

# Value Mapping Replication for Mass Data in PI 7.0 or PI 7.1



## Applies to:

PI 7.0 – PI 7.1. For more information, visit the [Service Bus-based Integration homepage](#)

## Summary

Here you'll find a little example of how you can make a value mapping replication for mass data. It's an easier example for beginners. I hope you enjoy it and useful.

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## Author Bio



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## Scenario

Well, we need to complete our value mapping tables from an external data, may be you'll find a lot of solutions, but why invent the wheel, if we already have a service interface available for this purpose.

Ok here we go:

First, we must register the service in our java proxy, to do this you have to put this link on your browser, remember change the host and port of this for your own data.

<http://<host>:<port>/ProxyServer/register?ns=http://sap.com/xi/XI/System&interface=ValueMappingReplicationOutSynchronous&bean=localejbs/sap.com/com.sap.xi.services/ValueMappingApplicationSynchronous&method=ValueMappingReplicationOutSynchronous>

Great, first step done. Now we need to do some things, I'll explain now.

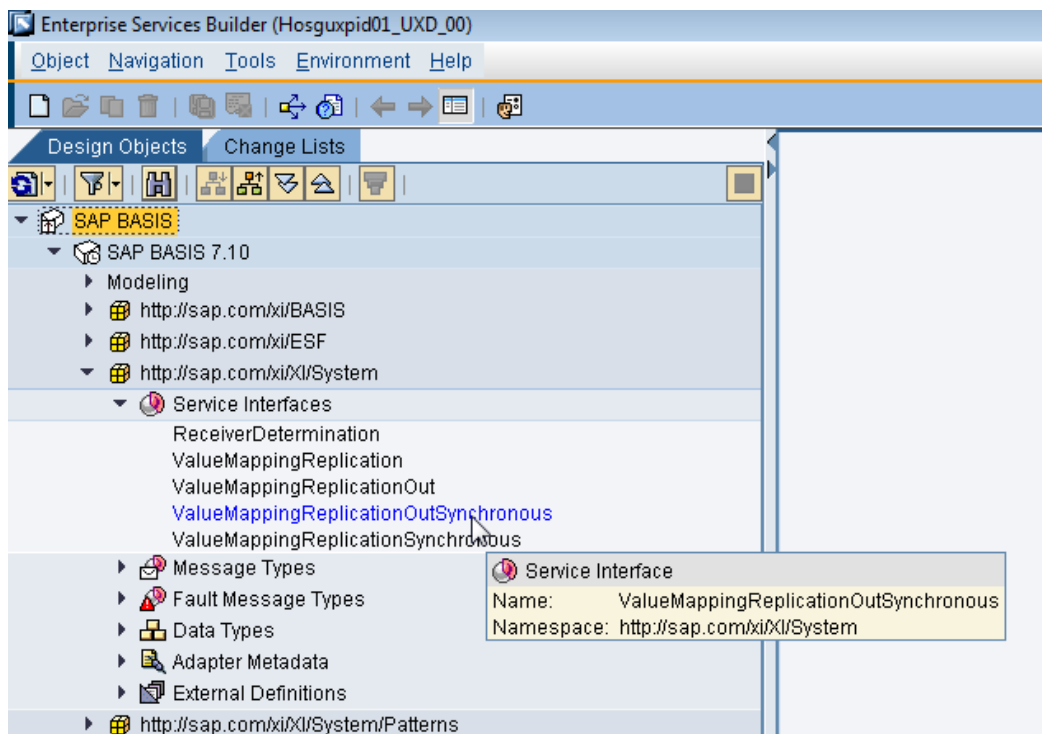
## Integration Repository or Enterprise Service Repository (ESR)

Like you can see on the picture and as we said in the last text, the services already exist, so we don't need to do nothing on the ESR. But take a look for the object there, you have to go to:

SWCV SAP BASIS 7.10

namespace <http://sap.com/xi/XI/System>

Interface Name ValueMappingReplicationOutSynchronous



**Operations**

Operation ValueMappingReplicationOutSynchronous

Description

**Attributes**

Operation Pattern Normal Operation

Mode Synchronous

**Messages**

Role	Type	Name
Request *	Message Type	ValueMappingReplication
Response *	Message Type	ValueMappingReplication
Fault	Fault Message Type	ValueMappingReplication

Well have you found something weird??.. no right, it's all know or us. Well let's continue with our little introduction.

## Integration Directory

Here we need to create a new business component, called Test\_Value\_Mapping, and do not forget put the inbound and outbound interface ValueMappingSynchronous.

**Display Communication Component** Status Active

Communication Component Test\_Value\_Mapping

Party

Description

**Business Component**

Receiver Sender Assigned Users Other Attributes

**Inbound Interfaces**

Name *	Namespace *	Software Compone
ValueMappingReplication	http://sap.com/xi/XI/System	SAP BASIS 7.10
ValueMappingReplicationSynchronous	http://sap.com/xi/XI/System	SAP BASIS 7.10

**Communication Channels**

Name ▲
--------


## Receiver Communication Channel

Here we use an XI receiver communication channel, the most important here is the Path Prefix, this have to appoint to **/MesaagingSystem/receive/JPR/XI**

Display Communication Channel		Status
Communication Channel	CC_XI_Value_Mapping	
Party		
Communication Component	Test_Value_Mapping	
Description	.	
<div style="display: flex; border-bottom: 1px solid black; margin-bottom: 5px;"> <div style="border: 1px solid black; padding: 2px 5px; margin-right: 5px;">Parameters</div> <div style="border: 1px solid black; padding: 2px 5px; margin-right: 5px;">Identifiers</div> <div style="border: 1px solid black; padding: 2px 5px; margin-right: 5px;">Module</div> </div>		
Adapter Type *	XI	http://sap.com/xi/XI/System
<input type="radio"/> Sender	<input checked="" type="radio"/> Receiver	
Transport Protocol *	HTTP 1.0	
Message Protocol *	XI 3.0	
Adapter Engine *	Integration Server	
Addressing Type *	URL Address	
Target Host *	[REDACTED]	
Service Number *	50000	
Path Prefix *	/MessagingSystem/receive/JPR/XI	
<b>Proxy</b>		
HTTP Proxy Host		
HTTP Proxy Port		
User Name		
User Password		=
<b>Authentication Data</b>		
Authentication Type *	Use Logon Data for Non-SAP System	
User Name	[REDACTED]	
User Password	*****	= *****

## Sender Communication Channel

This will be a SOAP sender communication channel, so this way we can expose our interface as a webservice, and this is an easier way to complete our value mapping table ;) . don't you think?.

 **Display Communication Channel**

Communication Channel	CC_SOAP_S_ValueMapping	
Party		
Communication Component	Test_Value_Mapping	
Description		

Parameters
Identifiers
Module

Adapter Type *	SOAP	http://sap.com/xi/XI/System
<input checked="" type="radio"/> Sender	<input type="radio"/> Receiver	
Transport Protocol *	HTTP	
Message Protocol *	SOAP 1.1	
Adapter Engine *	Central Adapter Engine	

General
Advanced

**Inbound Security Checks**

HTTP Security Level \* HTTP

**Security Parameters**

Select Security Profile

**Conversion Parameters**

Do Not Use SOAP Envelope

Keep Headers

Keep Attachments

Use Encoded Headers

Use Query String

**Processing Parameters**

Quality of Service \* Best Effort

## Sender Agreement

Well the sender agreement is like this, appointing to our Communication channel.

**Display Sender Agreement**  
**Sender**  
Communication Party   
Communication Component   
Interface   
Namespace   
**Receiver**  
Communication Party   
Communication Component   
Description   
**Parameters** **Assigned Users**  
Sender Communication Channel \*   
Software Component Version of Sender Interface   
Schema Validation  No Validation  Val

## Receiver Determination

Ok, we have the half of our job done it, now we configure the receiver determination, like this:

**Receiver Determination** Edit View

Status: Active Display Language: Eng

**Sender**

Communication Party:

Communication Component: Test\_Value\_Mapping

Interface: ValueMappingReplicationOutSynchronous

Namespace: http://sap.com/xi/XI/System

**Receiver**

Communication Party: \*

Communication Component: \*

Description:

Contents Configuration Overview

Software Component Version: SAP BASIS 7.10

Type of Receiver Determination:  Standard  Extended

**Configured Receivers**

Search

Rule	Condition	Communication Party	Communication Component
Local Rule			Test_Value_Mapping

**Receiver Determination** Status: Active Display Language: Eng

**Sender**

Communication Party:

Communication Component: Test\_Value\_Mapping

Interface: ValueMappingReplicationOutSynchronous

Namespace: http://sap.com/xi/XI/System

**Receiver**

Communication Party: \*

Communication Component: \*

Description:

Contents Configuration Overview

**Configuration Overview for Receiver Determination**

Receiver ▲

- Test\_Value\_Mapping
  - ValueMappingReplicationSynchronous


**Objects of Selected Connection**

Type ▲	Object
	Sender Agree...   Test_Value_Ma...
	Sender Commu...   Test_Value_Ma...
	Receiver Deter...   Test_Value_Ma...
	Interface Deter...   Test_Value_Ma...
	Receiver Agree...   Test_Value_Ma...
	Receiver Com...   Test_Value_Ma...



## Interface Determination

The interface determination do not need a message mapping, because we sending the same structure like the message type of the service interface, great, easier no?...

 **Display Interface Determination** Status

**Sender**

Communication Party

Communication Component

Interface

Namespace

**Receiver**

Communication Party





Communication Component

Description

Software Component Version of Sender Interface

Maintain Order At Runtime

**Receiver Interfaces \***

  |  

Condition	Operation Mapping	Name *	Namespace *
		ValueMappingReplicationSynch	http://sap.com/xi/XI/System

## Receiver Agreement

Receiver Agreement Edit View

Display Receiver Agreement Status **Activ**

**Sender**

Communication Party

Communication Component Test\_Value\_Mapping

**Receiver**

Communication Party

Communication Component Test\_Value\_Mapping

Interface ValueMappingReplicationSynchronous

Namespace http://sap.com/xi/XI/System

Description

Receiver Communication Channel \* CC\_XI\_Value\_Mapping

Software Component Version of Receiver Interface

Schema Validation  Validation by Integration Engine

**Header Mapping**

Sender Communication Party

Sender Communication Component

Receiver Communication Party

Receiver Communication Component

Well, we have done our configuration, now we need test our interface, like we say here in Chile "listo".

## How to Test?

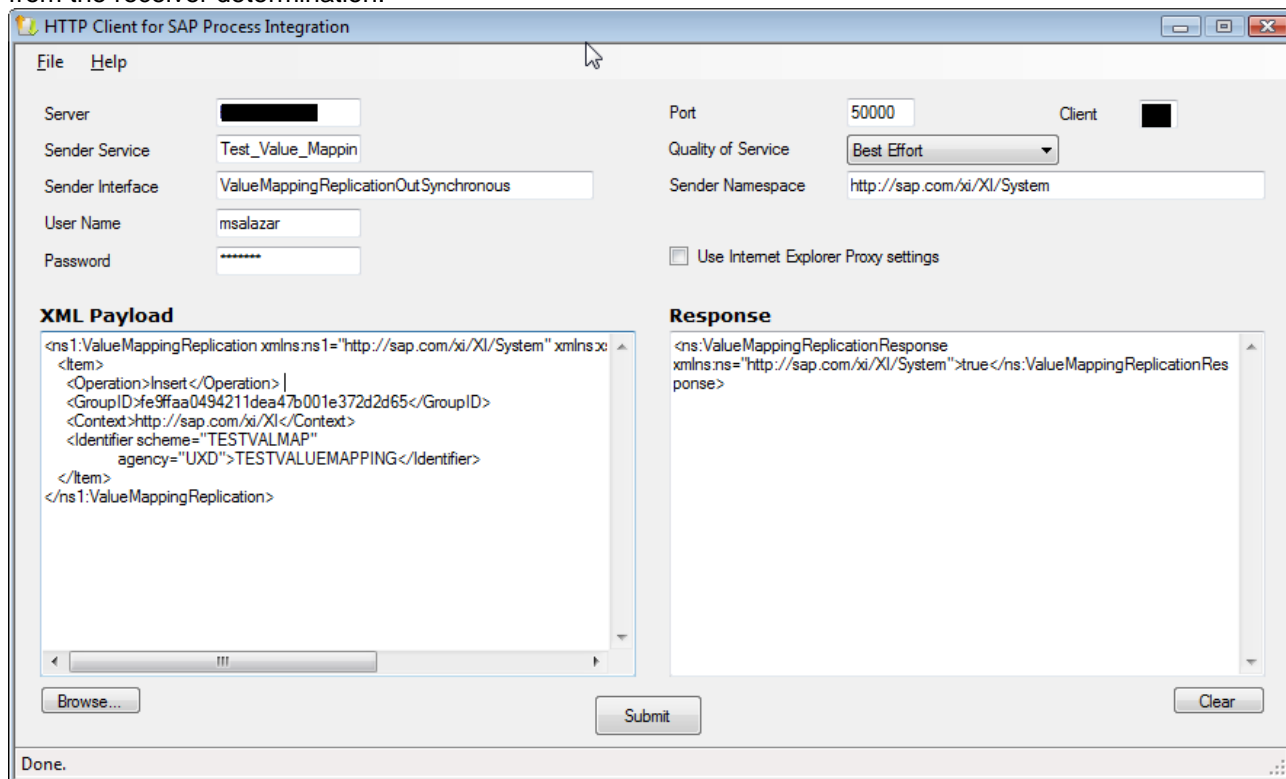
To make the test we will use the [SAP PI HTTP Client](#)

This is the XML content to test our interface or webservice

```
<ns1:ValueMappingReplication
xmlns:xsi="http://www.w3.org/2001/XMLSchemaInstance">
  <Item>
    <Operation>Insert</Operation>
    <GroupID>fe9ffaa0494211dea47b001e372d2d65</GroupID>
    <Context>http://sap.com/xi/XI</Context>
    <Identifier scheme="TESTVALMAP"
      agency="UXD">TESTVALUEMAPPING</Identifier>
  </Item>
</ns1:ValueMappingReplication>
```

```
xmlns:ns1="http://sap.com/xi/XI/System"
```

Well we put this payload in the client, complete the information on the blanks, you can take the information from the receiver determination.



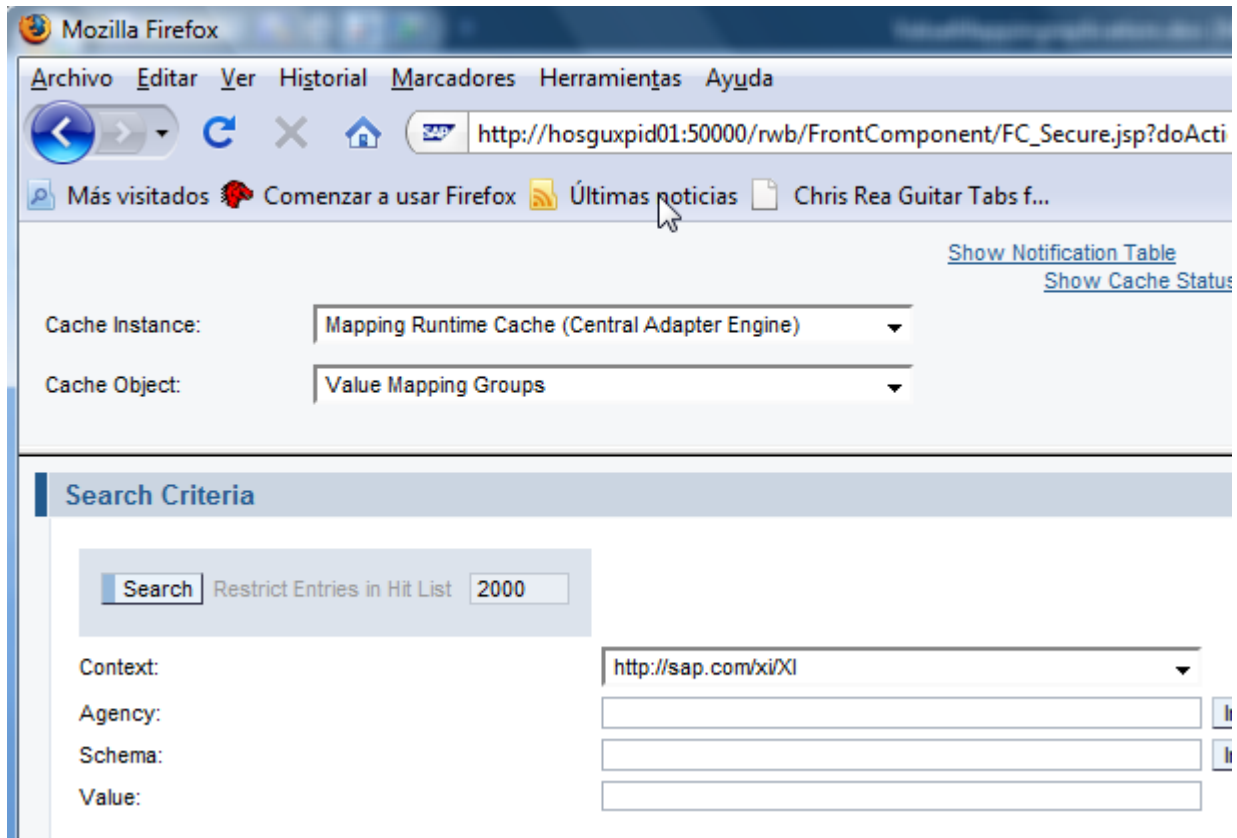
The server response

```
<ns:ValueMappingReplicationResponse
xmlns:ns="http://sap.com/xi/XI/System">true</ns:ValueMappingReplicationResponse>
```

Now we have to check our test, don't we?

Well it's easier go to

[http://<host>:<port>/rwb/FrontComponent/FC\\_Secure.jsp?doAction=showCacheMonitoring](http://<host>:<port>/rwb/FrontComponent/FC_Secure.jsp?doAction=showCacheMonitoring)



Then you must choose the corresponding Value Mapping depending of your group.

Well there is our result

The screenshot shows a Mozilla Firefox browser window displaying a web application. The address bar shows the URL: [http://hosguxpid01:50000/rwb/FrontComponent/FC\\_Secure.jsp?doActi](http://hosguxpid01:50000/rwb/FrontComponent/FC_Secure.jsp?doActi). The page content includes a navigation menu, a search bar, and a table of mapping data. The table is titled "(TPBS\_GEO\_D|DEPARTAMENTO|50)" and has columns for Agency, Schema, Value, and Group ID. The table contains 14 rows of data, with the last two rows highlighted in yellow.

Agency	Schema	Value	Group ID
CRM	Business Partner	985758	fe9ffaa0494211dea47b001e372d2d65
CRM	Business Partner	11111	fe9ffaa0494211dea47b001e372d2d65
CRM	Business Partner	985756	fe9ffaa0494211dea47b001e372d2d65
TPBS_GEO_D	DEPARTAMENTO	50	fe9ffaa0494211dea47b001e372d2d65
TPBS_GEO_D	DEPARTAMENTO	49	fe9ffaa0494211dea47b001e372d2d65
URDCLNT120	GRUPO_DE_ARTICULOS	002010202	fe9ffaa0494211dea47b001e372d2d65
URDCLNT120	GRUPO_DE_ARTICULOS	999999999	fe9ffaa0494211dea47b001e372d2d65
R3	Business Partner	1112221	fe9ffaa0494211dea47b001e372d2d65
R3	Business Partner	985754	fe9ffaa0494211dea47b001e372d2d65
R3	Business Partner	111111	fe9ffaa0494211dea47b001e372d2d65
UXD	TESTVALMAP	TESTVALUEMAPPING	fe9ffaa0494211dea47b001e372d2d65
UXD	TESTVALMAPPING	TESTVALUEMAPPING	fe9ffaa0494211dea47b001e372d2d65

Can you See?!!!! ... It's easier, now you can make more examples by you, and make and stronger value mapping in your interfaces.

Regards.

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## Related Content

[http://help.sap.com/saphelp\\_nwpi711/helpdata/en/2a/9d2891cc976549a9ad9f81e9b8db25/frameset.htm](http://help.sap.com/saphelp_nwpi711/helpdata/en/2a/9d2891cc976549a9ad9f81e9b8db25/frameset.htm)

<http://sdn.sap.com/irj/scn/go/portal/prtroot/docs/library/uuid/00ee347e-aabb-2a10-b298-d15a1ebf43c5>

<https://www.sdn.sap.com/irj/scn/weblogs>

For more information, visit the [Service Bus-based Integration homepage](#)

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