Datamasking over multiple applications with DATPROF Privacy

The challenges with data-masking starts with multiple applications or databases. In particular creating masked data which is consistent throughout all applications and/or databases. By supporting XML structures and with the help of translation tables DATPROF Privacy solves these challenges. This paper shows how we use translation tables and how XML structures are supported.

Translation Table

DATPROF Privacy can save a translation of the masked data. This is useful for unmasking the dataset, but more importantly for consistently mask multiple applications. The easiest way to explain this is by using a simple example.

For example, within your organization you use a CRM application and an ERP application. The CRM application contains an ID, first names, last names and bank accounts. The ERP application contains an ID, names, orders and fees. The ID-number / name combinations are shared between both applications. It's clear, both applications contain privacy sensitive data and needs to be masked. For testing purposes the consistency of the data might be essential, so after masking, the new ID / name combinations should exist and be the same on both sides.

To accomplish this DATPROF Privacy utilizes translation-tables; it saves the masking of the CRM application to a translation-table with the associated ID-number. The second masking template, for the ERP application, can use this translation-table to mask the names consistent with the CRM application. To do this, the application uses the ID-number to lookup the new values.

Production data

CRM Application

ID – Number	First Name	Last Name	Bank Account
123456789	Maarten	Urbach	NL555666777
987654321	Linda	Janssen	AU777555666

ERP Application

ID – Number	First Name	Last Name	Order	Fee
123456789	Maarten	Urbach	Travel insurance	AU $ 50,00
987654321	Linda	Janssen	Credit Card	AU $ 1000,00

After DATPROF Privacy

CRM Application

ID - Number	First Name	Last Name	Bank Account
987654321	XXXX	Urbach	FR444888121
123456789	XXXXX	Janssen	US111777333

ERP Application

ID – Number	First Name	Last Name	Order	Fee
987654321	XXXXX	Urbach	Travel insurance	AU $ 50,00
123456789	XXXXX	Janssen	Credit Card	AU $ 1000,00

Many organizations exchange data with partners. If these messages are to be tested in a non-production environment, new challenges arise if your databases are masked. You might send masked data to a non-masked environment, you might receive non-masked data in a masked environment or you might want to test an interface with another organization. There will be problems if the data differs from the data on the other side.

DATPROF Privacy solves this by capturing these messages and translating these messages to the expected values. For example, an incoming message will be masked and an outgoing message will be translated to the original values. This is also based on the use of translation-tables.