# QuickLaunch Foundation Pack

# Components & Assumptions

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## QuickLaunch Foundation Pack Introduction

The Agreement is made by and between Customer and Preferred Strategies, Inc. d/b/a QuickLaunch Analytics ("QLA") and is made pursuant to and under the terms and conditions of the QuickLaunch Analytics Order Form and Subscription and/or License Agreement. The QuickLaunch Foundation Pack is a suite of tools which provides data replication, data transformation, and analytics modeling so that companies have a governed, scalable, and secure automated enterprise data platform which can drive their data driven transformation using data lakehouse architecture. This suite of tools may require third-party software, including but not limited to Microsoft Power BI/Fabric, Databricks, and Fivetran, to optimize performance. Lakehouse refers to Customer's preferred lakehouse platform. Availability of certain features may vary depending on the lakehouse platform selected.

## QuickLaunch Foundation Pack Installation Components

If desired, QuickLaunch Analytics will install the Foundation Pack components in Customer's lakehouse and Power BI tenants as part of the subscription.

If Customer is also licensing an Application Pack, see Application Pack Components and Assumptions for additional details. QLA will not configure Foundation Pack components to applications that are covered with a QuickLaunch Application Pack without Customer procuring the applicable Application Pack Subscription.

QuickLaunch Analytics will provide a Recommended Resource Specification document for Foundation Pack which includes a high-level Azure resource diagram, direction for required users and groups to configure the Foundation Pack, and lakehouse estimated cost ranges to help Customer understand lakehouse resource costs. QuickLaunch Analytics makes no guarantee as to the actual lakehouse costs incurred as this varies based on Customer usage.

The QuickLaunch Power BI Data Models require deployment to workspaces using Fabric or Premium Capacity. The lowest entry level is Premium Per User, where every user interacting with the data model requires a Power BI Premium Per User license. The next level is Fabric Capacity, which has a distinct pool of resources, and where the size of the capacity determines the amount of computation power available. The minimum Fabric Capacity SKU to support import Power BI Models is F64, however if Customer has larger data volumes a larger Fabric Capacity will be required to support their data model size requirements.

Customer is responsible for purchasing licensing including, but not limited to, subscription to a data lakehouse platform, third-party data replication software, Power BI, Tabular Editor 3, and Azure subscriptions such as Azure Storage, Azure DevOps, site-to-site VPN, or Azure ExpressRoute, a client tool workstation VM, and third-party replication VM, if applicable.

## Data Lakehouse

The QuickLaunch Lakehouse implementation approach is where transaction data is copied from the source database(s) into a target data lakehouse with delta lake, dedicated for

reporting and analytics. The data is mirrored from the source in its raw form and stored in the bronze layer of the lakehouse. Data is then transformed into an analytics-ready format through a suite of views applied in the lakehouse silver layer. The QuickLaunch Lakehouse includes configuration and management, samples catalogs, and desktop applications to support the installation and on-going integration of the lakehouse solutions.

## Lakehouse Configuration and Management

The QuickLaunch Lakehouse will be configured and installed on Customer's tenant. During the technical installation, QLA will assist Customer in configuring the target lakehouse environment through working sessions. The items below with (*) are limited to Databricks configuration.

- Coordinate with Customer network group on virtual network/address space to use in Azure *
- Configure Azure networking using semi-private endpoints *
- Assist with site-to-site VPN or Azure ExpressRoute, where needed
- Create one (1) Azure Resource Group, including the following *
    - Storage Account
    - Lakehouse Workspace
    - Key Vaults
    - Access Connector
    - App Registrations
    - SQL Serverless Endpoints
- Create and secure sample catalogs and schemas
- Install QuickLaunch lakehouse wheel files used to support ETL process and help manage Customer's lakehouse environment
- Provision Azure VM for client workstation, if applicable
- Configure client workstation for QLA

### Additional Lakehouse Consulting Hours

If Customer requires any of the following services for the lakehouse configuration, QLA will provide an estimate as part of a consulting project plan:

- Azure networking with fully private endpoints *
- Additional Azure Resource Groups *
- Azure VNet Data Gateways, On-Premises Data Gateways, or Fabric Capacity to support private endpoint networking
- ETL Configuration, including movement of data from source(s) into lakehouse, installation of third-party data replication software, and required components

### Lakehouse Wheel File

The QuickLaunch Lakehouse includes the installation of a lakehouse wheel file that streamlines the deployment and update of the lakehouse codebase and functionality.

- Supports audit and logging processes
- Enable interaction with Power BI Semantic Models
- Import data from Excel, CSV, SharePoint
- Populate stage tables and create database table snapshots
- Provide access to utility functions such as connectivity and traceroute tests, expiring secrets and tokens notifications, and cloning catalogs

### Lakehouse Audit

The lakehouse audit functionality ensures data integrity through automated validation processes for sources that can connect via a JDBC connection

- Perform a nightly validation check comparing source and target data
- Verify table row counts for completeness
- Conduct aggregate checks on value and quantity fields
- Identify duplicate rows based on primary keys
- Uses lakehouse wheel file code and QuickLaunch audit schema and tables

### Lakehouse Security

Our delivery teams work closely with our clients to help customize Lakehouse Security to best meet their needs and requirements. Designing a workspace, catalog/lakehouse and schema structure to support your workflows and applying the right level of security will set you up on the right foundation. You can manage lakehouse permissions through Entra ID and implement role-based access controls. This protects sensitive data, ensures regulatory compliance, and enables appropriate access controls across the organization.

### Sample Catalogs

The QuickLaunch Lakehouse includes the installation of sample catalogs with schemas, tables, views, and applicable data used to showcase the code and methodology of the Foundation Pack. This can be a reference for Lakehouse Developers and Data Model Developers to build their solutions and the basis for QuickLaunch training.

### Source Control

QLA will configure Azure DevOps projects using GIT repositories for source control, which are used to track version control on lakehouse notebooks, Power BI Data Models, Power BI Report Builder Paginated Reports. QLA team members can help Customer set up, license, and add users to Azure DevOps projects repositories accounts to be used by QLA during the installation. The Customer may use a different commercial GIT repo such as GitHub or BitBucket, however the Customer is responsible for the setup and configuration.

## QuickLaunch Delta Editor

The QuickLaunch Delta Editor application is a tool for Lakehouse Administrators, automating a variety of common tasks that enhance efficiency and streamline operations.

- Query source database and target lakehouse through a unified interface
- Generate views or custom tables in the QuickLaunch Enterprise format
- Build calendar tables and records
- Generate ETL metadata for source-to-lakehouse transformation, when using QuickLaunch Replication for Databricks
- Support for complementary data replication software to convert ELT generated raw tables and columns into easily consumable views

## QuickLaunch Schema Compare

The QuickLaunch Schema Compare application is a tool for managing differences between lakehouses, particularly when promoting changes from development to production environments.

- Compare tables and views across environments to provide clarity and facilitate troubleshooting
- Highlight specific code differences in schemas and facilitate controlled production of changes
- Provide functionality not available to native lakehouse tools

These applications will be installed on the client workstation provisioned by Customer for the QLA consultants to utilize. Customer's Lakehouse Administrators and Developers will need these applications as well.

# Data Pipelines

Connect to any data source and ensure your analytics environment has consistent, reliable, and up-to-date information without manual intervention.

## QuickLaunch Replication

The QuickLaunch Data Pipeline solution provides end-to-end replication for SQL databases (on-premises or hosted) to the Customer lakehouse in Databricks.

- Connect to on-premises or hosted SQL databases
- Configure incremental or full data synchronization
- Monitor replication status and performance
- Schedule automated data refreshes

## Complementary Technology Data Integration

The QuickLaunch Foundation Pack integrates with industry-leading ETL tools like Fivetran, which provides connectors to hundreds of data sources including SaaS applications, cloud storage, and more. We also support data replication options within the platforms, such as Databricks Lakeflow Connect and Fabric Mirroring

If none of the QuickLaunch Replicator, Fivetran, or platform data replication tools have out-of-the-box connectors to your data source, QLA can help determine the most cost-effective means to establish a reliable replication capability. We will help estimate your third-party tool costs, but they will not be included in the QuickLaunch Foundation subscription.

# Enterprise Analytics

Empower your teams with trusted data models, stunning reports, and self-service capabilities. Our tools and pre-built content dramatically reduce development time, implement industry best practices, and drive enterprise-wide adoption. The following items will be installed as part of your subscription.

## Pre-built Power BI Enterprise Data Models

A library of pre-built, enterprise-grade Power BI semantic models designed to dramatically reduce development time, implement industry best practices, and provide immediate enterprise analytical capabilities. These models provide time to value opportunities for your specific source application and provide modeling examples that can be applied to other unique data needs. Included with the enterprise data models are the following:

- Finance (General Ledger, Accounts Payable, Accounts Receivable)
- Job Cost
- Payroll
- Supply Chain (Sales, Purchasing, Inventory, Production)

## Advanced Modeling Methodologies

Along with the items included with the enterprise data models, the Foundation Pack includes best practices and samples to enhance accuracy and performance for the following complex modeling techniques.

### Enterprise Calendar and Time Intelligence

A robust calendar table that supports both fiscal and standard calendars, along with multiple fiscal calendars. Time intelligence calculation groups in the models provide reusable custom calculations that can accommodate various fiscal calendars and patterns.

### Data Model Security

The QuickLaunch security methodology ensures appropriate data access, protects sensitive information, and maintains compliance with security requirements. Includes modular security by subject area and row-level security strategies using role-based access control with Entra ID groups.

### Data Model Partitions

The QuickLaunch partitions methodology provides strategies to optimize data management and minimize refresh times for large datasets. It includes custom partitioning strategies using Tabular Editor and performance optimization techniques.

### Tabular Editor Scripts

QuickLaunch Analytics provides Tabular Editor 3 scripts to automate repetitive data modeling tasks that accelerate model development and maintenance, following the QuickLaunch Analytics methodology.

### Currency Conversion

The QuickLaunch currency conversion methodology addresses several key considerations for implementing dynamic currency conversion including exchange rate types, exchange rate sources, and performance.

### Unit of Measure Conversion

The QuickLaunch unit of measure (UOM) conversion methodology addresses several key considerations for implementing dynamic UOM conversion including UOM conversion sources for product and standard conversions, as well as performance.

### Organization Hierarchy

QuickLaunch Analytics includes best practices to build the relationship structure between these organizational levels so that aggregations (employee count, revenue, etc.) can happen seamlessly and consistently.

### Financial Hierarchy

QuickLaunch Analytics provides the methodology and programs to centralize the account hierarchy structure so that every report is built on a consistent structure and reconciling different report versions is no longer an issue.

## QuickLaunch Power BI Content

QuickLaunch Analytics provides best practices for configuring your Power BI environment, including tenant settings and workspaces. Also included are report examples and templates that can be used to jumpstart the creation of your front-end content.

**Power BI Environment**
The QLA team and Customer will collaborate to configure the necessary settings within Customer's Power BI Tenant including:

- Power BI Tenant settings to support using XMLA endpoint
- Power BI Workspaces to publish data models and reports

**Power BI Report Examples and Templates**
QLA will provide example Power BI reports that reveal how to use more advanced visualizations such as scatter plots and decision trees. Customer can apply logos and JSON themes using the QuickLaunch Power BI Source Fixer application, to enhance customization and branding across reports.

**Power BI Report Builder for Income Statement and Balance Sheet**
QLA provides templates for Income Statement and Balance Sheet paginated reports that include techniques for providing the capability to drill down to the detail transactions.

## QuickLaunch Power BI Source Fixer

The QuickLaunch Power BI Source Fixer application automates the process of bulk mapping Power BI Desktop files to new data models. It also includes the ability to replace the default logo in the report samples to enhance customization and branding across reports.

## QuickLaunch Advantage

Enjoy the benefits of the QuickLaunch Community and continued subscription.

## QuickLaunch Community

QLA will provide Customer access to the QuickLaunch Community for the number of users purchased as part of their QuickLaunch Subscription. The QuickLaunch Community is an online resource where users can find answers to questions to resolve issues quickly. The QuickLaunch Community contains hundreds of articles and videos on topics related to using QuickLaunch and Power BI, Paginated Reports, and Excel. It includes how-to guides, tips and tricks, education sessions, and content to help users of all levels. The community is designed to support all customers in their journey, with sections dedicated to the implementation, specific product content, and customer success.

## Subscription Benefits and Service Availability

**QuickLaunch Foundation Pack Subscription Benefits**
The following details are benefits included as part of the QuickLaunch Foundation Pack Subscription:

- Access to enhancements and additions to QuickLaunch Foundation Pack content

- Updates to QuickLaunch content to support current releases of lakehouse platforms, Microsoft Power BI, and other applications to support the solution
- Fixes to Known Issues identified in current QuickLaunch content
- Discounted Consulting Rates
- Access to QuickLaunch Community
- Rights to use the following:
    - QuickLaunch Delta Editor
    - QuickLaunch Schema Compare
    - QuickLaunch Power BI Source Fixer
    - QuickLaunch Lakehouse Wheel File, including:
        - QuickLaunch Replication for SQL
        - Audit and staging methodology
        - Ad hoc notebooks
    - QuickLaunch Azure DevOps Repositories, including:
        - QuickLaunch Data Models
        - QuickLaunch Sample Reports

**Service Availability**

Customer team members will have direct access to QLA team members assigned to the initial installation project and Customer can contact those members directly for assistance and collaboration on the project.

After the initial installation project, Customer will use the QuickLaunch Ticketing System for support and development requests.

- Tickets are submitted via the QuickLaunch Community site.
- Tickets are monitored from 8:00 AM to 5:00 PM Pacific Time, Monday – Friday. Tickets received outside of the designated hours or on holidays will be collected, but action cannot be guaranteed until the next business day.