

Oracle® Agile Product Lifecycle Management for Process Data Mask Utility Guide

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Agile Product Lifecycle Management for Process

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Preface

Audience

This guide is intended for client programmers involved with integrating Oracle Agile Product Lifecycle Management for Process. Information about using Oracle Agile PLM for Process resides in application-specific user guides. Information about administering Oracle Agile PLM for Process resides in the Oracle Agile Product Lifecycle Management for Process Administrator User Guide.

Variability of Installations

Descriptions and illustrations of the Agile PLM for Process user interface included in this manual may not match your installation. The user interface of Agile PLM for Process applications and the features included can vary greatly depending on such variables as:

- Which applications your organization has purchased and installed
- Configuration settings that may turn features off or on
- Customization specific to your organization
- Security settings as they apply to the system and your user account

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

Software Availability

Oracle Software Delivery Cloud (OSDC) provides the latest copy of the core software. Note the core software does not include all patches and hot fixes. Access OSDC at:

<http://edelivery.oracle.com>.

Chapter 1—Introducing the Data Mask Utility

Purpose

This tool will mask all personally identifiable information in the PLM for Process database.

Note: DO NOT RUN THIS ON LIVE DATABASE!

Restore a backup of the database and run this tool on the backup DB.

Dependencies

.NET Framework 4.6

Oracle Data Access Components (ODAC) with TNS configured [Only if masking an Oracle database]

Chapter 2—Configuring of the Data Mask Utility

Masking rules are configured and can be modified in DataMask.exe.config.

The default rules are recommended and will mask all personally identifiable information.

Mask Field

A MaskField have three properties.

```
<MaskField fieldName="users.FirstName" maskType="Random" maskValue="FirstName"></MaskField>
```

fieldName used to specify a column of a table. Format is <TableName>.<ColumnName>.

maskType used to specify a kind of optional maskType.

maskValue used to mask field with the value.

Mask Types

It supports six types: GenericUnique, FixedString, Random, Password, Passphrase and Truncate for a MaskField.

Config Sample:

```
<MaskRules>
```

```
  <MaskField fieldName="users.UserName" maskType="GenericUnique" maskValue="User">
```

```
</MaskField>
```

This rule will replace users.userName with a unique value generated by adding a sequential number to the string "User"

For example : User1, User2, User3, etc.

```
<MaskField fieldName="users.FirstName" maskType="Random" maskValue="FirstName"></MaskField>
```

This rule will replace users.FirstName with a randomly selected name from the first name list. The list values are come from <P4P_DataMask_Home>\NameFiles\FirstNames.txt.

The maskValue options are "FirstName", "LastName", "FullName".

```
<MaskField fieldName="users.Phone" maskType="FixedString" maskValue=" "></MaskField>
```

This rule will replace users.Phone with " ".

The maskValue specifies what string will be used to update the field.

```
<MaskField fieldName="users.Password" maskType="Password" maskValue=""></MaskField>
```

This rule will generate a new password for each record in the users table.

This rule is specific to the PLM4P database.

```
<MaskField fieldName="users.Passphrase" maskType="Passphrase" maskValue=""></MaskField>
```

This rule will generate a new Passphrase for each record in the users table.

This rule is specific to the PLM4P database.

```
<MaskField fieldName="Person" maskType="Truncate" maskValue=""></MaskField>
```

This rule will truncate the Person table. This type should only be used for deprecated tables.

Mask Conditions

There are two type condition: Exclusions and Inclusions. Except truncate mask type, all others mask types can be allowed to add exclusions or inclusions condition.

Exclusions can be configured so that specific records in the table are not masked. It can use "|" to separate multi-specific values.

Inclusions can be configured so that specific records in the table are masked. It can use "|" to separate multi-specific values.

Note: Only one type of policy (Exclusions or Inclusions) will be allowed in the config file.

In this example, the records where UserName = 'prodikaadmin' OR UserName='system' will be excluded from the UserName masking.

...

```
<MaskField fieldName="users.UserName" maskType="GenericUnique" maskValue="User">
```

```
<Exclusions>
```

```
<ExcludeRecord id="1" columnName="UserName" value="prodikaadmin|system"/>
```

```
</Exclusions>
```

```
</MaskField>
```


...

In this example, the records where UserName = 'prodikaadmin' OR UserName='system' will be UserName masked.

...

```
<MaskField fieldName="users.UserName" maskType="GenericUnique" maskValue="User">
  <Inclusions>
    <IncludeRecord id="1" columnName="UserName" value="prodikaadmin|system"/>
  </Inclusions>
</MaskField>
```

Default Config file

Default config file (DataMask.exe.config) is only exclude prodikaadmin and system when mask users.UserName.

Customer can only mark one or more specified users' information by using inclusion condition. Please see sample config file: DataMask.exe.config_inclusions. Customer can replace placeholder User#1_PKID and User#2_PKID with specified user PKIDs.

...

```
<MaskField fieldName="users.UserName" maskType="GenericUnique" maskValue="User">
  <Inclusions>
    <IncludeRecord id="1" columnName="PKID" value="User#1_PKID|User#2_PKID"/>
  </Inclusions>
</MaskField>

<MaskField fieldName="users.FirstName" maskType="Random" maskValue="FirstName">
  <Inclusions>
    <IncludeRecord id="1" columnName="PKID" value="User#1_PKID|User#2_PKID"/>
  </Inclusions>
</MaskField>

<MaskField fieldName="users.LastName" maskType="Random" maskValue="LastName">
  <Inclusions>
```

```
<IncludeRecord id="1" columnName="PKID" value="User#1_PKID|User#2_PKID"/>
</Inclusions>
</MaskField>
<MaskField fieldName="users.jobTitle" maskType="FixedString" maskValue=" ">
  <Inclusions>
    <IncludeRecord id="1" columnName="PKID" value="User#1_PKID|User#2_PKID"/>
  </Inclusions>
</MaskField>
....
```

Chapter 3—Usage of Data Mask Utility

Requirements to run Data Mask Utility

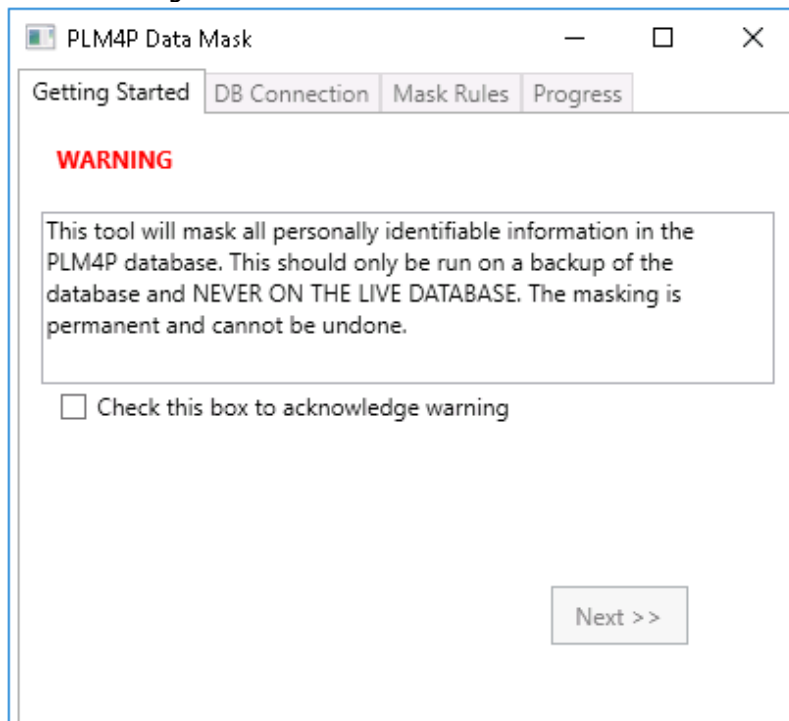
- Restore backup of database
- Need DB User with permissions to update records, create/drop tables, truncate tables

Steps to run Data Mask Utility

Run <P4P_Home>\Apps\DataMaskUtil\DataMask.exe.

Process results will be logged with any errors in /logs/DataMask.log.

- Getting Started UI



Only check "Check this box to acknowledge warning", "Next>>" will be enabled.

- DB Connection

User can use SQL Server or Oracle according to mask DB type. After input DB's connection parameters, click "Test Connection" button. If test connection succeed, "Next>>" button will be enabled.

The image shows two side-by-side screenshots of the 'PLM4P Data Mask' application window, specifically the 'DB Connection' tab. The left window has 'Oracle' selected as the 'Database Type'. It contains fields for 'Datasource', 'UserID', and 'Password' under the 'Oracle Connection' section. The right window has 'SQL Server' selected as the 'Database Type'. It contains fields for 'Server', 'Database', 'UserID', and 'Password' under the 'SQL Server Connection' section. Both windows have 'Test Connection' and 'Next >>' buttons at the bottom.

- Mask Rules

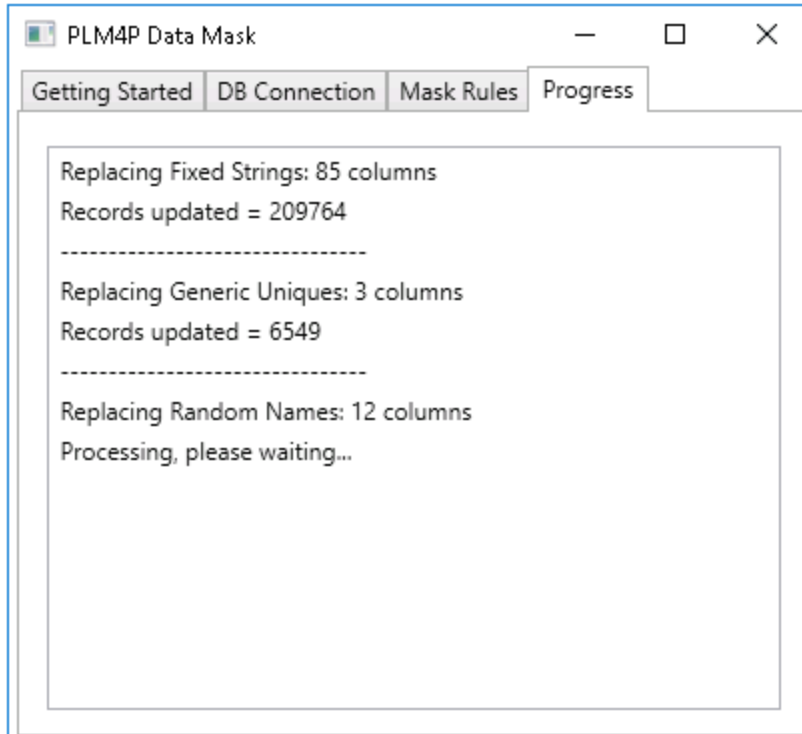
If both ExcludeRecords and IncludeRecords exist in the config, it will display warning message and disable "Start>>" button. Otherwise, it will list all needed masked fields.

The image shows two side-by-side screenshots of the 'PLM4P Data Mask' application window, specifically the 'Mask Rules' tab. The left window displays a warning message: "Only one type of policy (Exclusions or Inclusions) can be allowed in the request, please update to include either Exclusions or Inclusions only before start!". The right window displays a list of fields to be masked, such as "users.UserName -- GenericUnique", "users.FirstName -- Random", "users.LastName -- Random", "users.jobTitle -- FixedString", "users.Phone -- FixedString", "users.Password -- Password", "users.Passphrase -- Passphrase", "users.eMail -- FixedString", "users.Fax -- FixedString", "userEdit.UserName -- GenericUnique", "userEdit.FirstName -- Random", and "userEdit.LastName -- Random". Both windows have a "Start >>" button and a red "Point of no return!!" warning at the bottom.

Important Note: Once the mask is done, you can no longer undo it. Please make sure you have backed up your database before click 'Start>>'.

- Progress

After clicked "Start>>" button, it will mask all list fields. When progressing, it will display masked records count and "Processing, Please waiting..." message. After progress finished, it will display "Process Complete" message.



Note: if you close the tool when it's still in processing, it will stop the mask right away, for those records already been masked, you can no longer undo. For those records not been masked, you can re-run the tool.

