

SYNDICATING QUALIFIED MASTER DATA FIELDS

A Step-by-Step Guide

Applies to:

SAP MDM 5.5

Summary

This document describes how the SAP MDM Syndicator can be used to output qualified fields. This also covers an example of syndicating structured data to an XML file using XSD technology.

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The Scenario

Let's take the vendor repository (SP3Vendor) as the source. In this scenario, the phone number field is a multi-valued qualified field with the country field as a qualifier. Here's a look at the structure and the data stored.

Qualified Lookup Selection

Available lookup records [236 of 236]:

- Afghanistan
- Albania
- Algeria
- American Samoa
- Andorra
- Angola
- Anguilla

Selected lookup records [2]:

- United Kingdom
- United States

Buttons: All, Add, Remove, None

| Lookup Detail | Search Selections |
|----------------|-------------------------------|
| Country | United Kingdom; United States |
| [Standard No.] | Yes |
| [Telephone] | 77946631552; 2538747447 |
| [Extension] | 1445 |
| [Complete No.] | 4477946631552; 12538747447 |
| [Sequence No.] | |

The sample data for a particular vendor is stored is as per the following table.

| <i>Country (Qualifier)</i> | <i>Telephone</i> | <i>Complete No</i> | <i>Extension</i> |
|----------------------------|------------------|--------------------|------------------|
| United Kingdom | 77946631552 | 4477946631552 | 1445 |
| United States | 2538747447 | 12538747447 | 1445 |

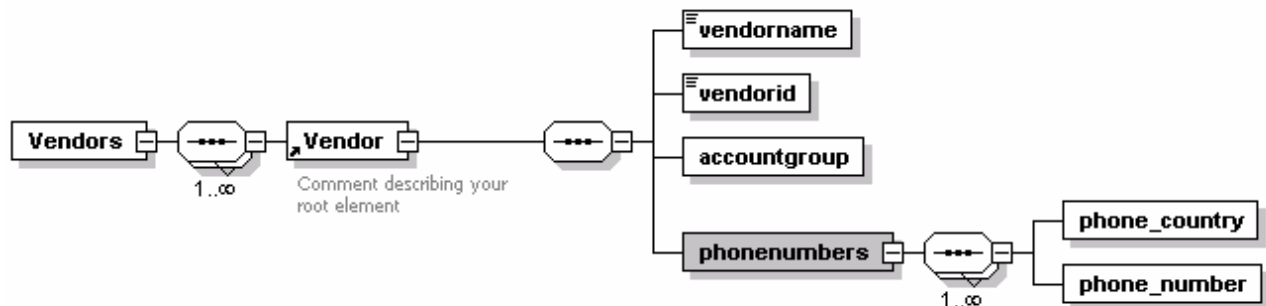
For our process, we will send out the following fields.

| |
|--------------------|
| <i>Destination</i> |
| Vendor Name |
| Vendor ID |
| Account Group |

| |
|-----------------------|
| Phone-Country |
| Phone-Complete Number |

The Schema

Let's also create an XSD file which will hold this information. Here's the graphical view of the schema.



Note that the number of phone numbers to be syndicated can be many per vendor (indicated by the 1..infinity sign). This is the feature that is critical to syndicating multiple qualified fields. The same is also true for the 'Vendor' node. Let's save this XSD in a file 'SP3Vendor_phone.xsd' in a local directory. The entire XSD definition is available in the appendix.

Syndication

Start SAP MDM Syndicator and connect to the SP3Vendor repository. The following steps need to be performed.

The Destination Properties

Set the destination properties as shown below.

The screenshot shows the 'Destination Properties' dialog box. The fields are as follows:

- Type: XML Schema File
- Client system: Business Warehouse
- Port: (empty)
- XML schema: (empty)
- XML file name: D:\MDM\XML\SP3Vendors_qfield\SP3vendor_phone1. ...
- Root: Vendors

Buttons: OK, Cancel

The type of file that is to be syndicated is an XML file with the schema as per an uploaded XSD file. Hence the type is 'XML Schema File'. Set any client system. Also, set the XML file name which stores the schema as saved previously (file 'SP3Vendor_phone.xsd'). Update the root to 'Vendors'.

The Destination Items

Inspect the destination items field. You should see the following structure.

| Destination items: | | | |
|--------------------|-----------------|------------|--|
| Map | Name | Type | |
| | [-] Vendors | | |
| | [-] Vendor | | |
| | vendorname | Text [255] | |
| | vendorid | Text [255] | |
| | accountgroup | Text [255] | |
| | [-] phonenumber | | |
| | phone_country | Text [255] | |
| | phone_number | Text [255] | |

Node Properties

Now, we need to inform MDM that each vendor node can actually store multiple vendor numbers. Go to the 'Destination Items' tab and select the checkbox for row 'Repeatable XML Node' as shown (under the 'Value Column').

| Properties | | |
|---------------------|--------------------------|-------------------------------------|
| Name | Inherit | Value |
| Name | <input type="checkbox"/> | phonenumber |
| Required | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Repeatable XML Node | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Make sure to do the same for the 'Vendor' node too. All records will then be syndicated to a single XML file.

Mapping

Map the respective fields from the Vendor repository. Map the multi-valued qualified lookup field 'Phone Numbers' as displayed. Also, map the top level 'Vendors' node on the source to the individual 'Vendor' node on the destination.

| Source items: | | | |
|---------------------|------------------------|------------------|----|
| Name | Type | Map | De |
| [-] Update Date | Time Stamp | | |
| [-] Phone Number | Lookup [Qualified ...] | ✓ Vendors/Vendor | |
| [-] Country [DF] | Lookup [Flat] | | |
| [Remote Key] | Remote Key | | |
| Name [DF] | Text [50] | ✓ Vendors/Vendor | |
| ISO Code | Text [3] | | |
| Code | Text [2] | | |
| Standard No. [Qual] | Lookup [Flat] | | |
| Telephone [Qual] | Text [30] | | |
| Extension [Qual] | Text [10] | | |
| Complete No. [DF] | Text [30] | ✓ Vendors/Vendor | |
| Sequence No. [Qual] | Text [3] | | |

Map
Unmap

| Destination items: | | | |
|--------------------|-----------------|------------|-------------------|
| Map | Name | Type | Source |
| | [-] Vendors | | |
| ✓ | [-] Vendor | | Vendors |
| ✓ | vendorname | Text [255] | Name 1 |
| ✓ | vendorid | Text [255] | Id [DF] |
| ✓ | accountgroup | Text [255] | Name |
| ✓ | [-] phonenumber | | Phone Number |
| ✓ | phone_country | Text [255] | Name [DF] |
| ✓ | phone_number | Text [255] | Complete No. [DF] |

In a previous step, we marked the 'phonenumber' and 'Vendor' node as a repeatable node. This has enabled the high level mapping of the qualified lookup field Phone Number to the 'phonenumber' node. All information stored in the qualified lookup field should now flow into this node. The Country Name and the Complete No are subsequently mapped to 'phone_country' and 'phone_number' nodes respectively. A similar logic applies for the vendors and all vendors flow into the vendor node in the same file.

Preview

Go to the 'Destination Preview' Page. Here's how the XML looks.

```
<?xml version="1.0" encoding="UTF-8" ?>
- <Vendors>
  - <Vendor>
    <vendorname>Pricer Straits</vendorname>
    <vendorid>105</vendorid>
    <accountgroup>Goods supplier</accountgroup>
    - <phonenumbers>
      <phone_country>United States</phone_country>
      <phone_number>12538747447</phone_number>
    </phonenumbers>
    - <phonenumbers>
      <phone_country>United Kingdom</phone_country>
      <phone_number>4477946631552</phone_number>
    </phonenumbers>
  </Vendor>
- <Vendor>
```

Execute Syndication

Press the 'Execute Syndication' button on the menu bar to create the XML file.

Appendix

The XSD File

The file SP3Vendor_phone.xsd stores the following information

```
<?xml version="1.0" encoding="UTF-8"?>

<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"
  elementFormDefault="qualified" attributeFormDefault="unqualified">

  <xs:element name="Vendor">
    <xs:annotation>
      <xs:documentation>Comment describing your root
element</xs:documentation>
    </xs:annotation>
    <xs:complexType>
      <xs:sequence>
        <xs:element name="vendorname" type="xs:string"/>
        <xs:element name="vendorid" type="xs:string"/>
        <xs:element name="accountgroup"/>
        <xs:element name="phonenumbers">
          <xs:complexType>
            <xs:sequence maxOccurs="unbounded">
              <xs:element name="phone_country"/>
              <xs:element name="phone_number"/>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
```

```

        </xs:sequence>
    </xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="Vendors">
    <xs:complexType>
        <xs:sequence maxOccurs="unbounded">
            <xs:element ref="Vendor"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
</xs:schema>

```

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