

# D&B Optimizer for Microsoft Installation Guide

Installation, Setup and Configuration

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## Introduction

## What is D&B Optimizer for Microsoft?

D&B Optimizer for Microsoft Dynamics is a cloud-native data service built on Microsoft's Power Platform. It enhances the quality, completeness and accuracy of your business records by connecting directly to Dun & Bradstreet's global business database.

#### **Key Benefits:**

- Real-time entity matching and enrichment
- Trusted firmographics from over 500M+ business records
- Seamless integration with Dynamics 365 via Power Apps
- Power BI dashboards for data health & stewardship
- Improved segmentation, targeting, and customer insights



Whether you are enabling clean account creation, building better campaigns, or optimizing CRM workflows, D&B Optimizer helps ensure your business decisions are based on complete and accurate data.

⚠ Contact matching is no longer available in the current version of D&B Optimizer. If you are interested in contact-level data, please reach out to your D&B Account Representative to explore available data blocks and licensing options.

# **Getting Started**

Before beginning your installation, ensure you:

- Have Dynamics 365 online (version 9.0+)
- Have Admin access to your Power Platform environment
- Have received your D&B "Welcome Email" with activation link

We recommend first installing to a sandbox environment.

For additional help, contact your Dun & Bradstreet Onboarding Consultant or refer to this guide.

## **Microsoft Licensing Checklist**

The following licenses are required to install and use D&B Optimizer for Microsoft:

- Microsoft Dynamics 365 (online only)
  - Supported apps: Sales, Customer Service, Marketing, Enterprise, or Business Editions
  - Version 9.0 or later required
- Power BI Pro (for dashboards)
  - Needed to import and publish D&B dashboards in Power BI Web
  - o Only available for Windows OS



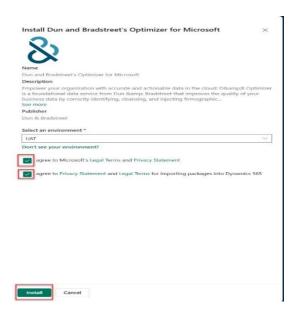
## **Checklist Before Installing**

Ensure you complete the following prior to beginning installation:

- 1. Receive and review your **D&B Welcome Email**
- 2. Provide your **Environment Org ID** to your onboarding consultant for activation
- 3. Decide which **Power Platform environment** you will install to (sandbox recommended first)
- 4. Confirm you have **System Administrator** role for the target environment
- 5. Optionally, prepare your **Power BI Desktop** if reporting will be enabled

## Installing the Optimizer Solution

⚠ You will not be able to install until D&B has activated your Environment Org ID.



Please reach out to your Onboarding Consultant to get started. 📏 <u>Installation Problems</u>

#### Step 1: Locate the App on AppSource

Go to <u>Microsoft AppSource</u> and search for "D&B Optimizer for Microsoft". Select Free Trial to begin the installation.

#### **Step 2: Choose Environment & Accept Permissions**

Sign in with the same account that has admin rights for your Power Platform environment



- Select the target Dynamics 365 environment
- Accept permission prompts to allow integration

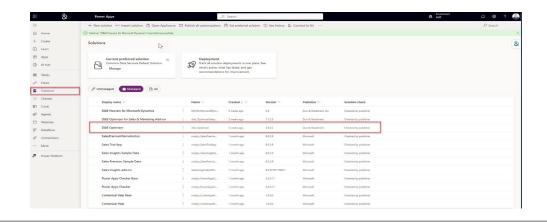
## **Step 3: Installation Confirmation**

Once you click **Submit**, installation will begin and may take 10–15 minutes.



## Step 4: Confirm Installation

- Navigate to <u>Power Platform Admin Center</u>
- Go to **Environments** > Select your environment
- Under Resources > Dynamics 365 Apps, confirm D&B Optimizer is listed



Next up: Security Role Assignment, Company Profile setup, and data mapping...

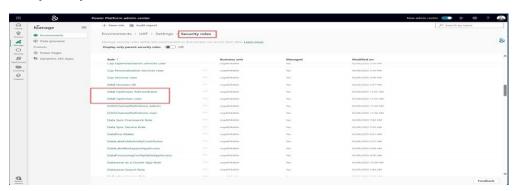


# Assigning Security Roles

After installation, you will need to assign roles to enable access:

#### **Roles Created Automatically**

- D&B Optimizer Administrator: Required for configuration access and field mapping
- **D&B Optimizer User**: Grants visibility into Company Profile data and enables matching/enrichment
- **D&B Optimizer Application User**: A specialized, non-interactive user account automatically created during the installation of the D&B Optimizer solution in Microsoft Dynamics 365. This account is essential for facilitating secure, automated interactions between your Dynamics environment and Dun & Bradstreet's data services.



## **Key Features:**

- **Automated Operations**: Enables background processes such as data matching, enrichment, and synchronization without manual intervention.
- **Security Role Assignment**: Equipped with a dedicated security role that grants the necessary permissions to perform its functions securely.
- **License-Free**: As a non-interactive user, it does not consume a Dynamics 365 license, ensuring cost-effective operations.

#### **Best Practices:**

- Maintain Integrity: Avoid modifying or deleting this user account to prevent disruptions in D&B Optimizer functionalities.
- Monitor Permissions: Ensure the assigned security role remains unchanged to maintain seamless operations.
- **Regular Audits**: Periodically verify the application's user settings to ensure compliance with your organization's security policies.

For more information on managing application users in Dynamics 365, refer to Microsoft's official documentation: Create and manage application users in Microsoft Dataverse.



## **Assign Roles**

- Go to Power Platform Admin Center > Environments > [Your Environment] > Settings > Users + permissions > Users
- Select a user and assign the appropriate D&B Optimizer role
- Optionally assign roles at the Team level via Security > Teams

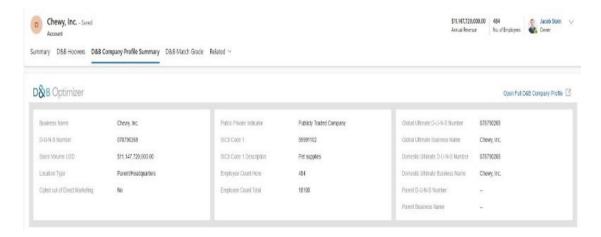
Users without the required role:

- Will not see D&B data in records matched by other users
- Will not trigger real-time matching/enrichment events

P D&B Optimizer Administrator or System Administrator are required roles for configuring settings and mappings within Optimizer for Dynamics

# **D&B Company Profile Setup**

Once a record is matched to a DUNS Number, a D&B Company Profile summary becomes visible on the Account or Lead form in Dynamics 365. Company Profile Not Displaying



# To Add the Company Profile to a Custom Form:

- 1. Open Power Apps and navigate to Solutions
- 2. Choose your environment and select the **Account** entity
- 3. Click Forms and open your desired Account form (e.g., Main,)
- 4. In the Field Explorer, locate Company Profile ID (**dnb\_businessprofileid**) and drag it into the form



5. Insert a Web Resource with the following settings:

Web Resource Name: WebResource\_BusinessProfileViewerInline

Label: BusinessProfileViewerInline

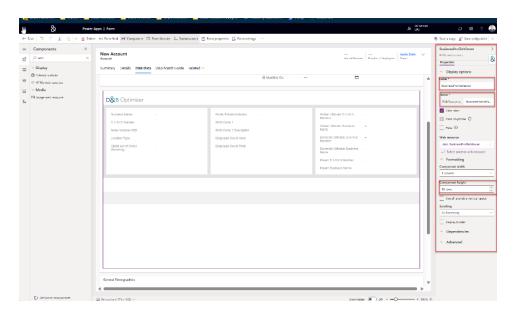
o **Display Mode**: One Column

Number of Rows: 16

Visibility: Checked (visible by default)

Restrict Cross-Scripting: Unchecked

Border: Disabled



PEnsure both the Company Profile ID field and web resource are placed on the same form.

## **Final Steps**

- Click OK and Save the form
- Select Publish All Customizations
- Open a matched account record to confirm the Company Profile appears and displays data.

Only matched records will display the D&B Company Profile summary and the Company Profile ID Lookup field is populated with a hyperlink. Only records with D&B Company Profile summary will utilize RUM (per unique DUNS number).



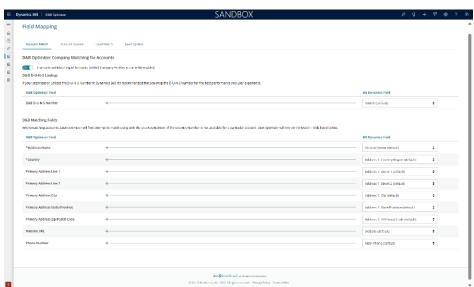
# Configuring Match and Enrichment Mappings

## Input (Match) Field Mappings

Define which fields from your Account and/or Lead, will be used to identify a match.

Default fields often include:

- Business Name (required)
- Address (Street, City, State, ZIP)
- Country (required)
- Website (Domain match is always accepted at Confidence Code of an 8)
- Phone Number
- **DUNS Number** (optional direct match override) (Confidence Code of 10)



? Another attempt at matching automatically occurs when one/any of these fields are updated on previously unmatched records.

⚠ Important: If a D-U-N-S Number is entered incorrectly (e.g., wrong digits or missing leading zeroes), the match will automatically fail. Optimizer will not fall back to business name or address logic in this case. Always ensure D-U-N-S Numbers are exactly 9 digits, including any leading zeroes.

If the D-U-N-S field is mapped and populated, Optimizer will prioritize it for matching and ignore the other match fields. If not, the remaining fields are used in combination for entity resolution. 

The Basics on Data Matching



## Enrichment (Update) Field Mappings

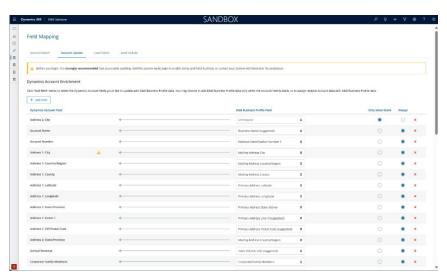
Enrichment mappings determine which Dynamics fields are populated with D&B data following a successful match. Only System Administrators and users with the D&B Optimizer Administrator role can configure these. Choose which Dynamics fields will be populated with D&B data after a successful match. 

D&B Optimizer for Microsoft Field Guide

Two enrichment overwrite options:

- Only When Blank: Default; will fill in if Dynamics field is blank, only; preserves existing data: will never write a null value.
- **Always**: Will fill in Dynamics field if blank; will overwrite Dynamics field with existing value if different; will never overwrite an existing value if D&B has a null value.

Mappings can be created via the D&B Optimizer App or Advanced Settings > Customizations.



🦞 Configure all match and enrichment mappings **before** initiating any imports or bulk updates.

## **Exclude Records from Optimizer Functionality**

You can prevent specific records from being matched or enriched using the custom field **"Exclude from D&B Optimizer"**.

When this field is set to "Yes", the record will:

- Not be picked up for matching
- Not be enriched
- Be excluded from RUM (Records Under Management) tracking

## To add this field:



- 1. Open any Account or Lead record
- 2. Click Form (for Accounts) or Form Editor (for Leads)
- 3. In the Field Explorer, search for "Exclude from D&B Optimizer"
- 4. Drag the field onto the form, preferably in the **Summary** section
- To apply exclusions in bulk, use **Advanced Find** and **Bulk Edit** features within Dynamics.

Important: If your organization plans to reduce Records Under Management (RUM) before a contract renewal, it is recommended to set the "Exclude from D&B Optimizer" field to Yes and remove the Company Profile ID (dnb\_businessprofileid) from any matched records you no longer wish to manage. This ensures those records are not counted as active RUM in the subsequent term. Exclusion alone does not automatically remove an existing match.

Next up: Enabling auditing and data history, SBC + match modes, and Power BI reporting...

# **Auditing Setup for Enrichment**

Enabling auditing ensures visibility into Dynamics field-level changes made by D&B Optimizer during enrichment.

#### Step 1: Enable Global Auditing

- Navigate to Advanced Settings > System > Auditing > Global Audit Settings
- Check Start Auditing
- Select Common Entities or specify only the relevant ones (e.g., Account, Lead, Contact)

#### Step 2: Enable Entity-Level Auditing

- Go to Advanced Settings > Customizations > Customize the System
- Expand Entities > Account, Lead, Contact, etc.
- Open the Entity and enable Auditing in the Data Services panel

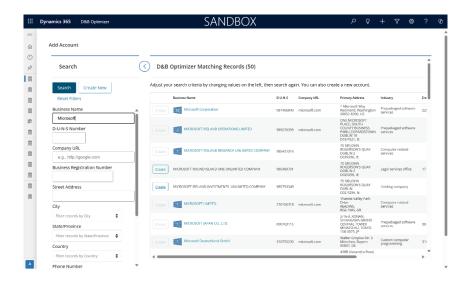
#### Step 3: Enable Field-Level Auditing

- For each entity field you wish to audit, check the Audit checkbox in the field properties
- Save and publish your changes
- To view audit history: Navigate to Account > Related > Audit History
- For more information on managing auditing in Dynamics 365, refer to Microsoft's official documentation: *Enable Auditing*



# Search Before Create, Bulk & Transactional Match

# Search Before Create (SBC)



SBC helps prevent duplicates by surfacing real-time D&B matches before a new record is created.

- Works on Account and Lead forms
- Can be triggered via Quick Create or Standard forms
- Honors Dynamics form precedence settings
- You can disable record creation from SBC to enforce duplicate prevention.





#### **Bulk Match**

Bulk Match allows you to match and enrich records in mass. \(\struct \) Matching/Enrichment Not Working

- Is available only to Admin or Optimizer Admin role
- Attempts matches only unmatched records
- Requires prior completion of field mappings
- Can be initiated via classic UI or modern App settings panel
- ♀ Avoid running during major imports Bulk Match is preferred for performance

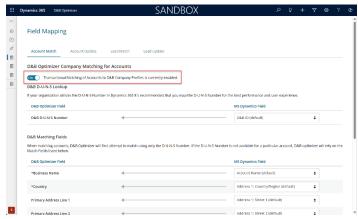


Pulk Match will not automatically include newly added records. It is a manual process used to match existing records already in your system. To ensure new records are included, re-run Bulk Match after imports or large updates. Nightly refresh, by contrast, only updates records that have already been matched.



#### Transactional Match

- Runs in real time when records are created or updated
- Can be enabled/disabled per entity in the Optimizer App settings
- Recommended to disable during imports to avoid performance issues



For importing a large number of records, disable transactional match before bulk importing, then run Bulk Match after import.

Coming next: Managing duplicates, setting up Power BI, and advanced troubleshooting...

# **Duplicate Management**

D&B Optimizer enhances the duplicate detection experience in Dynamics by:

- Helping identifies records with shared D-U-N-S Numbers
- Leveraging Dynamics merge functionality (based on user role permissions)

## Merge and Delete Behavior

- **Optimizer User**: Can access match results, but must also have merge/delete permissions granted through other roles
- Optimizer Administrator: Can view duplicates in UI and trigger deletion if permissions are granted

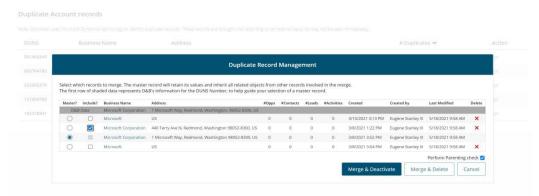
Role assignment controls access, but not the core ability to merge or delete — those must be configured through standard Dynamics security roles.



## Merge Outcomes: Deactivate vs. Delete

When merging duplicate records in Dynamics 365, the system provides two options for handling the subordinate (duplicate) record:

- Merge and Deactivate: This is the default behavior. The subordinate record is deactivated, preserving its data for audit trails and historical reference. All child records (e.g., activities, notes) are reparented to the master record. This approach maintains data integrity and allows for future reference to the original record.
- Merge and Delete: In this scenario, the subordinate record is permanently deleted after
  the merge. This action removes the record entirely from the system, including its audit
  history. Use this option with caution, as it eliminates the possibility of reviewing the original
  data post-merge.



The ability to delete records may be restricted based on user security roles. Ensure appropriate permissions are granted before attempting a merge and delete.

# Parenting Check During Merge

The **Parenting Check** is a safeguard mechanism in Dynamics 365 that ensures data consistency during the merge process. It verifies whether the records being merged have different parent records (e.g., different parent accounts for contacts). If a discrepancy is detected and the Parenting Check is enabled, the system will prevent the merge to avoid unintended data hierarchy changes.

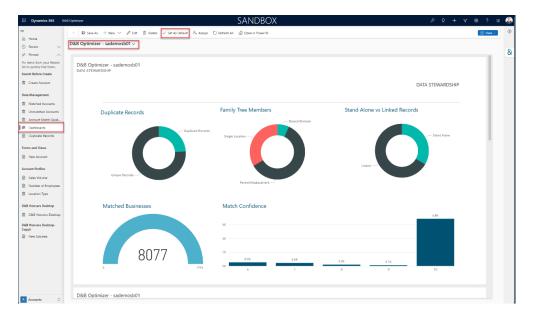
- **Enabled**: The system checks for differing parent records and blocks the merge if inconsistencies are found. This is useful for maintaining strict data hierarchies and preventing accidental reparenting of child records.
- **Disabled**: The system allows the merge to proceed even if the records have different parent records. Child records from the subordinate are reparented to the master record, which may result in changes to the data hierarchy.



Carefully consider the implications of disabling the Parenting Check. While it allows for more flexible merging, it may lead to unintended data structure changes if not managed properly.

# Power BI Reporting Integration

D&B Optimizer provides out-of-the-box Power BI dashboards to measure data health and enrichment performance. You can view these dashboards within Power BI or embed them directly in Dynamics 365. \*Power BI Dashboards



## Prerequisites

- Power BI Pro Desktop Edition (Windows only)
- A Dynamics environment with D&B Optimizer installed
- Download the D&B Template. The file name will look like this:
   dnb\_Optimizer 1 1 0 0 powerbi.pbit.

## Step 1: Download and Open the Power BI Template

- Download the latest .pbit D&B Optimizer Power BI template from your onboarding resource or D&B support
- 2. Open Power BI Desktop
- 3. Select File > Import > Power BI template



#### Step 2: Connect to Dynamics

- 1. Navigate to Home > Edit Queries > Data source settings
- 2. Update the OData feed URL to your environment's API endpoint:
  - o Format: https://<your\_instance>.crm.dynamics.com/api/data/v8.2
- 3. Choose Organizational Account and Sign In with your Dynamics credentials
- 4. Select **Connect** and apply the changes

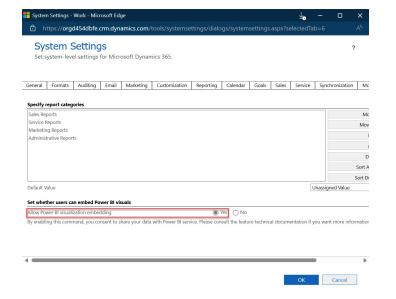
#### Step 3: Publish to Power BI Web

- 1. Go to Home > Publish
- 2. Choose the appropriate Workspace
- 3. Upon success, your report will be available in Power BI Web



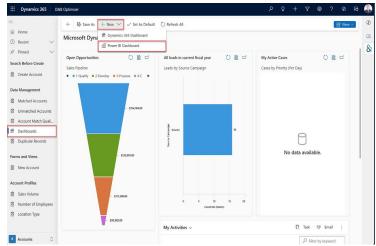
Step 4: Embed Dashboards in Dynamics

- 1. In Dynamics, go to Settings > Administration > System Settings > Reporting
- 2. Set Allow Power BI visualization embedding to Yes





- 3. Navigate to Sales > Dashboards > NEW > Power BI Dashboard
- 4. Select the Workspace and the published Dashboard
- 5. Save and Set as Default if desired



Optional: Share Dashboards

- 1. In Power BI Web, open the dashboard
- 2. Click **Share** and enter Dynamics users or Teams
- 3. Confirm recipients have Power BI licenses

#### Step 5: Schedule Refresh

- 1. In Power BI Web, go to **Datasets > Schedule Refresh**
- 2. Enter credentials and enable refresh toggle
- 3. Set refresh frequency and time

A schedule must be configured to ensure dashboards are updated regularly with new CRM data.

# Troubleshooting & Known Issues

#### **Installation Problems**

Issue: Cannot install from AppSource

**Resolution:** Confirm your Org ID has been activated by D&B. This is required before proceeding with installation.

Issue: App install stalls or fails mid-way

**Resolution:** Verify permissions. Only users with Global Admin or Power Platform Admin roles can install apps in some environments.



## Company Profile Not Displaying

**Issue:** Web Resource not loading on Account form **Resolution:** 

- Confirm dnb\_businessprofileid and the Web Resource are on the same form
- Verify Web Resource settings (Visibility checked, Restrict Cross-Scripting unchecked)
- Ensure record is matched (profile only appears after match)

#### Power BI Dashboards

**Issue:** Data not populating in Power BI **Resolution:** 

- Recheck OData URL and credentials in Power BI Desktop
- Confirm the correct environment and security roles are used
- Schedule refresh in Power BI Web to see new data

# Matching/Enrichment Not Working

**Issue:** Records are not being matched or enriched **Resolution:** 

- Check if match input fields (Name, Address, Country) are mapped correctly
- Ensure D-U-N-S is correctly mapped and overriding
- Confirm transactional match or bulk match has been enabled

Issue: Data is not overwriting as expected

#### Resolution:

- Review overwrite settings under enrichment mapping
- If set to "Only When Blank," data must be empty to populate
- If "Always," enable auditing to retain historical changes



## **Contact & Support**

## **Onboarding Support**

Your D&B Onboarding Consultant is your primary point of contact during installation and configuration. They will guide you through setup, mapping, and best practices for launch.

## Post-Implementation Support

After go-live, support is available via:

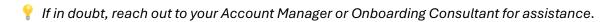
- D&B Customer Service: For help with data content, enrichment, and product behavior
- Technical Support Portal: Digital Service Center: support for all things Dun & Bradstreet
- Submit a ticket at: <a href="https://service.dnb.com/home">https://service.dnb.com/home</a>
- US Phone: (833) 362-3279 M-F 8:00am-9:00pm EST
- CA Phone: (800) 463-6362 M-F 8:00am-9:00pm EST
- After Hours/Outages Phone: (866) 465-3829 (24x7)

For international contact options, visit the country-specific service portals listed in your onboarding materials.

## Subscriptions & Alerts

Stay up to date with:

- Service alerts at status.dnb.com
- Product updates & release notes: Available via the AppSource listing or D&B communications
- Email notifications: Subscribe via <u>D&B Service Subscriptions</u> under Notifications



# Glossary & Key Terms

**AppSource** - Microsoft's app marketplace where D&B Optimizer is hosted and installed.

**Auditing** – A feature in Dynamics that tracks changes made to records. Required for tracking field-level data enrichment by D&B Optimizer.

**BEMFAB** – A U.S.-only indicator describing a record's marketing status. Common values include:



- M = Marketable
- N = Not Matched
- O = Out of Business
- A = Undeliverable
- D = Delisted
- X = Miscellaneous

**Bulk Match** – A manual process used to match and enrich large volumes of records. Typically used after mass imports.

**Confidence Code** – A two-digit score (01–10) reflecting how closely your data matches a record in D&B's reference database. A higher score indicates a more reliable match.

**Corporate Linkage** – The hierarchical relationships between business entities in a corporate family (parent, HQ, global/domestic ultimate, branch).

**D-U-N-S® Number** – A unique nine-digit identifier assigned by D&B to individual business entities worldwide.

**D&B Company Profile** – A visual panel available on matched records showing key firmographic attributes pulled from D&B's global database.

**Enrichment Mapping** – The process of defining which Dynamics 365 fields will be populated using D&B data following a match.

**Exclude from D&B Optimizer** – A Dynamics field that, when set to "Yes," prevents a record from being matched or enriched and excludes it from Records Under Management (RUM).

**Firmographics** – Core business descriptors such as company name, revenue, employee count, industry classification, location, and legal structure.

**Match Data Profile (MDP)** – A 14-part string that describes how each field matched, and which D&B data element was used (e.g., Tradestyle, Former Address).

**MatchGrade** – A character string that shows how closely various input fields matched D&B records. Each character corresponds to a match field (e.g., A = strong match, F = weak match).

**Power BI** – Microsoft's business intelligence tool used to visualize and analyze data. D&B Optimizer provides ready-to-use dashboard templates for reporting.

**Power Platform Environment** – A container within the Microsoft ecosystem where Dynamics 365, Power Apps, and other components run. Installations and solutions are bound to specific environments.



**RUM (Records Under Management)** – Refers to the number of CRM records being matched and enriched by D&B Optimizer. Affects licensing and credit usage.

**Search Before Create (SBC)** – A feature that allows users to check for existing matches before creating new records, reducing duplicates, and maintaining data quality.

**Transactional Match** – Real-time matching triggered upon record creation or updates. Can be toggled per entity within the Optimizer configuration.

**Web Resource** – A script or visual component added to a Dynamics form, such as the WebResource\_BusinessProfileViewerInline used to render the D&B Company Profile.