

# Call Doctor Search Service with GET Method

## **SCENARIO:**

## **Invoking a Web Service with GET Method to Retrieve Information**

## Scenario Description

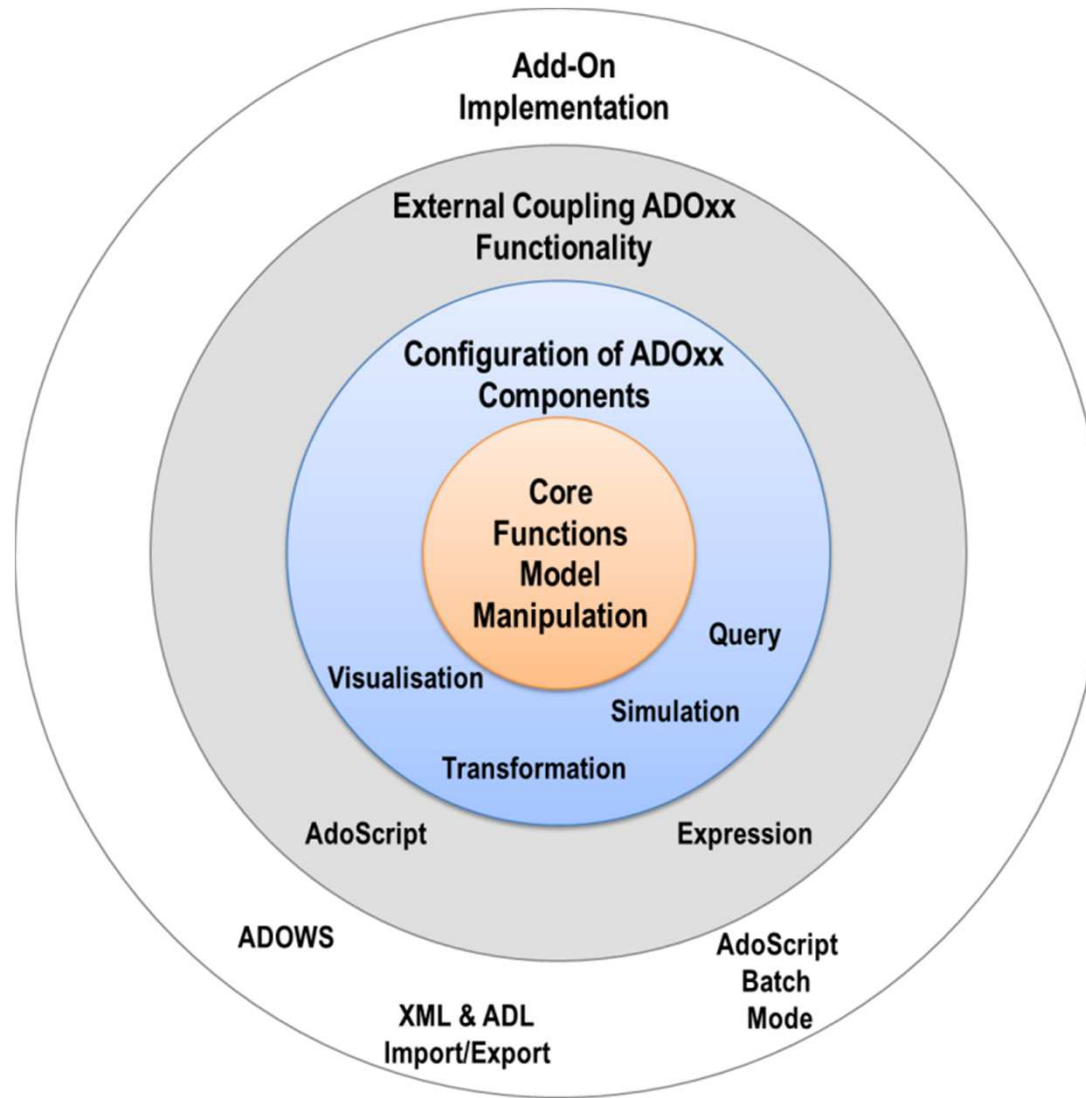
### **Case:**

Invoking a web service with GET method in order to search appropriate doctor according to the proficiency

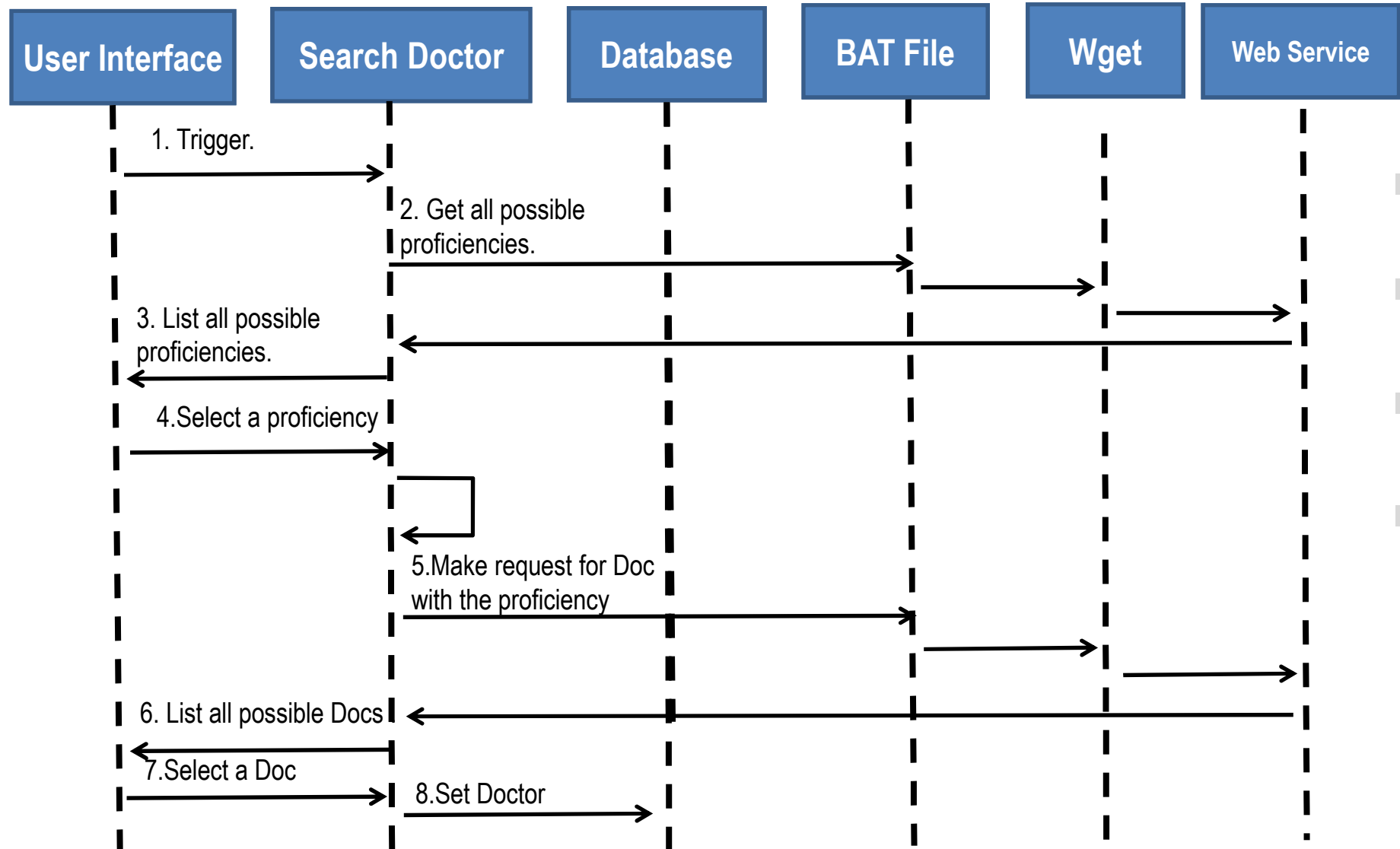
### **GOAL:**

Demonstrate how to call a external service with GET method

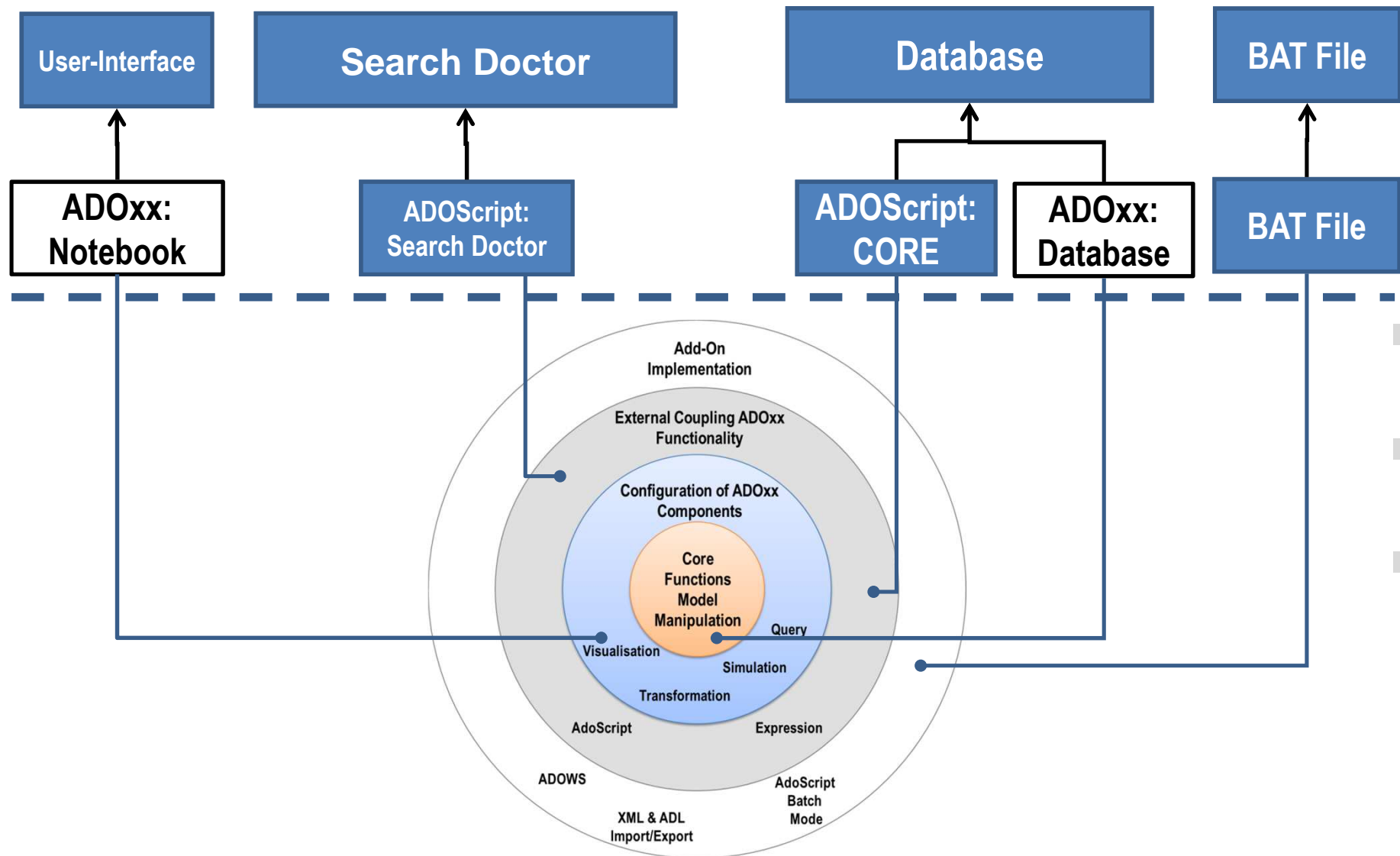
# ADOxx Functionality on Meta Level



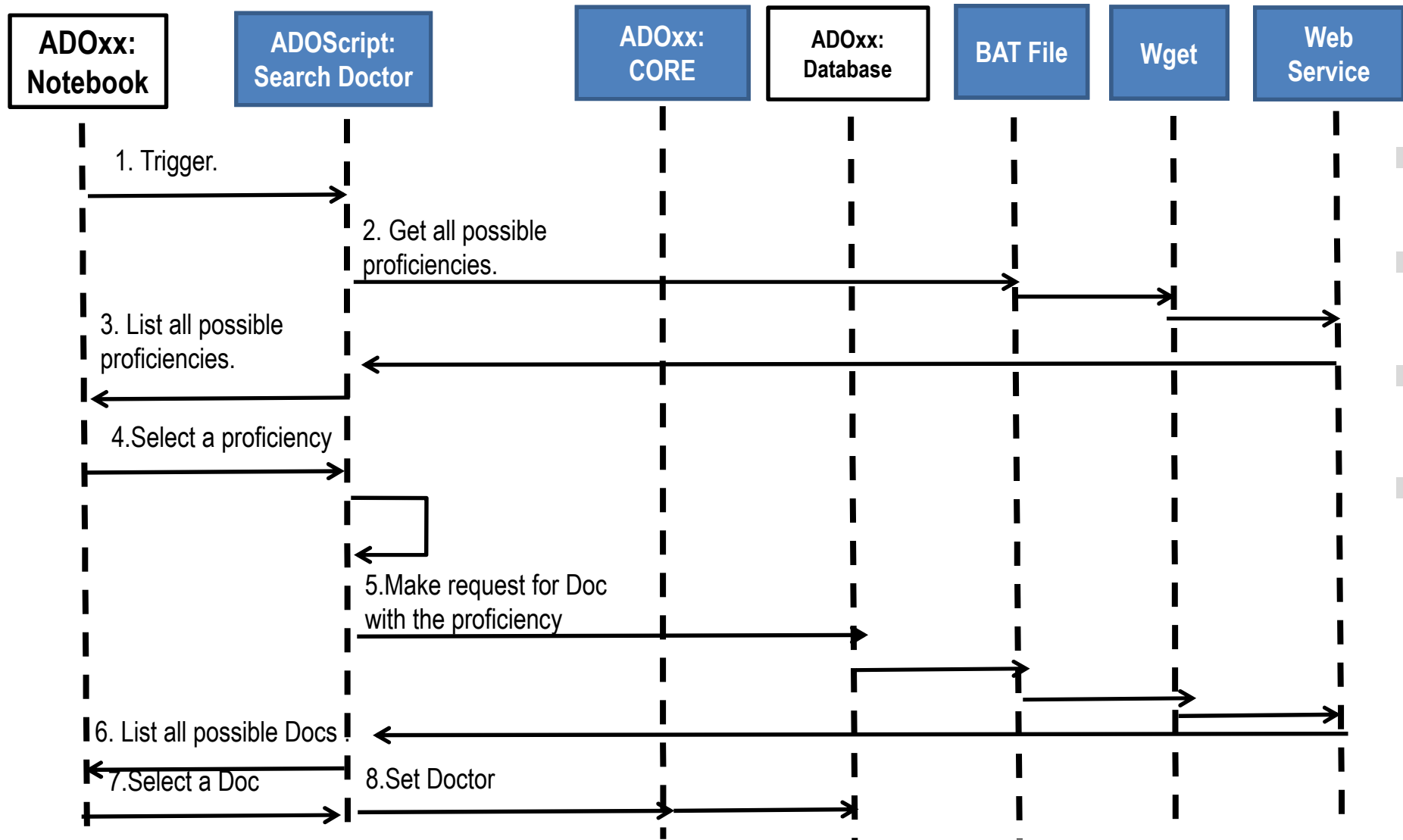
# Description of Algorithm



# Mapping ADOxx Functionality



# ADOxx Realisation Approach



## Added Value of Metamodelling Platform

Used meta-modelling functionality for realisation of the scenario:

- ADOScript:** ADOScript can retrieve model information, sends request to the API
- ADOxx Visualisation Component:** is provided by the platform and enables configuration of the user interface of model editor
- ADOScript Service:** ADOScript Service: ADOScript Service listens a certain port to get and interpret requests

# ADOxx Realisation Hands-On

## 1. Modelling Language

1. Model Types “Space Model”
2. New class “Doctor”
3. Add Attributes

## 2. Configure ADOxx

1. Configure Space Model AttrRep





## 3. Implement Algorithm with ADOscript

1. Search Doctor



# Used ADOxx Functionality: Implementing an Algorithm

Introduction	
Setup of Implementation Environment	
Modelling Language Implementation	
	Classes
	Relations
	Class Attributes and Attributes
	GRAPHREP
	ATTRREP
	CLASS Cardinality
	CONVERSION
	Model Pointer
	Attribute Facets
	Model Types

Mechanisms & Algorithms Implementation	
	<b>Core Functions for Model Manipulation</b>
	Database 
	<b>Visualisation</b>
	Query 
	<b>Transformation</b>
	Configuration of ADOxx Components
	Visualisation
	Query
	<b>External Coupling ADOxx Functionality</b> 
	<b>ADOscript Triggers</b>
	ADOscript Language Constructs
	Visualisation ADOscript
	Visualisation Expression
	Query ADOscript
	Transformation ADOscript 
	<b>ADD-ON Implementation</b>
	ADOxx Web-Service
	XML / ADL Import – Export
	ADOscriptBatch Mode

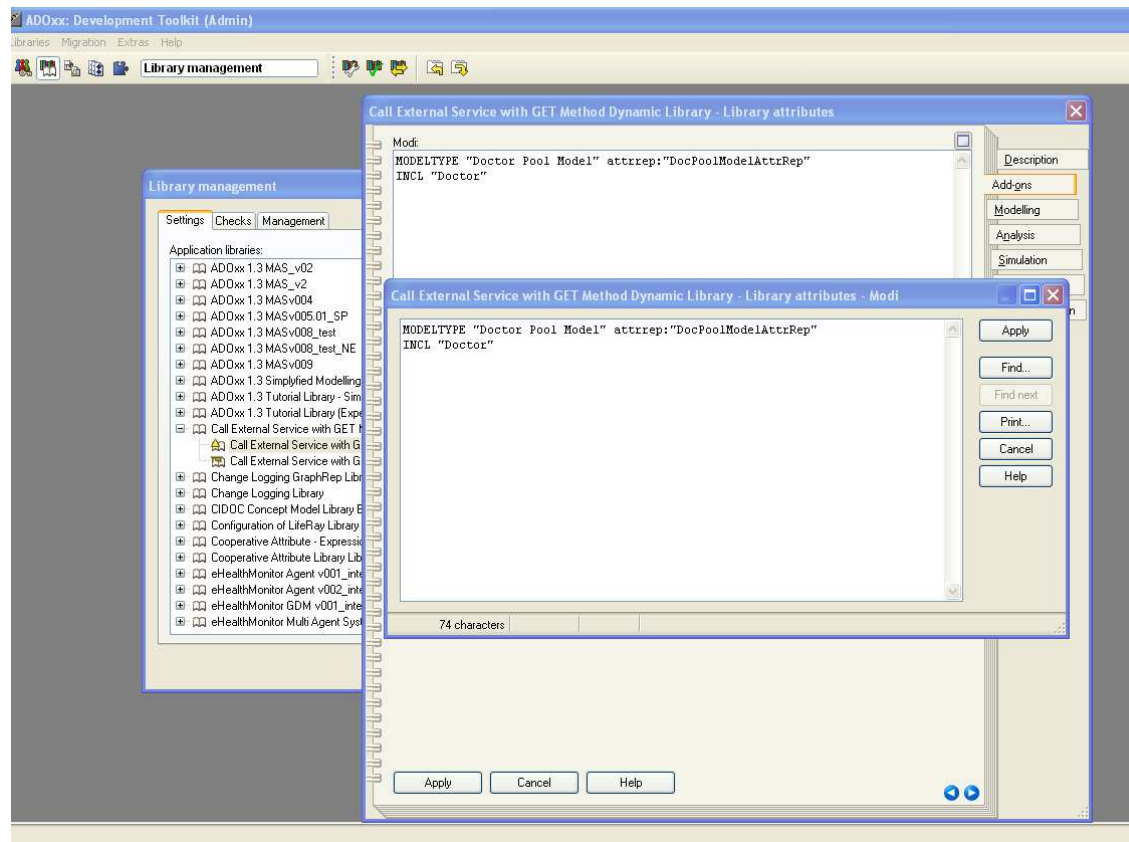
# HANDS-ON

Call Doctor Search Service with GET Method

**SCENARIO:**

**Invoking a Web Service with GET Method to Retrieve Information**

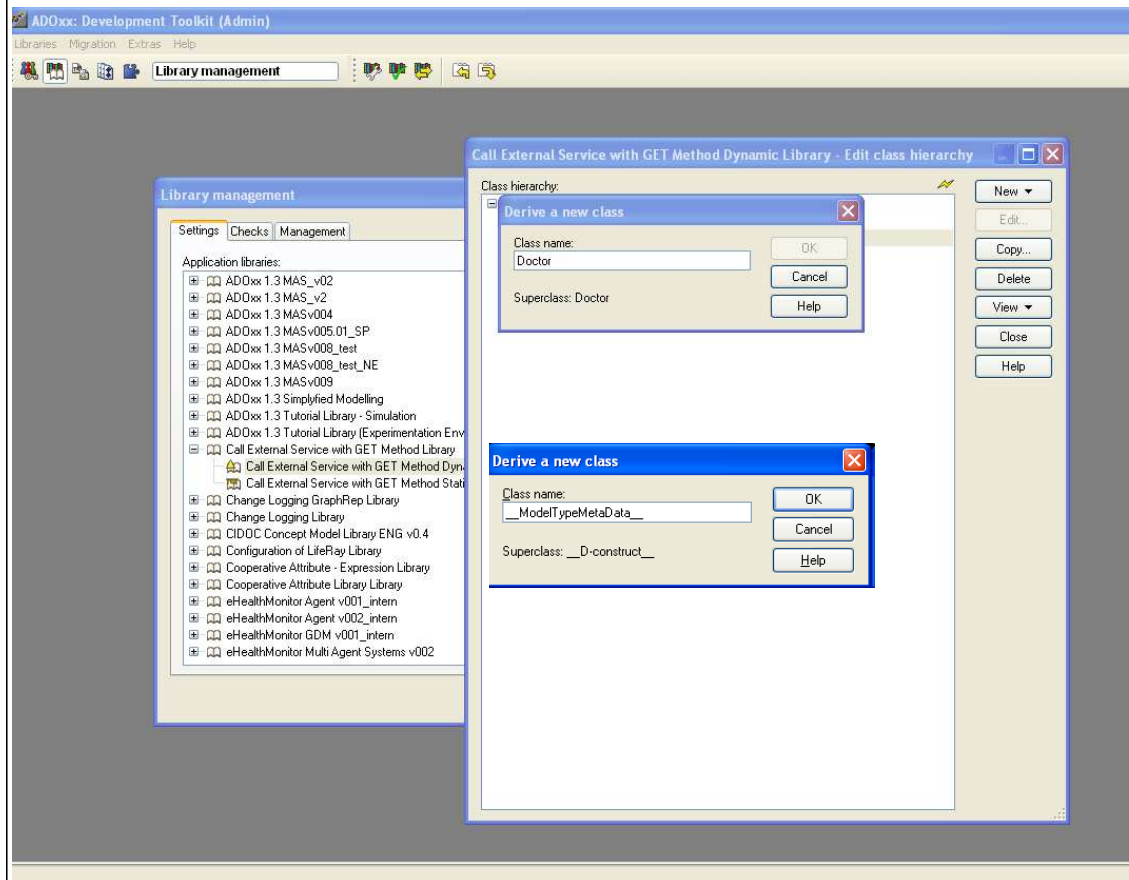
# Define new Modeltypes Space Model”



## New Modeltypes:

- Select “Call External Service with GET Method Dynamic Library” and open Library attributes.
- Got to Add Ons
- Add the Modeltypes “Doctor Pool Model” in the Modi attribute
- When the classes are defined, you need to INCLUDE “Doctor” under “Doctor Pool Model”

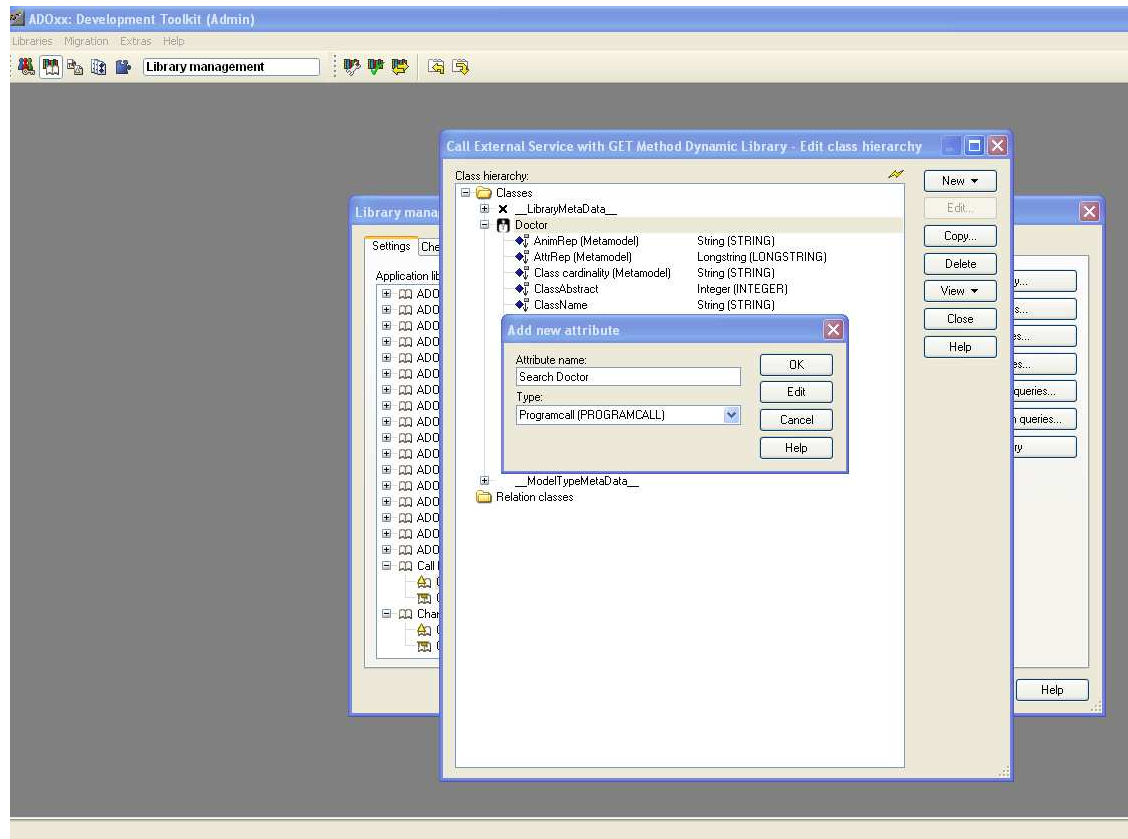
# Create New Classes



## Create New Classes

- Select “Call External Service with GET Method Dynamic Library” and open Library attributes.
- Open Class hierarchy, view “Metamodel” and “Class hierarchy” in the View button, select \_\_\_D-construct\_\_\_ and click new class.
- Name new classes:
  - “Doctor” and “\_\_\_ModelTypeMetaData\_\_\_”
  - “Doctor” and “\_\_\_ModelTypeMetaData\_\_\_”
- are now sub-classes of \_\_\_D-construct\_\_\_

# Add Attributes for Classes



## Add Attributes

- Select "Doctor" and click Newattribute.
- Make "Search Doctor" as type PROGRAMCALL
- Make "Name" and "Proficiency" as type STRING
- Select "\_\_ModelTypeMetaData\_\_" and click New, attribute.
- Make "DocPoolModelAttrRep" as type LONGSTRING.

# Implement and Import ADOscript File into Database

## SearchForDoc.asc (please find whole code in the package)

```
CC "Modeling" GET_ACT_MODEL
SET n_act_modelid:(modelid)
CC "Core" GET_ATTR_VAL objid:(n_act_modelid) attrname:("DocWSEndpoint") as-string
SET s_service_endpoint:(val)
#SET s_service_endpoint:("http://10.0.1.114:9080/eHMWS/webresources/getConceptsWS/doctors/")
SET temp_result_file:("C:\\Results")

SET s_annotation_call:(s_service_endpoint+"annotation")
SYSTEM ("C:\\SearchDoc.bat "+s_annotation_call) with-console-window
CC "AdoScript" FREAD file:(temp_result_file) binary:0 base64:0
SET s_annotatations:(text+"$all")

CC "AdoScript" LISTBOX entries:(s_annotatations) toksep:("$") boxtext:("Proficiency") title:("Select a Proficiency")
SET s_selected_annotation:(selection)
IF (endbutton = "ok")
{
    SET s_doc_call:(s_service_endpoint)

    IF (s_selected_annotation != "all")
    {
        SET s_doc_call:(s_doc_call+s_selected_annotation)
    }

    SYSTEM ("C:\\SearchDoc.bat "+s_doc_call)

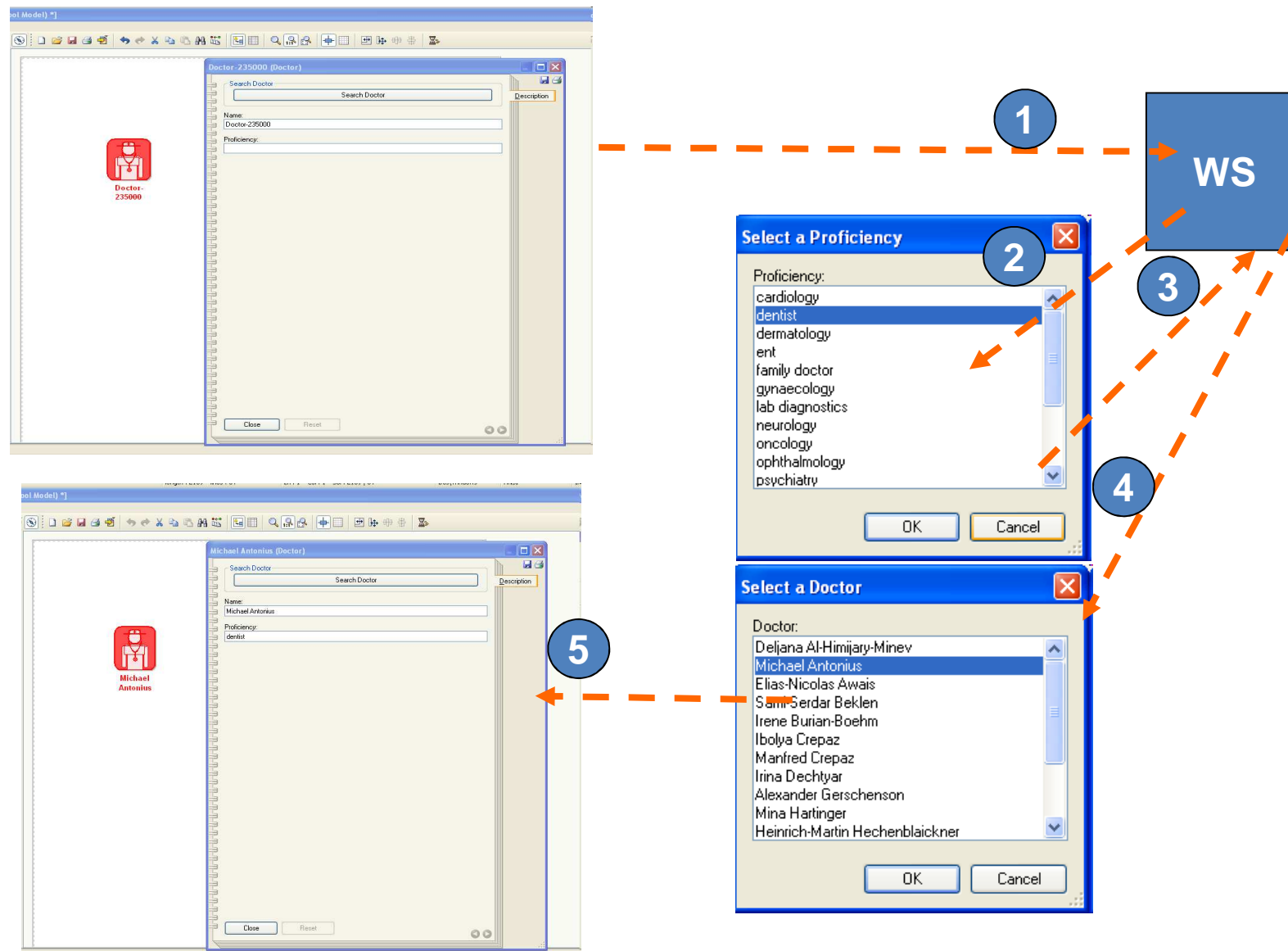
    CC "AdoScript" FREAD file:(temp_result_file) binary:0 base64:0
    SET s_pos_doc_candidate_infos:(text)
```

...

## Configure Bat File and Webservice

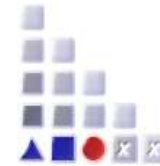
- Copy Bat File into C:
- Deploy provided WAR file on a Tomcat ( 6.x or higher)
- Set in model attribute “DocWSEnpoint” end point of your service like  
“http://localhost:8080/DocSearchWS/webresources/getConceptsWS/doctors/”

# Results





# Further Questions?



[www.adoxx.org](http://www.adoxx.org)

[tutorial@adoxx.org](mailto:tutorial@adoxx.org)

