Optimist
User Guide

RMA Extract Utility
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**Optimist**

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Introduction

About the RMA Extract Utility

The RMA Extract Utility (RMAEU) is a tool designed to support the extraction of data from Optimist models in order to provide data to the Risk Management Association (RMA) for their annual statement studies.

The RMAEU allows a system administrator to extract data from either an SQL Server installation of Optimist, or from a network directory containing many .opt files.

Purpose of this guide

This guide provides instructions for using the RMAEU to extract data from Optimist models for the RMA annual statement.

Audience

This user guide is intended for system administrators of Optimist.

Process overview

The following flow chart provides an overview of the data extraction process using RMAEU.
How the RMA Extract Utility works

The utility automates the extraction of data from the Optimist database (or .opt files) and loads the resulting information into the specified RMA Database (as provided by the Risk Management Association for that particular year).

The automation of this process is supported by an administrator defined mapping in order to define what financial and non-financial (e.g. Model and Statement Properties) are to be applied to the various fields in the RMA database.
Using the RMA Extract Utility

Steps for Using the RMAEU:

1. Establish Database Connections
2. Complete Bank Information
3. (optional) Generate Mappings from Optimist data to RMA DB fields
4. (optional) Apply Exclusion Filters and Set Extraction Parameters
5. Execute Data Extraction

Step 1: Establish Database Connections

Prior to being able to complete the mapping and extraction processes, it is necessary to create a connection to one of the following data sources:

- the Optimist SQL database
- a network directory where .opt files are stored

To do this:

1. Run the RMA Extract Utility.

Following is an example of the main screen:
2. Depending on the data source you wish to use, select the radio button for either:

- **SQL Server Connection**; or
- **Network Connection**
Connecting to the Optimist Admin Database

To successfully complete an extract, it is necessary to establish a connection to the Optimist Administration database.

1. Enter the connection string to the Optimist Administration Database in the **SQL Server Connection String** field (note, the Optimist Administration database does not have to be housed in a SQL Server environment for this operation), or select the ellipsis button to the right of this field.

2. Enter the network path to where Optimist is installed in the **Optimist Directory** field (e.g. `c:\Program Files\Inmatrix\Optimist\`).

Establish an SQL connection string

**If you need to establish an SQL connection string:**

To establish a connection string to the databases which were established for Optimist, complete the following steps:

1. Select the ellipsis button to the right of the **SQL Server Connection String** field.

   The Select a Database dialog is displayed.

2. Select either the **Microsoft Access** or **Microsoft SQL Server** radio buttons depending on the particular installation architecture of Optimist.

3. For Microsoft Access based installations:
   - select the ellipsis button to the right of the **Select Database File** field and browse to the Optimist installation path
   - locate and select the file `OptAdmin.mdb` or `OptAdmin75.mdb` and click **Open**.
4. Click the **Test Connection**... button.

5. If the test is successful, click the **OK** button to save.

**Extracting from a Network Directory**

**If you have selected to use a network connection:**

1. Enter the network path in the **Network Directory** field or click the ellipsis button and navigate to the relevant folder.

   **Note:** A connection to the Optimist Administration database is still required for extraction from a Network Directory.

2. Enter the network path to where Optimist is installed in the **Optimist Directory** field (e.g. c:\Program Files\Inmatrix\Optimist\).

3. Select the **Recursive Search** check box if you want the RMAEU to look for .opt models in all sub-directories within the directory you have specified as the extraction source.

**Tip**

Do not select the **Recursive Search** check box if you want to only search for .opt models in the directory you have specified (excluding sub-directories within it).

**Step 2: Complete Bank Information**

**Define Target information**

Upon connection to the RMA database, the RMAEU will automatically extract the required fields and data types from the Database Schema. The administrator can populate the information into the Bank Information table (tbl!Transmittal) via the RMAEU.

First define the target information. To do this:

1. If you wish to use a different mapping file from the default, click the ellipsis button next to the **Mapping File** field to navigate to an alternative mapping file.
2. In the **RMA Database** field, check that the database displayed is current.

   If the database displayed is not current, click the ellipsis button next to the field to navigate to the correct RMA database.

3. Specify the **Fiscal Year Start** and the **Fiscal Year End** as per the RMA requirements for the year of submission.

4. Select the relevant check boxes if you wish to:
   
   - **Include Statements with Currency Conversion not in USD** (i.e. will include financial statements that have been converted to foreign currencies)
   
   - **Include Budget Projection Statements** (i.e. will include financial statements that are flagged as Budget periods within the Optimist model).

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**Complete Bank Information**

1. Select the **Edit Mapping File** button.

   The Advanced Settings dialog is displayed.
2. Select the **Banking Information** tab.

The required fields from the tblTransmittal table within the RMA database will auto populate into the display grid.

3. Enter your bank information by typing directly into the field text boxes.

4. Click the **Save** button to retain the information in the mapping file.

**Tip**

If you wish to modify the generic mapping file, refer to step 3: Generate Mappings from Optimist Data to RMA DB Fields, otherwise go to step 5.

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**Step 3 (optional): Generate Mappings from Optimist Data to RMA DB Fields**

**Create new mappings**

If you wish to modify the generic mapping file, select the **Mappings** tab in the Advanced Settings dialog.
Then select an appropriate mapping for each field within the display grid by clicking the ellipsis button next to the appropriate field.

You can do this using either:

- the RMAEU Formula Builder; or
- VBScript

Refer to the instructions below.

**Edit Mappings**

Once the ellipsis button next to the appropriate Mapping field has been clicked, the **Edit Mapping Field Source** dialog will display.
From here, it is possible to select any of the following Optimist objects to map into the RMA field:

- An Income Statement account (such as Revenue or COGS)
- A Balance Sheet account (such as Accounts Receivable)
- Any of the Optimist Drivers or Results
- Model Properties
- Statement Properties
- Custom (KPI) Variables
- RMA Formulae
- Other (Model ID or Statement Date)
To map a specific Optimist object to the selected RMA database field, click on the relevant object from within the Edit Mapping Field Source dialog and then click **OK**.

To clear the mapping for a particular RMA field, select the **Clear Mapping** button from within the Edit Mapping Field Source dialog and then click **OK**.

### Create new mappings using the RMAEU Formula Builder

#### Using Text Fields and Constants

The Formula Builder supports the ability for an administrator to define both constants and text values to be assigned to any of the fields in the RMA database.

On the main form of the utility, click the **Edit Formula** button.

The Formula Edit dialog is displayed.

![Formula Edit dialog](image)

Use this dialog to define constants and text values to be assigned to any of the fields in the RMA database.

For example, using the following syntax in the **Ratio Formula** field will place the text “P” in the Record Type Field:

“P”
Alternatively, a constant can be applied to the field by using the following syntax:

\[ \text{<number>} \text{ (where <number> is a numerical value), e.g. } 8.322 \]

**Building Simple Formulae**

Simple formulae can be constructed in the RMAEU Formula Builder, using common mathematical operators, such as +, -, /, *. In addition, functions such as \( \text{pp}[\] and \( \text{cp}[\) allow the user to query specific Optimist accounts in either the current period (cp) or previous period (pp).

The following example would calculate the Revenue Growth Ratio %

\[
\left( \frac{\text{cp}[\text{Revenue}] - \text{pp}[\text{Revenue}]}{\text{pp}[\text{Revenue}]} \right) \times 100
\]

**Create new mappings using VBScript**

The Formula Builder supports the use of VB Script where required. For example, the following script can be entered into the formula builder:

```
If cp[Billings in Excess of Costs] <> 0 Then
  Result = “P”
Else
  Result = “G”
End If
```

It should be noted that if using If, Then, Else constructs such as the above, each branch of code must return a result.

**Loading an existing mapping file**

To use an alternative mapping file, enter the file name into the **Mapping File** field in the Target section of the main form (refer section 2 for more detail).
Step 4: (optional) Apply Exclusion Filters and Set Extraction Parameters

Using Extraction Filters

Extraction Filters can be used to ensure that only certain model or statement types are extracted from the Optimist models and submitted to RMA.

Excluded statement or model types may include the following:

- Projections
- Interims
- Management Prepared Financials

To view and set extraction filters, complete the following steps:

1. Select the Extraction Filters tab from the Advanced Settings dialog (accessed by clicking the Edit Mapping File button on the main form).

2. Select any model types that are to be excluded from the RMA submission from within the top left panel of the Extraction Filters page.

3. Select any statement types that are to be excluded from the RMA submission from within the top right panel of the Extraction Filters page.
4. Select any **model properties** that are considered **mandatory** for a successful submission.

These might include NAICS or SIC codes. Any Optimist model that does not have these fields populated would be excluded from the extract database.

The Extract Utility will check for duplicate models, where a defined primary key exists in more than one model.

To define duplicate model checking:

1. Select an appropriate Primary Key from the dropdown (if there is no duplicate model checking to be completed, select ‘None’).

2. Select either of the following options to define how the utility should handle duplicate models:

   - Use the model that was modified more recently;
   - Use the model that was created more recently
Step 5: Execute Data Extraction

**Extract data**

Once the mappings have been established between the Optimist data and the required RMA extract fields, in addition to populating the required Bank Information, it is possible to execute the extraction process.

To do this, click the **Import** button on the main screen.

This will commence the extraction process. As part of the entire extraction process the following processes are completed:

1. Copy raw Optimist data from Optimist models to a Staging Database.

2. Once in the Staging Database, apply necessary filters to eliminate invalid models.

3. Copy data to the RMA Submission and Transmittal Database Tables, applying the appropriate transformations.

The entire extraction process will take a varying amount of time, depending on the number of models being imported in stage 1. Typical processing times will be between 1.5 – 2.0 seconds per model.

**Finalize the RMA DB for submission to RMA**

The Optimist RMA Extract Utility will populate both the Submissions and Transmittal tables that are required within the RMA Submission Database.

It is recommended that users review the contents of both of these tables via MS Access prior to submitting to RMA.
Appendix A – Helper Functions

The RMA Extract Utility Formula Builder includes a number of helper functions to assist in creating mapping formulae for the RMA extract. These functions are detailed below:

**cp[Account]**
Returns the value in *Account* for the current period (i.e. latest period).

**pp[account]**
Returns the value in *Account* for the previous period.

**mp(id)**
Returns the value stored in model property location ‘id’.

For example, mp(0) would return the value stored in the first model property, and mp(5) would return the value stored in the 4th model property.

**csp(id)**
Returns the value stored in the current period within statement property location ‘id’.

For example, csp(0) would return the value stored in the first statement property, and csp(5) would return the value stored in the 4th statement property.

**psp(id)**
Returns the value stored in the previous period within statement property location ‘id’.

For example, psp(0) would return the value stored in the first statement property, and psp(5) would return the value stored in the 4th statement property.

**cpdays()**
Returns the number of days in the current statement period.