value Proposition

3.17.3. Customer Data Platform - Related Applets

3.17.4. Customer Data Platform - Project Implementation Steps

Scope Management (End Results)

Begin with the end in mind

- This is where we define the end results and priorities
- We decide what to do in phase 1, phase 2, phase 3 etc.
- This is where we create the WBS (Work Break Down) as well.

Project Gantt Chart

- Defining Activities
  - List down all the activities involved for each work breakdown
- Sequence Activities

◦ Which one first, which one next

  • Estimated Resource Requirements for each activity

        ◦ Estimate how long it will take, what skills may be required to do this

  • Schedule

        ◦ Identify the activities dependency, and based on resource availability , developing a schedule

  • Identify Critical Path

Project Kickstart Meeting

Weekly Meeting

Agile Method

Cashflow Projection

Human Resource Management

  • Milestones and Rewards

Communication Management

Risk Management

  • Identify third party dependency

  • Identify backup plans

  • Identify contingency plans

UAT (User Acceptance Test)

Requirement Analysis

Project Goes Live

Post Mortem

3.18. Digital Twin Module

3.18.1. Introduction

The intention of this section in the documentation. What this section cover, and not covering… and how it will link to othe other modules. Explaining that certain detail about

Overview

Some background of why this module was developed Provide a summary of what this module does

and doesn't do.

Applets

Features and Functions

What's New

Getting Started

Module Dependencies

3.18.2. Digital Twin - Unique Value Proposition

3.18.3. Digital Twin - Related Applets

3.18.4. Module Name - Project Implementation Steps

Scope Management (End Results)

Begin with the end in mind

- This is where we define the end results and priorities
- We decide what to do in phase 1, phase 2, phase 3 etc.
- This is where we create the WBS (Work Break Down) as well.

Project Gantt Chart

- Defining Activities
  - List down all the activities involved for each work breakdown
- Sequence Activities
  - Which one first, which one next
- Estimated Resource Requirements for each activity
  - Estimate how long it will take, what skills may be required to do this
- Schedule
  - Identify the activities dependency, and based on resource availability , developing a schedule
- Identify Critical Path

Project Kickstart Meeting

Weekly Meeting

Agile Method

Cashflow Projection

Human Resource Management

- Milestones and Rewards

Communication Management

Risk Management

- Identify third party dependency
- Identify backup plans
- Identify contingency plans

UAT (User Acceptance Test)

Requirement Analysis

Project Goes Live

Post Mortem

3.19. Datalake Module

3.19.1. Introduction

The intention of this section in the documentation. What this section cover, and not covering... and how it will link to othe other modules. Explaining that certain detail about

Overview

Some background of why this module was developed Provide a summary of what this module does and doesn't do.

Applets

Features and Functions

What's New

Getting Started

Module Dependencies

3.19.2. Datalake - Unique Value Proposition

3.19.3. Datalake - Related Applets

3.19.4. Datalake - Project Implementation Steps

Scope Management (End Results)

Begin with the end in mind

- This is where we define the end results and priorities

- We decide what to do in phase 1, phase 2, phase 3 etc.

- This is where we create the WBS (Work Break Down) as well.

Project Gantt Chart

- Defining Activities

  ◦ List down all the activities involved for each work breakdown

- Sequence Activities

  ◦ Which one first, which one next

- Estimated Resource Requirements for each activity

  ◦ Estimate how long it will take, what skills may be required to do this

- Schedule

  ◦ Identify the activities dependency, and based on resource availability , developing a schedule

- Identify Critical Path

Project Kickstart Meeting

Weekly Meeting

Agile Method

Cashflow Projection

Human Resource Management

- Milestones and Rewards

Communication Management

Risk Management

- Identify third party dependency

- Identify backup plans

- Identify contingency plans

UAT (User Acceptance Test)

Requirement Analysis

Project Goes Live

Post Mortem

Chapter 4. Applet Directory

4.1. Applet Listing

Applet Name	Description
Applet Store	This is the default applet that every user will get when they sign up to the Akaun Platform. Users can open this applet to install all other applets.
Organization Applet	You can use this applet to create / update / delete companies, branches and locations.

4.1.1. Applet Store

Introduction

This is the default applet that every user will get when they sign up to the Akaun Platform. Users can open this applet to install all other applets.

Modules

This applet is used in the following modules:

- Section 3.1, "Core Module"
- Section 3.2, "Accounting Module"
- Section 3.3, "Point of Sales Module"
- Section 3.4, "Manufacturing Module"
- Section 3.5, "Membership Module"
- Section 3.6, "Referral Module"
- Section 3.7, "Customer Relationship Management"
- Section 3.8, "Contact Center Module"
- Section 3.9, "Name of Module"
- Section 3.10, "Inventory Module"
- Section 3.11, "Marketplace Connector Module"
- Section 3.12, "Delivery Fulfillment Module"
- Section 3.13, "CP Commerce Module"
- Section 3.14, "Procure to Pay Module"
- Section 3.15, "Order To Cash Module"
- Section 3.16, "Warehouse Management Module"
- Section 3.17, "Customer Data Platform"
- Section 3.18, "Digital Twin Module"
- Section 3.19, "Datalake Module"

Menu 01 - e.g. Sales Orders Listing

Menu 02 - e.g. Line Items

Permission Settings

Personalization

Related Applets

This applet also depends on the following applets:

- Applet 1
- Applet 2

The following applets depends on this applet:

- Applet 3
- Applet 4

Also see

Pricing

Release Note

Roadmap

4.1.2. Tax Configuration Applet

Introduction

This is a simple description of the applet, no more than 100 words.

Modules

This applet is used in the following modules:

- Section 3.1, "Core Module"
- Section 3.2, "Accounting Module"
- Section 3.3, "Point of Sales Module"
- Section 3.4, "Manufacturing Module"
- Section 3.5, "Membership Module"
- Section 3.6, "Referral Module"

Menu 01 - e.g. Sales Orders Listing

Menu 02 - e.g. Line Items

Permission Settings

Personalization

Related Applets

This applet also depends on the following applets:

- Applet 1
- Applet 2

The following applets depends on this applet:

- Applet 3
- Applet 4

Also see

Pricing

Release Note

Roadmap

4.1.3. Organization Applet

Introduction

You can use this applet to create / update / delete companies, branches and locations.

Modules

This applet is used in the following modules:

- Section 3.1, "Core Module"
- Section 3.2, "Accounting Module"
- Section 3.3, "Point of Sales Module"
- Section 3.4, "Manufacturing Module"
- Section 3.5, "Membership Module"
- Section 3.6, "Referral Module"
- Section 3.7, "Customer Relationship Management"
- Section 3.8, "Contact Center Module"
- Section 3.9, "Name of Module"
- Section 3.10, "Inventory Module"
- Section 3.11, "Marketplace Connector Module"
- Section 3.12, "Delivery Fulfillment Module"
- Section 3.13, "CP Commerce Module"
- Section 3.14, "Procure to Pay Module"
- Section 3.15, "Order To Cash Module"
- Section 3.16, "Warehouse Management Module"
- Section 3.17, "Customer Data Platform"
- Section 3.18, "Digital Twin Module"
- Section 3.19, "Datalake Module"

Menu 01 - e.g. Sales Orders Listing

Menu 02 - e.g. Line Items

Permission Settings

Personalization

Related Applets

This applet also depends on the following applets:

- Applet 1
- Applet 2

The following applets depends on this applet:

- Applet 3
- Applet 4

Also see

Pricing

Release Note

Roadmap

4.1.4. Chart of Account Applet

Introduction

This is a simple description of the applet, no more than 100 words.

Modules

This applet is used in the following modules:

- Section 3.1, "Core Module"
- Section 3.2, "Accounting Module"
- Section 3.3, "Point of Sales Module"
- Section 3.4, "Manufacturing Module"
- Section 3.5, "Membership Module"
- Section 3.6, "Referral Module"

Menu 01 - e.g. Sales Orders Listing

Menu 02 - e.g. Line Items

Permission Settings

Personalization

Related Applets

This applet also depends on the following applets:

- Applet 1

- Applet 2

The following applets depends on this applet:

- Applet 3

- Applet 4

Also see

Pricing

Release Note

Roadmap

4.1.5. Cashbook Applet

Introduction

This is a simple description of the applet, no more than 100 words.

Modules

This applet is used in the following modules:

- Section 3.1, "Core Module"
- Section 3.2, "Accounting Module"
- Section 3.3, "Point of Sales Module"
- Section 3.4, "Manufacturing Module"
- Section 3.5, "Membership Module"
- Section 3.6, "Referral Module"
- Section 3.7, "Customer Relationship Management"
- Section 3.8, "Contact Center Module"
- Section 3.9, "Name of Module"
- Section 3.10, "Inventory Module"
- Section 3.11, "Marketplace Connector Module"
- Section 3.12, "Delivery Fulfillment Module"
- Section 3.13, "CP Commerce Module"
- Section 3.14, "Procure to Pay Module"
- Section 3.15, "Order To Cash Module"
- Section 3.16, "Warehouse Management Module"
- Section 3.17, "Customer Data Platform"
- Section 3.18, "Digital Twin Module"
- Section 3.19, "Datalake Module"

Menu 01 - e.g. Sales Orders Listing

Menu 02 - e.g. Line Items

Permission Settings

Personalization

Related Applets

This applet also depends on the following applets:

- Applet 1
- Applet 2

The following applets depends on this applet:

- Applet 3
- Applet 4

Also see

Pricing

Release Note

Roadmap

4.1.6. Doc Item Maintenance Applet

Introduction

This is a simple description of the applet, no more than 100 words.

Modules

This applet is used in the following modules:

- Section 3.1, "Core Module"
- Section 3.2, "Accounting Module"
- Section 3.3, "Point of Sales Module"
- Section 3.4, "Manufacturing Module"
- Section 3.5, "Membership Module"
- Section 3.6, "Referral Module"

Menu 01 - e.g. Sales Orders Listing

Menu 02 - e.g. Line Items

Permission Settings

Personalization

Related Applets

This applet also depends on the following applets:

- Applet 1
- Applet 2

The following applets depends on this applet:

- Applet 3
- Applet 4

Also see

Pricing

Release Note

Roadmap

4.1.7. Inventory Item Maintenance Applet

Introduction

This is a simple description of the applet, no more than 100 words.

Modules

This applet is used in the following modules:

- Section 3.1, "Core Module"
- Section 3.2, "Accounting Module"
- Section 3.3, "Point of Sales Module"
- Section 3.4, "Manufacturing Module"
- Section 3.5, "Membership Module"
- Section 3.6, "Referral Module"
- Section 3.7, "Customer Relationship Management"
- Section 3.8, "Contact Center Module"
- Section 3.9, "Name of Module"
- Section 3.10, "Inventory Module"
- Section 3.11, "Marketplace Connector Module"
- Section 3.12, "Delivery Fulfillment Module"
- Section 3.13, "CP Commerce Module"
- Section 3.14, "Procure to Pay Module"
- Section 3.15, "Order To Cash Module"
- Section 3.16, "Warehouse Management Module"
- Section 3.17, "Customer Data Platform"
- Section 3.18, "Digital Twin Module"
- Section 3.19, "Datalake Module"

Menu 01 - e.g. Sales Orders Listing

Menu 02 - e.g. Line Items

Permission Settings

Personalization

Related Applets

This applet also depends on the following applets:

- Applet 1
- Applet 2

The following applets depends on this applet:

- Applet 3
- Applet 4

Also see

Pricing

Release Note

Roadmap

4.1.8. Entity Maintenance Applet

Introduction

This is a simple description of the applet, no more than 100 words.

Modules

This applet is used in the following modules:

- Section 3.1, "Core Module"
- Section 3.2, "Accounting Module"
- Section 3.3, "Point of Sales Module"
- Section 3.4, "Manufacturing Module"
- Section 3.5, "Membership Module"
- Section 3.6, "Referral Module"

Menu 01 - e.g. Sales Orders Listing

Menu 02 - e.g. Line Items

Permission Settings

Personalization

Related Applets

This applet also depends on the following applets:

- Applet 1

- Applet 2

The following applets depends on this applet:

- Applet 3

- Applet 4

Also see

Pricing

Release Note

Roadmap

4.1.9. Customer Maintenance Applet

Introduction

This is a simple description of the applet, no more than 100 words.

Modules

This applet is used in the following modules:

- Section 3.1, "Core Module"
- Section 3.2, "Accounting Module"
- Section 3.3, "Point of Sales Module"
- Section 3.4, "Manufacturing Module"
- Section 3.5, "Membership Module"
- Section 3.6, "Referral Module"
- Section 3.7, "Customer Relationship Management"
- Section 3.8, "Contact Center Module"
- Section 3.9, "Name of Module"
- Section 3.10, "Inventory Module"
- Section 3.11, "Marketplace Connector Module"
- Section 3.12, "Delivery Fulfillment Module"
- Section 3.13, "CP Commerce Module"
- Section 3.14, "Procure to Pay Module"
- Section 3.15, "Order To Cash Module"
- Section 3.16, "Warehouse Management Module"
- Section 3.17, "Customer Data Platform"
- Section 3.18, "Digital Twin Module"
- Section 3.19, "Datalake Module"

Menu 01 - e.g. Sales Orders Listing

Menu 02 - e.g. Line Items

Permission Settings

Personalization

Related Applets

This applet also depends on the following applets:

- Applet 1
- Applet 2

The following applets depends on this applet:

- Applet 3
- Applet 4

Also see

Pricing

Release Note

Roadmap

4.1.10. Supplier Maintenance Applet

Introduction

This is a simple description of the applet, no more than 100 words.

Modules

This applet is used in the following modules:

- Section 3.1, "Core Module"
- Section 3.2, "Accounting Module"
- Section 3.3, "Point of Sales Module"
- Section 3.4, "Manufacturing Module"
- Section 3.5, "Membership Module"
- Section 3.6, "Referral Module"

Menu 01 - e.g. Sales Orders Listing

Menu 02 - e.g. Line Items

Permission Settings

Personalization

Related Applets

This applet also depends on the following applets:

- Applet 1
- Applet 2

The following applets depends on this applet:

- Applet 3
- Applet 4

Also see

Pricing

Release Note

Roadmap

4.1.11. Employee Maintenance Applet

Introduction

This is a simple description of the applet, no more than 100 words.

Modules

This applet is used in the following modules:

- Section 3.1, "Core Module"
- Section 3.2, "Accounting Module"
- Section 3.3, "Point of Sales Module"
- Section 3.4, "Manufacturing Module"
- Section 3.5, "Membership Module"
- Section 3.6, "Referral Module"
- Section 3.7, "Customer Relationship Management"
- Section 3.8, "Contact Center Module"
- Section 3.9, "Name of Module"
- Section 3.10, "Inventory Module"
- Section 3.11, "Marketplace Connector Module"
- Section 3.12, "Delivery Fulfillment Module"
- Section 3.13, "CP Commerce Module"
- Section 3.14, "Procure to Pay Module"
- Section 3.15, "Order To Cash Module"
- Section 3.16, "Warehouse Management Module"
- Section 3.17, "Customer Data Platform"
- Section 3.18, "Digital Twin Module"
- Section 3.19, "Datalake Module"

Menu 01 - e.g. Sales Orders Listing

Menu 02 - e.g. Line Items

Permission Settings

Personalization

Related Applets

This applet also depends on the following applets:

- Applet 1
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- Applet 3
- Applet 4

Also see

Pricing

Release Note

Roadmap

Chapter 5. Cloud Native Architecture

Common misunderstanding * thinking web based = cloud based. * everything has A.I. * online / networked = cloud based

Our aspirations * To be the business operating systems

5.1. Background

- Outdated JBoss application server, EJB 1.0 / 2.0

- Servers idling

- Hackers attack

- Certain minimum costs to power up a tenant

- Self service

- Internal employee users vs customers + suppliers

- Integration pains

5.2. Motivation

Platform Business Model

Multiple offerings → as middleware - backend as a service → as applets → as SAAS → as communication hub

Cross Platform development

Scalability

Flexibility

Growth

Composable Enterprise

Utility based billing

5.2.1. Integrations

spikes in loads

5.2.2. Infrastructure and Toolchain

Various tools ready to be used out of the box… example : OCR, Lambda, RDS, NoSQL, API Gateway

5.2.3. Network Effect

5.2.4. Cloud Cost Savings

5.2.5. Artificial Intelligence

5.2.6. Human Resource

5.3. Journey

5.4. Challenges and Lessons

5.5. Technical Considerations

- managing complexities
- Sharing about our journey to transform from monolith architecture to cloud native architecture
- Sharing about the problems and challenges implementing stateless applications
- Sharing about the implementation of Micro-Frontend Architecture
- Sharing about the implementation of Web Socket using API Gateway and DynamoDB
- Sharing about challenges of securing the API, permissions / configurations etc
- Sharing about the challenges of multi-tenant environments
- Sharing about the design of composable enterprise architecture
- Sharing about the tricky part of networked tenants

Chapter 6. Technical Guide

This technical guide is used by both internal and external employees of

6.1. Applet Development Guide

6.1.1. Creating a new Applet

There are many steps involved when you want to create a new applet, a well designed applet would have to follow our applet design guidelines.

Preparation Before Developing A New Applet

Business Requirements

Database Design

Mock Up and Design

API Design

6.1.2. Deploying applet to s3

- Making pull request the github vendor repository
- Platform SysAdmin to merge the changes from vendor repository to the global applet repository, and then syncing it to various branches : production, staging , development. Subsequently, these changes to be sync to the s3 bucket in AWS
- Submission for testing

6.1.3. Developer SysAdmin Applet

This applet is used by the Platform System Administrator to configure various applets

6.1.4. Example Applet Template

This guide provide a walk thru of the example applet so that the applet developers can cut short the learning time required to produce an applet from scratch.

6.1.5. Inactive Applet

An inactive applet is taken out from the applet store, but they are NOT deleted from the system yet.

The developer can still see this applet in their applet listing.

6.1.6. Publishing an Applet

- Logo design

- Applet Description
- Applet images (for Applet Store)
- Pricing Country
- Applet Type
- Quality Checking
- Security Checking *

6.1.7. Releasing new version of the applets

Handling changes in permission templates

Getting approval

6.1.8. Full Deletion of Applet

Removal of applet from Applet-Catalogs

Removal of applet from users who have installed the applet

Removal of the Javascript Bundle from s3

Delete all applet settings / configurations in bl_applet_* tables in both Tenant and Root

- This would include Permission Templates / Permission Sets etc.

Removal of all schedulers related to this applet

Removal of Audit Trails and other applet related tables

Removal of applet from the Applet Master List - Google Spreadsheet

Removal

6.1.9. Quality Control Checklist

In order to ensure the best user experience on the Akaun Platform, we need to ensure this checklist is executed on a periodic basis.

UI Design QC

Documentation QC

Permissions QC

Features QC

Development / Staging Environment QC

Commercials QC

Source Code QC

6.1.10. Support and Maintenance of Applet

6.1.11. Suspension of Applet

- Usually this happens when the developer / applet violates the policy of applet store etc.

6.1.12. Types of Applet

6.1.13. UI Design Guidelines

- Must have Applet settings at the bottom left
- Having Personal Settings at the bottom left
- Showing the Tenant-code at the top left
- Showing the applet logo at the top left
- Having left menu
- Responsive to both desktop and mobile

6.1.14. Vendor Account

Vendor Registration

Developer Registration

Linking to the AkaunHQ Entity Account

understanding of permission / assignee / target type table.

understanding of difference between permission set and permission template

requesting for the permission template to be created for third party developer..

6.1.15. Pricing for applets

For now, we go with simplified pricing strategy by just charging per user per applet per month manually before the Billing Engine is ready.

6.1.16. Scheduler for applet

The scheduler of an applet allow recurring task to be executed on a periodic basis.

6.1.17. Webhooks for Applets

The webhook for an applet is different from the webhook for Sales Order etc...

This webhook is specific to an applet, to cater for the following scenario... For example, when the users first installed an applet, or when they first start clicking on the applet... etc..

6.1.18. Archiving an Applet

Archiving an applet would be permanently in-activating an applet.

6.1.19. Client Side Settings

- This is used for certain client side permissions to hide certain fields in the UI
- Allowing users to configure customize the behavior of the client-side

6.2. Akaun Shell Development Guide

6.3. Cloud Infrastructure

6.4. BigLedger Database Guide

6.4.1. Overview

6.4.2. Database Schema

6.4.3. Liquibase

6.4.4. The Root Database Schema

6.4.5. The Tenant Database Schema

6.5. BigLedger Java API Guide

6.5.1. Spring Framework

6.5.2. RESTful API Best Practices

6.6. Domain Driven Design

6.7. CP Commerce Development

6.8. Kubernetes

Chapter 7. Documentation Authoring

7.1. Authoring this Documentation

This documentation is written using asciidoc, please take a few minutes to go through the following guide:

- https://docs.asciidoctor.org/asciidoctor/latest/
- https://docs.asciidoctor.org/asciidoc/latest/

Some useful videos:

- https://www.youtube.com/watch?v=KbmpBZO4EoY
- https://www.youtube.com/watch?v=GL1SEYOhEiQ
- https://www.youtube.com/watch?v=wca5m7JpS_U

7.2. Setup and Configurations

7.2.1. Github Repository

- Github User Account

In order to author this documentation, you will need to have a https://github.com account. As an employee of Wavelet.net or BigLedger.com , you will be using the <username>@wavelet.net to register for the github user.

You can request the HR department to grant you access to the hr@wavelet.net to grant you the access to Github Akaun organization (https://github.com/akaun).

- Downloading the Github Desktop Client by clicking on the button below:

Please visit https://desktop.github.com/ to download the Github Desktop.

• Accessing the repository

After you have downloaded the github, please clone the https://github.com/akaun/Public-Guide to your local computer.

7.2.2. Asciidoctor Toolchain

Depends on the operating systems you are using, please follow the instructions below accordingly:

Installing Asciidoctor

• Linux

   ◦ https://docs.asciidoctor.org/asciidoctor/latest/install/linux-packaging/

• Windows

   ◦ https://docs.asciidoctor.org/asciidoctor/latest/install/windows/

- Mac
  - https://asciidoctor.org/docs/install-asciidoctor-macos/
  - https://docs.asciidoctor.org/asciidoctor/latest/install/macos/

Installing Epub3 Converter

Please click on the link below for detailed instructions:

https://docs.asciidoctor.org/epub3-converter/latest/

Installing PDF Converter

https://asciidoctor.org/docs/asciidoctor-pdf/#install-the-published-gem

Installing Multipage HTML Converter

https://github.com/owenh000/asciidoctor-multipage

7.2.3. Visual Studio Code

- Downloading Visual Studio Code

Please visit the following page to download. https://code.visualstudio.com/download

After you have installed the Visual Studio Code, please install the following extensions:

- AsciiDoc
- Github Pull Requests and Issues
- vscode-pdf

The next step is to open the folder where you cloned the https://github.com/akaun/Public-Guide repository using the Visual Studio Code

7.3. Understanding the Directory Structure

Folder Name	Description
bin	This folder contains shell scripts that you need to install and setup. You will also see a file called publish.sh , and this is the file that you would execute to compile the asciidoc into various file formats, and save them in the "docs" folder. You shouldn't be editing any files in this folder.
build	This is a temporary folder that gets deleted and re-created every time we "compile" the documentation. You shouldn't need to mess with files in this folder.

content	This is where you will be contributing by editing the files in this folder.
docs	You shouldn't need to edit any files in this folder. But you are welcome to open the files in this folder to check the "compiled output" of your changes , to ensure they are correct before pushing your code to the github, and request for your branch to be merged with the "main" branch in github.

7.4. Images

You may place the images anywhere in any sub-folders inside the "content/" folder, and reference to it in your asciidoc document using assets/<image-file-name>. The **bin/publish.sh** would copy all images in the "content" folder into the "content/assets" folder before the compilation and build of all asciidoctor formats.

Example:

```
image::assets/<image-file-name>[]
```

7.5. Committing Changes To The Repository

Before you make any changes, it is absolutely important that you **checkout** the local repository into a different branch, and the naming convention that we use would be:

YYYY-<email_address>

You may find the following resource useful:

- https://code.visualstudio.com/docs/editor/versioncontrol# :~:text=You%20can%20create%20and%20checkout,tags%20in%20the%20current%20repository.
- https://www.youtube.com/watch?v=X9-iaXfKY5g
- https://www.youtube.com/watch?v=H5BLEPhqxe8
- https://www.jasongaylord.com/blog/2020/07/08/create-delete-branches-using-visual-studio-code

Once you have made the changes you want, remember to run the command from the "Public-Guide" directory:

```
bin/publish.sh
```

The above shell script will clean up the "docs" and "build" folders, and then compile all the adoc files into the intermediate "build" folder and subsequently publish the final output into the "docs" folder.

To view the final output, you can open the "docs" folder and view the content in the folder by opening one of the following files:

- index.html (This is the multipage html output)

- blg_blueprint.pub

- blg_blueprint.pdf

- blg_blueprint.html

Once you have completed your editing, the next step is to create a **pull request**. Refer to the following for more information:

- https://docs.github.com/en/pull-requests/collaborating-with-pull-requests/getting-started/about-collaborative-development-models

- https://docs.github.com/en/pull-requests

- https://www.youtube.com/watch?v=oa1wXWeH1IQ

Congratulations !!

Glossary

Akaun Shell

The user interface that loads into a web browser, and showing users a list of applets.

Applet

An application that runs on the Akaun Shell.

Applet Store

The applet where users can discover other applets and install these other applets.

Environment

There are 3 environments, namely production, staging and development. Each of these environments lives in a different AWS account.

Platform Administrators

This refers to the BigLedger MIS Department.

System Administrator

This refers to the BigLedger MIS Department.

Root Database

This refers to the Platform main and global database.

Tenant

Every tenant is isolated from each other , it has its own independent database and other resources like files storage. Within a tenant, it is possible to create multiple companies, and they share the same database.

Tenant Admin

This refers to the OWNER or ADMIN of the Tenant.

Appendix A: First Appendix

A.1. First Subsection

A.2. Second Subsection

Appendix B: Second Appendix

B.1. First Chapter

B.2. Second Chapter

sdfsfa