

DMS Tool

User Guide

Comprehensive Guide to Using the Data Management System

Version 4.0.0

DMS Tool – End■to■End User Guide

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1. Introduction

1.1 What the DMS Tool Is

The **DMS Tool** (Data Management System / Data Warehouse Tool) is a web application designed to:

- **Extract** data from one or more **source systems** (Oracle, PostgreSQL, and others via connections).
- **Transform** that data using **reusable mapping rules**.
- **Load** the results into **target data warehouse tables** (dimensions, facts, staging).
- **Schedule and monitor** recurring jobs that execute those mappings.
- **Provide visibility** into job runs, errors, and overall health through dashboards and logs.

You can think of the DMS Tool as a **visual, governed ETL/ELT front end** on top of your enterprise data warehouse.

1.2 Who This Guide Is For

This guide is written for:

- **Business / data analysts** who design mappings and jobs but may not write low-level code.
- **Data engineers** who need to understand how to use the UI correctly and how data flows.
- **Admins / power users** who configure users, roles, and connections.

You do **not** need to know Python or PL/SQL to use the application, but you should:

- Understand your **source system tables** and **target data model**.
- Be comfortable reading/writing **SQL** where needed (especially in Manage SQL).

1.3 High■Level Data Flow

At a high level, every use of the tool follows the same pattern:

```
Source DB / Files ■ ■ (1) Read via a Connection + SQL (Manage SQL, File Upload) ▼  
Mapping Rules (Data Mapper) ■ ■ (2) Apply transformations, mapping, SCD rules ▼  
Target Tables in DW (CDR schema) ■ ■ (3) Scheduled / manual Jobs run mappings  
repeatedly ▼ Dashboards, Reports, and Downstream Consumers
```

The rest of this guide explains **each part of this flow**, and how you, as a user, interact with it through the UI.

2. Getting Started

2.1 Accessing the Application

- Open a modern browser (Chrome, Edge, Firefox).
- Navigate to your environment URL, for example:
 - `http://localhost:3000` (local/development)
 - `https://dms.your-company.com` (production)
 - You will be redirected to the **Login** page under `/auth/login`.

> If you do not have a user account, contact your **DMS administrator**.

2.2 First Login & Password Change

1. Login

- Enter your **username** and **password**.
- If reCAPTCHA is enabled, tick “I’m not a robot”.
- Click **Sign In**.

2. Forced Password Change (if configured)

- For brand■new or reset accounts, you may be forced to change your password.
- You’ll be redirected to `/auth/change-password`.

- Enter:
- Current password.
- New password (follows your org's complexity rules).
- Confirm new password.
- Click **Update Password**.

3. After successful login you will be redirected to the **Home** page.

If login fails, you'll see a friendly error like:

- “Hmm, that didn’t work. Try again!” for invalid credentials.
- “Account locked. Please try again after 15 minutes” if there were too many failed attempts.

2.3 Understanding the Home Screen & Navigation

After login you typically land on [/home](#).

Common elements you'll see:

- **Top Bar**

- Product name/logo.
- Current environment (for example: DEV / UAT / PROD).
- User profile menu (top right) – access **Profile**, **Change Password**, and **Logout**.

- **Left Sidebar**

- A list of **modules** you can access, for example:
 - Home
 - Register DB Connections
 - Manage SQL
 - Type Mapper

- Mapper Module

- Jobs

- Job Status & Logs

- Dashboard

- Reports, Report Runs

- File Upload

- Security (for admins)

- Admin (for admins)

- Modules shown here are controlled by:

- Your **role** (admin, power user, normal user).

- The **Security** module configuration (which modules are enabled per user).

- **Main Content Area**

- Contextual content based on selected module.

- Summary cards, tables, charts, forms, etc.

> If you see a “Not Authorized” message when clicking a module, your user or role does not have access to that module. Contact your administrator.

3. Core Concepts & Terminology

Before diving into the screens, it helps to understand a few core ideas.

3.1 Source Systems, Targets, and Connections

- **Source System**

Any system from which data is read:

- ERP database (Oracle, PostgreSQL, etc.).
- Source data mart.
- Flat files (via File Upload).

- **Target**

Where data ends up in the data warehouse:

- **CDR schema** tables such as `DIM_CUSTOMER`, `FACT_SALES`, staging tables.

- **Connection**

A reusable set of credentials and network details that lets the DMS Tool talk to a database:

- Defined once in **Register DB Connections**.
- Reused in:
- **Manage SQL**: to run source queries.
- **Mapper Module**: to define the **target connection** for loads.
- **Jobs and File Upload**: to read/write data.

Think of **connections** as “saved logins” to databases that the rest of the tool can safely reference.

3.2 Mappings and Jobs

- **Mapping**

A mapping defines **how data should look** in the target:

- Which source columns feed which target columns.
- What transformations are applied (e.g., concatenation, lookups, CASE expressions).
- Whether history is tracked (SCD Type 2) or overwritten (SCD Type 1).
- Which table type: **Dimension**, **Fact**, or **Staging**.

- **Job**

A job defines **when and how a mapping (or report) is executed**:

- Which mapping to run.
- How often (daily, weekly, monthly, interval).
- Any parameters (date range, history load, etc.).
- Whether there are dependencies on other jobs.

3.3 Schedules, Runs, and Logs

- **Schedule**

A configuration that says, “Run job X at frequency Y”, for example:

- Daily at 2 AM.
- Every 15 minutes.
- Every Monday at 9 AM.

- **Run / Execution**

A single execution of a job:

- Has start time, end time, status, and row counts.
- Is visible in **Job Status & Logs** and the **Dashboard**.

- **Logs**

Detail of what happened during a run:

- Progress messages.
- Error messages.
- Row counts and performance information.

3.4 Roles, Permissions, and Licenses

- **Roles:** Group permissions, such as Admin, Power User, Viewer.
- **Permissions:** Control which modules and actions a user can perform.
- **License:** Controls whether the application is activated and for how long.

Admins manage all of this under the **Admin** and **Security** modules.

4. Typical End-to-End Workflow (Big Picture)

This section gives you a “map in your head” of how the application is meant to be used.

4.1 From Source Data to Dashboard – Step-by-Step

1. Register DB Connections

- Define connections to:
 - The metadata database (DMS schema).
 - Source databases.
 - Target databases (CDR schema).

2. Author Source SQL

- In **Manage SQL**, create reusable **SQL codes** that extract the data you want from the source.
- Validate and test queries.

3. Define Mappings

- In **Mapper Module**, create a **mapping**:
 - Choose table type (Dimension, Fact, Staging).
 - Configure target table and schema.
 - Define each target column and the logic that populates it.

- Link to one or more SQL codes from Manage SQL as needed.

4. Create Jobs

- In **Jobs**, create a job that runs your mapping:

- Configure whether it is a one-off, daily, weekly, etc.

- Optionally define dependencies (Job B waits for Job A).

5. Enable Scheduler

- Ensure the **scheduler service** is running (usually handled by IT).

- Once running, it will:

- Synchronize job schedules.

- Pick up immediate run requests.

- Execute job flows using the execution engine.

6. Monitor Job Status

- Use **Job Status & Logs** to:

- See each run.

- View logs and error details.

- Stop a run if needed.

7. Review Dashboards and Reports

- Use the **Dashboard** to see overall system health and performance.

- Use **Reports** to define and **Report Runs** to access generated reports.

4.2 Example: Daily Customer Dimension Load

Imagine you want a **Customer Dimension** table that is refreshed daily at 2 AM:

1. Define an **Oracle connection** to your ERP system (source).
2. Define a **PostgreSQL connection** to your DW (target).
3. In **Manage SQL**, create **SQL_CUSTOMER_SRC** that selects customer data from ERP.

4. In **Mapper Module**, create mapping `MAP_CUSTOMER_DIM`:
- Table type: Dimension (SCD Type 2 for history).

- Target: `DIM_CUSTOMER` in `CDR` schema.
- Define mappings for `CUSTOMER_ID`, `NAME`, `ADDRESS`, `STATUS`, etc.

5. In **Jobs**, create job `JOB_CUSTOMER_DAILY`:
- Attached to mapping `MAP_CUSTOMER_DIM`.

- Schedule: Daily at 2:00 AM.

6. Ensure scheduler is running.
7. Next morning, check **Job Status & Logs**:
- Confirm run succeeded.
- See row counts and any warnings.

8. Check BI tool or the **Dashboard** to confirm updated metrics.
-

5. Module■By■Module Guide

This section explains **what each module is for** and **how to use it step■by■step**.

5.1 Authentication & Login (Auth Module)

What it is designed for

Provides secure login, logout, password change, and password reset workflows.

How it works (high level)

- Frontend collects your username, password, and optional reCAPTCHA.
- Backend validates the credentials against the **SQLite users** table.
- On success, backend issues a **JWT token** stored in localStorage and cookies.
- Subsequent requests include this token to prove your identity.

How to use it

- **Login**

1. Go to </auth/login>.
2. Enter username and password.
3. Complete reCAPTCHA (if visible).
4. Click **Sign In**.

- **Forgot Password**

1. Click **Forgot Password** on the login page.
2. Enter your email.
3. Check email for reset link.
4. Click link and set a new password.

- **Change Password (after login)**

1. From the top-right profile menu, choose **Change Password** or go to </auth/change-password>.
2. Enter current and new passwords.
3. Click **Update Password**.

- **Logout**

1. Click the profile menu.
 2. Click **Logout**.
-

5.2 Home & Navigation

What it is designed for

The **Home** page and navigation help you quickly see what's important and move between modules.

How it works

- The sidebar is driven by your **permissions and enabled modules**.
- The home page may show:
 - Quick links to main modules.
 - Summary of recent jobs, issues, or notifications.

How to use it

1. After login, land on [/home](#).
 2. Use the sidebar to switch modules.
 3. Use cards/links on the home page for shortcuts (for example, “Create new mapping”).
-

5.3 Register DB Connections

What it is designed for

To define **reusable database connections** that can be referenced by Manage SQL, Mapper, Jobs, and File Upload modules.

How it works

- Connection details (host, port, service/db name, username, password) are stored in metadata.
- Each connection has:
 - Status (active/inactive).
 - Type (Oracle/PostgreSQL/etc.).
 - A friendly name (for example, “ERP_PROD_ORA”).
 - Modules use the connection **CONID** to connect to the appropriate database.

How to use it

1. Click **Register DB Connections** in the sidebar.
2. To add a new connection:
 - Click **Add Connection**.
 - Fill in:

- Connection Name (descriptive).
- Database Type (Oracle/PostgreSQL).
- Host, Port.
- Service Name / Database Name.
- Username, Password (or connection string).
- Click **Test Connection**.
- If test passes, click **Save**.

3. To **edit a connection**:

- Click the edit icon next to a connection.
 - Update details, re-test, and **Save**.
- #### 4. To **deactivate** a connection:
- Use the toggle or Deactivate button.
 - Deactivated connections won't appear for selection in other modules.

Best practice

- Use descriptive names like:
 - `ERP_OLETP_ORACLE_DEV`
 - `DWH_POSTGRES_PROD`
- Never use personal accounts; always use **service accounts** managed by DBAs.

5.4 Manage SQL (Source Query Management)

What it is designed for

To manage **reusable source SQL queries** that mappings can consume.

How it works

- Each SQL definition has:
 - **Code** (for example, `SQL_CUSTOMER_SRC`).
 - **Description.**
 - **Source Connection** (from Register DB Connections).
 - **SQL text.**

- These definitions are stored in metadata tables and can be used in:
 - Mapper Module (as data sources).
 - Reports.

How to use it

1. Go to **Manage SQL**.
2. To **create a new SQL definition**:
 - Click **New SQL**.

- Fill:
 - SQL Code (unique identifier).
 - Description.
 - Select the **Source Connection**.
 - Enter SQL text in the editor.
 - Click **Validate** to check syntax.
 - Click **Test** to preview data (first N rows).

- Click **Save** to store it.
- 3. To **edit a SQL definition**:
 - Click on the row or edit icon.
 - Update SQL or description.

- Re-validate and **Save**.

4. To **use in a mapping**:

- In Mapper Module, choose this SQL code as your source.

Example

```
SELECT c.customer_id, c.first_name || ' ' || c.last_name AS full_name, c.status,  
c.created_date FROM erp_customers c WHERE c.status = 'ACTIVE';
```

5.5 Type Mapper (Parameter & Data Type Mapping)

What it is designed for

To manage **data type mappings and parameter types** between different databases and internal representations.

How it works

- Maintains lists such as:
- Source data types vs target data types.
- Parameter data types used in mappings and jobs.
- Ensures consistent handling of types when generating code and executing jobs.

How to use it (typical user)

Most business users will rarely need to modify this. It's primarily for:

- Data engineers.
- Administrators performing cross-database migrations.

Use cases:

- When moving from Oracle to PostgreSQL, ensure types like **NUMBER**, **VARCHAR2**, **DATE** are correctly mapped to **NUMERIC**, **VARCHAR**, **TIMESTAMP**, etc.

5.6 Data Mapper (Mapper Module)

What it is designed for

This is the **heart of the system**. It defines:

- How data flows from the source SQL to the target table.
- All column-level transformation logic.
- Whether you track history (SCD) or overwrite.

How it works (simplified)

- You define:

- **Mapping Header** (reference, description, table type, target schema, etc.).

- **Field Mappings** for each target column.

- When you save and validate, the backend:

- Stores this configuration in metadata tables.

- Can generate executable Python job flow code that the scheduler executes later.

How to use it (step-by-step)

1. Go to **Mapper Module**.

2. **View existing mappings:**

- See list with Reference, Description, Table Name, Status.

3. **Create a new mapping:**

1. Click **New Mapping**.

2. Fill header:

- **Reference:** Unique name, e.g., `MAP_CUSTOMER_DIM`.

- **Description:** “Customer dimension from ERP”.

- **Source System:** Logical name of source (ERP, CRM, etc.).

- **Table Name:** Target table, e.g., `DIM_CUSTOMER`.

- **Table Type:**

- **Dimension** – Surrogate keys, SCD.
- **Fact** – Measures and foreign keys.
- **Staging** – Raw staging area.
- **Target Schema:** e.g., [CDR](#).
- **Frequency Code:** How often this mapping will typically run.
- **Bulk Process Rows:** Batch size for processing.
- **Target Connection:** Choose which DB connection is used to create/populate the table.

3. Link source SQL:

- Either:
 - Choose a SQL code from **Manage SQL**.
 - Or paste/write SQL directly (depending on configuration).
 - Load columns to show available fields from the source.

4. Configure field mappings:

- For each target column:
 - **Field Name:** Target column name.
 - **Data Type:** Target data type.
 - **Primary Key and PK Sequence** (for key columns).
 - **SCD Type:**
 - Type 1: Overwrite.
 - Type 2: Track history (start/end dates, status).
 - **Logic:** Expression that populates the field.

- **Key Column / Value Column** (for lookups).

- **Combine Code**: How to aggregate multiple rows (SUM, MAX, etc.).

- **Execution Sequence**: Order (helpful if outputs of one expression feed another).

5. Validate mapping:

- Click **Validate**:

- Checks for missing required fields.

- Checks data type consistency.

- Validates SQL and mapping expressions.

- Fix any errors highlighted.

6. Save mapping:

- Click **Save** or **Save to Database**.

- The system persists header and detail rows.

4. Edit an existing mapping:

- Open mapping, change header or fields, revalidate, and **Save**.

5. Activate / Deactivate:

- Activate when ready for job creation.

- Deactivate to prevent further use (existing jobs may still reference old versions depending on configuration).

How data flows through a mapping

Simplified:

Source Data (via SQL) ■■■ Apply each field's logic ■■■ Target Row

For SCD Type 2 dimensions, the engine:

- Compares hash of incoming row vs existing row.
- If different:

- Closes existing row (set end date).

- Inserts a new row (new version).

5.7 Jobs (Job Design & Scheduling)

What it is designed for

To turn mappings into **runnable jobs** that can be executed on a schedule or on demand.

How it works

- Each job references:
 - A **mapping** (or report).
 - Optional **time parameters** (for history runs).
 - Optional **dependencies** (run after other jobs).
 - Schedules are stored in metadata and synchronized to the scheduler service.

How to use it

1. Go to **Jobs**.
2. **View existing jobs:**
 - See Job ID, Mapping reference, Description, Status.
3. **Create a job:**
 1. Click **New Job** or **Create Job**.
 2. Select a **Mapping** (only active ones).
 3. Enter:
 - Job description.
 - Any default parameters (such as date range).
 4. Configure schedule:

- Choose frequency: daily, weekly, monthly, etc.
- Set time (hour, minute) and starting date.
- Optionally end date.

5. Save job and enable schedule if you want it to auto-run.

4. Run a job immediately:

- From the job list, click **Run Now**.

- Confirm the execution.

5. Edit a job:

- Change description, schedule, or parameters.
- Save updates.

6. Set dependencies:

- In advanced dialogs (such as Dependency Modal), define:
 - Job B depends on Job A:
 - Job B won't run until Job A completes successfully.

5.8 Job Status & Logs

What it is designed for

To give you clear visibility into **what has run**, **is running**, and **why something failed**.

How it works

- Reads execution records from tables such as:
 - [DMS_PRCLOG](#), [DMS_JOBLOG](#), [DMS_JOBERR](#).
- Shows:
 - Start/end time.

- Status (In Progress, Completed, Failed, Stopped).

- Row counts.

- Links to:

- Detailed logs.

- Error messages.

How to use it

1. Go to **Job Status & Logs**.

2. Use filters:

- Date range.

- Status (success/failure).

- Mapping reference.

- Job ID.

3. Click on a specific run:

- See detailed summary.

- Open logs:

- A chronological list of messages.

- Open error details:

- Error text.

- Possibly affected table/column.

4. To **stop a running job**:

- Find a run with status “In Progress”.

- Click **Stop Job**.

- Confirm.

Use this module whenever:

- A job is **red** on the dashboard.
 - A downstream consumer says data is stale.
 - You want to confirm if yesterday's loads were successful.
-

5.9 Dashboard (Monitoring & Analytics)

What it is designed for

To provide a **visual summary** of system health and performance:

- How many jobs succeed/fail.
- How long jobs take.
- How much data is processed.

How it works

- Aggregates data from job logs.
- Provides charts and KPI cards for:
 - Success/failure counts.
 - Average run time.
 - Processed rows.

How to use it

1. Go to **Dashboard**.
2. Choose your **date range**.
3. Review:
 - Success/failure charts.
 - Distribution of run durations.
 - Top slow jobs.
4. Use this to:
 - Identify chronic failing jobs.

- Spot performance regressions.
 - Confirm that overnight runs processed expected volumes.
-

5.10 Reports & Report Runs

What they are designed for

To define and execute **report definitions** and to access their generated outputs.

How it works

- A **Report** definition:
 - Specifies data sources (SQL, mappings).
 - Defines layout (columns, groupings, formatting).
 - Specifies output format (PDF, Excel, CSV).
- **Report Runs:**
 - Capture individual generations of a report.
 - Allow users to download outputs.

How to use them

1. **Define a report** (Reports module):
 - Create a new report definition.
 - Choose data sources (Manage SQL or mappings).
 - Configure layout and parameters.
 - Save.
2. **Run a report**:
 - From the report definition, click **Generate**.
 - Choose parameters (date range, filters).

- Wait for completion.

3. View past runs (Report Runs module):

- Download existing outputs.
 - Check status and timings.
-

5.11 File Upload Module

What it is designed for

To allow users to upload data from **files** (CSV, Excel, JSON, etc.) into the data warehouse, with repeatable column mappings and transformations.

How it works

- Upload file → Parse & inspect → Configure column mappings → Process into target.
- Supports:
 - Column mapping.
 - Data type enforcement.
 - Basic transformations.
 - Preview and validation.

How to use it

1. Go to **File Upload**.
2. **Upload a file:**
 - Click **Upload File**.
 - Select file from your computer.
 - Provide:
 - File reference.

- Description.
- Source system.
- Target connection (if data is loaded to DB).
- Click **Upload**.

3. Configure column mappings:

- For each detected column:
 - Map to target column name.
 - Choose data type.
 - Mark required or optional.
 - Define default values or transformations.
- Save mappings.

4. Preview:

- Preview a few rows to confirm data looks right.

5. Process:

- Choose processing options (Insert/Update/Upsert).
- Start processing.
- Monitor status and errors.

Use the File Upload module when:

- You receive data as **files** from external parties.
- You need a one-time or recurring **file-based load**.

5.12 Security (Module Access)

What it is designed for

To control **which user sees which modules** in the UI.

How it works

- Maintains a matrix of:
 - Users/roles → Modules → Permissions.
 - Uses a central list of modules (Manage SQL, Mapper, Jobs, etc.).
 - The frontend checks this configuration to:
 - Show/hide modules in the sidebar.
 - Block unauthorized access.

How to use it (Admin only)

1. Go to **Security**.
2. For each user or role:
 - Enable or disable modules.
3. Save changes.

This ensures that:

- Business users only see relevant modules.
- Admin and technical modules are restricted.

5.13 Admin (Users, Roles, License)

What it is designed for

Central place for admins to manage:

- Users.
- Roles and permissions.
- Licenses.
- System notifications.

How to use it

- **Users**
 - Add / edit users.

- Activate / deactivate accounts.
- Reset passwords.
- **Roles**
 - Define roles such as **DMS_ADMIN**, **DMS_DEVELOPER**, **DMS_USER**.
- Assign modules and permissions to roles.
- **License Manager**
 - View license status and expiry.
 - Enter or update license keys.

Regular users will rarely need to access this module.

5.14 Profile (Personal Settings)

What it is designed for

To let you see and update **your own profile information**.

How to use it

1. Click on your profile icon (top right).
2. Choose **Profile**.
3. See details such as:
 - Name, email, department.
 - Role and last login time.
4. Update allowed fields (for example, phone number).
5. Click **Save**.

Use this module to keep your contact details current.

6. Data Flow Details

6.1 How Data Moves Through the System

At runtime, a typical job does the following:

1. Scheduler decides it's time to run Job J 2. Execution engine looks up the mapping(s) for Job J 3. For each mapping:
 - a. Connect to source DB using connection defined in Manage SQL
 - b. Execute the source SQL and fetch rows
 - c. For each row, apply field mapping logic
 - d. Connect to target DB using mapping's target connection
 - e. Insert/update rows in the target table
 - f. Write logs and row counts
4. Dashboard and Job Status modules read these logs for display

6.2 Where Data Is Stored

- **Source data:** In the **source system database or files**.
- **Metadata** (mappings, jobs, connections, parameters): In DMS schema tables (Oracle/PostgreSQL).
- **Target data:** In CDR schema tables.
- **User and security data:** In SQLite (for app users, roles, etc.).
- **Logs and execution history:** In metadata tables ([DMS_PRCLOG](#), [DMS_JOBLOG](#), [DMS_JOBERR](#)) and backend log files.

6.3 How Changes and History Are Tracked

- **Metadata changes:**

- Mappings and jobs are versioned logically via flags and timestamps.

- **Data changes (SCD):**

- Type 1 – overwrite.

- Type 2 – end date old row, insert new row with a new hash and effective dates.

- **Hash column ([RWHKEY](#)):**

- Stores an MD5 hash of the important data columns.

- Makes comparisons efficient (one hash vs many columns).

7. How To... Scenarios (Recipes)

7.1 Onboard a New Source System

1. **Register connections** to the new source DB in **Register DB Connections**.
2. Identify target tables and schemas with your data architect.
3. For each subject area (Customer, Product, etc.):
 - Create a **source SQL** in **Manage SQL**.
 - Create a **mapping** in **Mapper Module**.
 - Create a **job** in **Jobs**.
 - Test runs via **Run Now**.
 - Monitor results via **Job Status & Logs**.

7.2 Build a New Mapping and Job

1. Confirm that:
 - Required source tables/columns exist.
 - Necessary DB connections are defined.
2. In **Manage SQL**:
 - Create a new SQL definition (test it).
3. In **Mapper Module**:
 - Create mapping reference.
 - Define fields and transformation logic.
 - Validate and save.
4. In **Jobs**:
 - Create a job, link it to the mapping.
 - Optionally define schedule.
5. Test via **Run Now**:
 - Validate row counts in target.

- Ensure business users confirm results.

7.3 Investigate a Failed Job

1. Go to **Job Status & Logs**.
2. Filter for:
 - Status = Failed.
- Target date/time window.
3. Open the **failed run**:
 - Check error message summary.
 - Open detailed logs for more context.
4. Typical issues:
 - DB connection problems.
 - Missing tables/columns.
 - Data type conversion errors.
 - Logic errors in mapping expressions.
5. Fix the root cause:
 - In Register DB Connections.
 - In Manage SQL.
 - In Mapper Module.
6. Re■run the job (either **Run Now** or wait for schedule).

7.4 Safely Change Existing Logic

1. Identify impacted mapping(s) and job(s).
2. Communicate change with stakeholders (owners of reports/dashboards).
3. In **Mapper Module**:
 - Open the mapping.

- Update specific field logic.

- Validate.

4. In Jobs:

- If needed, update parameters or schedule.

5. Test in a non-production environment:

- Run job on a subset or test date range.

- Validate outputs with data owners.

6. Deploy change to production only after sign-off.

8. Troubleshooting & FAQs

8.1 Common Login / Access Issues

- **Can't log in / "Hmm, that didn't work"**

→ Check username/password, Caps Lock, try again. If still failing, reset password or contact admin.

- **"Account locked"**

→ Too many failed attempts. Wait 15 minutes and contact admin if still locked.

- **I don't see certain modules in the sidebar**

→ Your role may not have access; ask your admin to enable modules for you via **Security/Admin**.

8.2 When Jobs Don't Run as Expected

- **Job did not run at scheduled time**

- Verify the **scheduler service** is running.

- Check **Jobs** to ensure schedule is enabled.

- Check **Job Status & Logs** for missed/failed runs.

- **Job shows success but data not updated**
 - Verify target connection and schema.
 - Check that mapping logic aligns with expectations.
 - Confirm date ranges and filter conditions.

8.3 Data Mismatch / Wrong Numbers

- Compare:
 - Source data using **Manage SQL Test** or DB client.
 - Target data using a SQL query.
 - Mapping logic to confirm each field.
- Use **Job logs** to:
 - Check row counts.
 - Identify dropped/filtered rows.

8.4 Who to Contact

In your organization, typical roles are:

- **DMS Administrator** – for:
 - Access and roles.
 - Module enable/disable.
 - License and environment issues.
- **Data Engineer / ETL Developer** – for:
 - Complex mapping logic.
 - Database performance issues.
 - New source system onboarding.

- **Business/Data Owner** – for:
 - Confirmation of business rules.
 - Validation of numbers and results.

You can now use this guide as a “companion manual” while working through the UI.

For any screen, ask yourself:

- **What is the role of this module in the overall data flow?**
- **Where is the data coming from and where is it going?**
- **How does this configuration affect the jobs and the final reports/dashboards?**

If you keep those questions in mind, the DMS Tool will feel like a **structured, end-to-end pipeline builder**, not just a set of separate screens.