# **PERSON MASTER**

# Service description



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# 1 OVERALL DESCRIPTION

Person master is a web service application that is responsible for managing the identity of persons. The main usage of it is the assignment of  $\underline{U}$ niversal  $\underline{U}$ nique  $\underline{ID}$ entifiers (UUID's) to persons' CPR numbers.

The application was initially created by Gentofte Kommune. Further enhancements and installer have then been created by Magenta ApS.

# **2 IMPLEMENTATION**

## 2.1 Implementation summary

The solution is implemented as a <u>Windows Communication Foundation</u> (WCF) service that is hosted in IIS. The solution requires .Net Framework 4.0

All methods are basically implemented as database stored procedures. The WCF services initialize the input parameters and adjust the output to be returned to clients.

### 2.2 General method signature

The overall signature for all methods is

[Method Name](param1, param2,..., ref string aux)

The aux parameter is used for returning any error messages that may occur in the code



# **3 BUILDING CLIENTS**

In order to build a client for Person Master, you need to do some steps. The description here applies to C# / Visual Studio.NET

### 3.1 Add a service reference

Add a reference to http://personmaster/PersonmasterServiceLibrary.BasicOp.svc

(or wherever the service is installed)

# 3.2 Calling the service

```
WSHttpBinding binding = new WSHttpBinding();
var PersonMasterUrl
="http://personmaster/PersonmasterServiceLibrary.BasicOp.svc"
var SpnName = "host\PersonMaster"
var identity = new SpnEndpointIdentity(SpnName);
EndpointAddress endPointAddress = new EndpointAddress(new
Uri(PersonMasterUrl + "/PersonMasterService12"), identity);
PersonMaster.BasicOpClient client = new
PersonMaster.BasicOpClient(binding, endPointAddress);
string[] pnrs = new string[]{<pnr1>,...};
string aux = "";
var result = client.GetObjectIDsFromCprArray("BacthClient", pnrs, ref
var succeeded = result.Where(res => res.HasValue).Count();
var failed = result.Where(res => !res.HasValue).Count();
Console.WriteLine(string.Format("Batch finished: Size={0}, Succeeded
={1}; Failed ={2}", pnrs.Length, Succeeded, Failed));
```

#### Parameters:

Name	Description
PersonMasterUrl	URL of the installed service. Usually this is  http://[WebsiteName]/PersonmasterServiceLibrary.BasicOp.svc  An additional string "/PersonMasterService12" is added to use SOAP 1.2 in the above example.
SpnName	Service Principal Name is a string that identifies the target service. You can get it from the service WSDL file at Xpath:  //wsdl:service/wsdl:port/wsa10:EndpointReference/Identity/Spn

# **4 METHOD DESCRIPTION**

### 4.1 GetObjectIDFromCpr

Gets the UUID that corresponds to the given CPR number. If there is no UUID corresponding to the CPR number, a new UUID is created.

### 4.1.1 Signature

Guid GetObjectIDFromCpr(string context, string cprNo, ref string aux)

#### 4.1.2 Parameters

Name	Description
context	Arbitrary string specifying the caller's context . Can be anything
cprNo	10 Digit string representing the CPR number to be mapped
aux	Passed by reference, this parameter should contain any error(s) found during processing

#### 4.1.3 Return value

A UUID to which the CPR number is mapped. It will be equal to Guid.Empty if the operation fails.

### 4.2 GetObjectIDsFromCprArray

This is the array version of GetObjectIDFromCpr. Each given CPR number is mapped to a UUID that will be in the corresponding index position in the output.

### 4.2.1 Signature

Guid? GetObjectIDsFromCprArray(string context, string cprNoArr, ref string aux)

#### 4.2.2 Parameters

Name	Description
context	Arbitrary string specifying the caller's context . Can be anything
cprNoArray	Array of 10 Digit strings representing the CPR numbers to be mapped.



Name	Description
aux	Passed by reference, this parameter should contain any error(s) found during processing. The string is formatted as: <error text1="">: <cpr1> , <cpr2> , <error text2="">: <cpr3> , <cpr4> ,  Where <error text=""> is the failure reason</error></cpr4></cpr3></error></cpr2></cpr1></error>

#### 4.2.3 Return value

Array of Nullable<Guid> that contains the UUIDs of the input CPR numbers. Each element is the UUID of the person at the same index position in the input array.

CPR numbers that could not be mapped will have a null value at the corresponding index position.