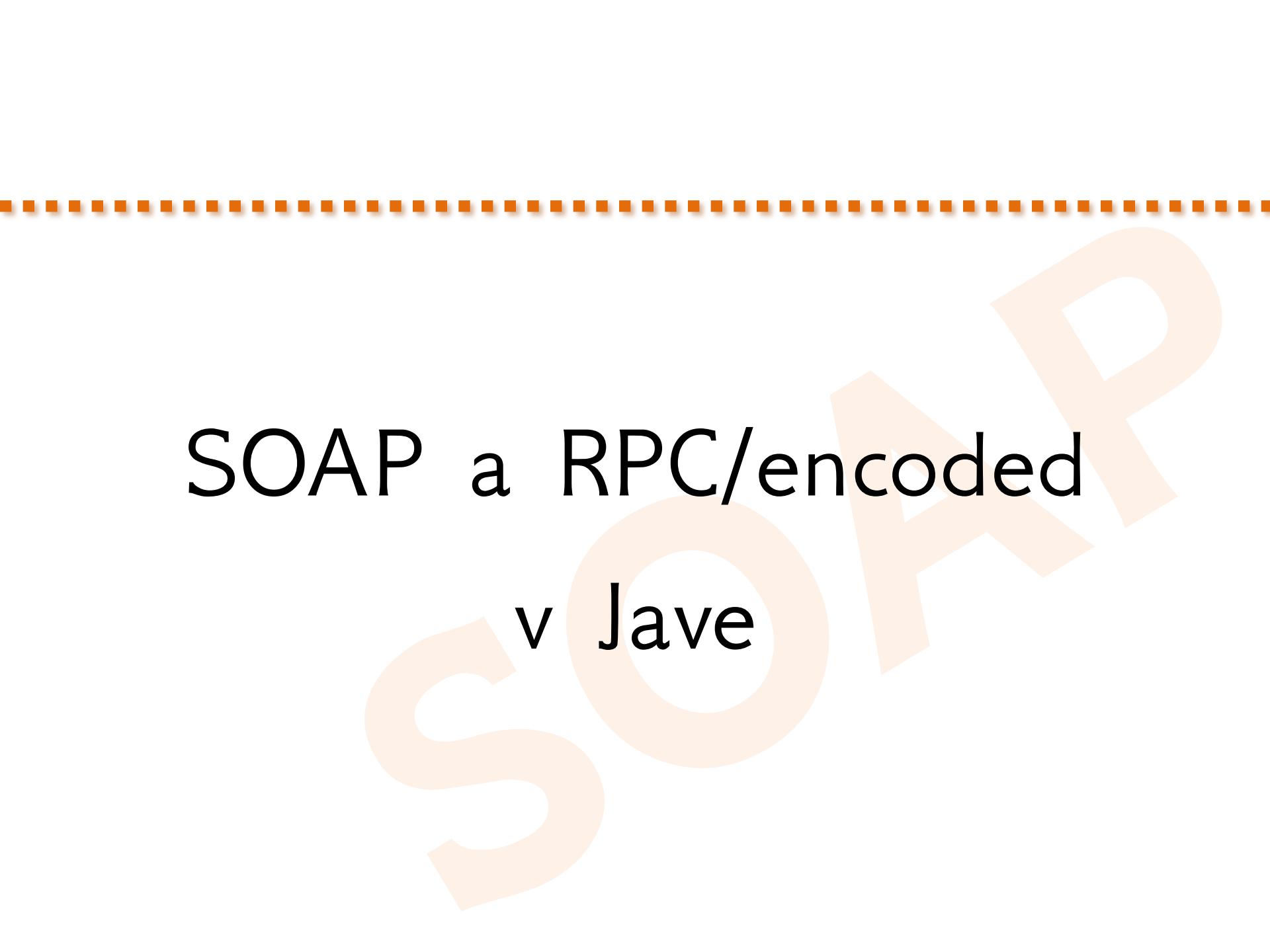


# SOAP a zriedkavejšie platformy (Java 6, PHP, Python)

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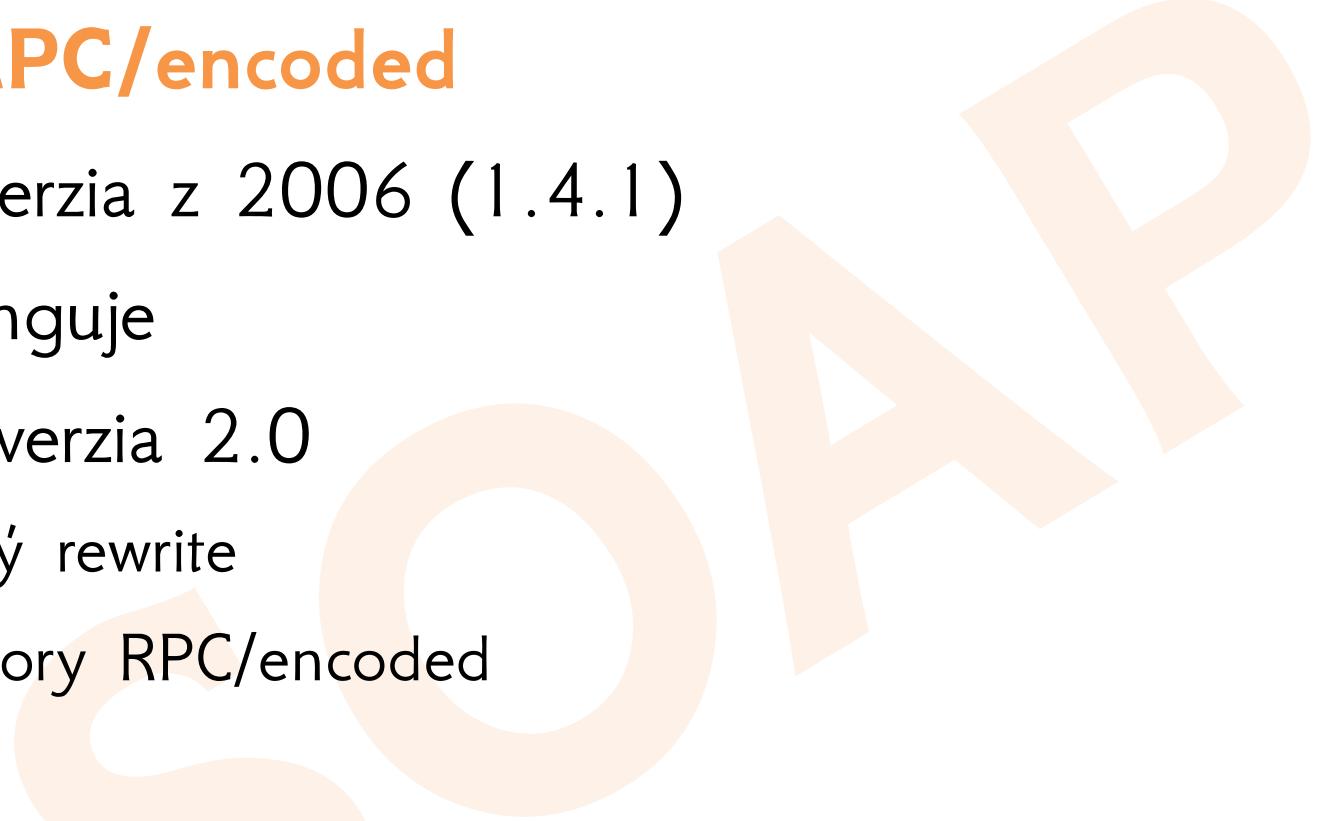
**SOAP a RPC/encoded**

v Java

# Apache Axis 1.0



- podpora **RPC/encoded**
- posledná verzia z 2006 (1.4.1)
- ako-tak funguje
- existuje aj verzia 2.0
  - kompletný rewrite
  - bez podpory RPC/encoded



<http://axis.apache.org/axis/>

# SoapUI Preferences

erences

ferences

apUI settings

HTTP Settings

oxy Settings

SL Settings

SDL Settings

JI Settings

itor Settings

Tools

S-I Settings

al Properties

Security Settings

S-A Settings

ndUI Settings

Recording Settings

ive Information Tokens

n Update Settings

JBossWS wstools:	<input type="text"/>	<a href="#">Browse...</a>
JAX-RPC WSCompile:	<input type="text"/>	<a href="#">Browse...</a>
JAX-WS WSImport:	<input type="text" value="c:\java\jdk7\bin"/>	<a href="#">Browse...</a>
Axis 1.X:	<input type="text" value="C:\java\axis"/>	<a href="#">Browse...</a>
Axis 2:	<input type="text"/>	<a href="#">Browse...</a>
.NET 2.0 wsdl.exe:	<input type="text"/>	<a href="#">Browse...</a>
XFire 1.X:	<input type="text"/>	<a href="#">Browse...</a>
CXF 2.X:	<input type="text"/>	<a href="#">Browse...</a>
ANT 1.6+:	<input type="text"/>	<a href="#">Browse...</a>
GSoap:	<input type="text"/>	<a href="#">Browse...</a>
JAXB xjc:	<input type="text"/>	<a href="#">Browse...</a>



soapUI 4.5.1

FileToolsDesktopHelp

JBossWS Artifacts



JBossWS JAX-WS Artifacts



JAX-RPC Artifacts



JAX-WS Artifacts



Axis 1.X Artifacts

Generates Axis 1.X artifacts using WSDL2Java



Axis 2 Artifacts



Apache CXF



XFire 1.X Stubs



Oracle Proxy Artifacts



XmlBeans Classes



JAXB 2.0 Artifacts



.NET 2.0 Artifacts



GSoap Artifacts



Launch TcpMon



HermesJMS

**Axis 1.X WSDL2Java**

Specify arguments for Axis 1.X Wsdl2Java

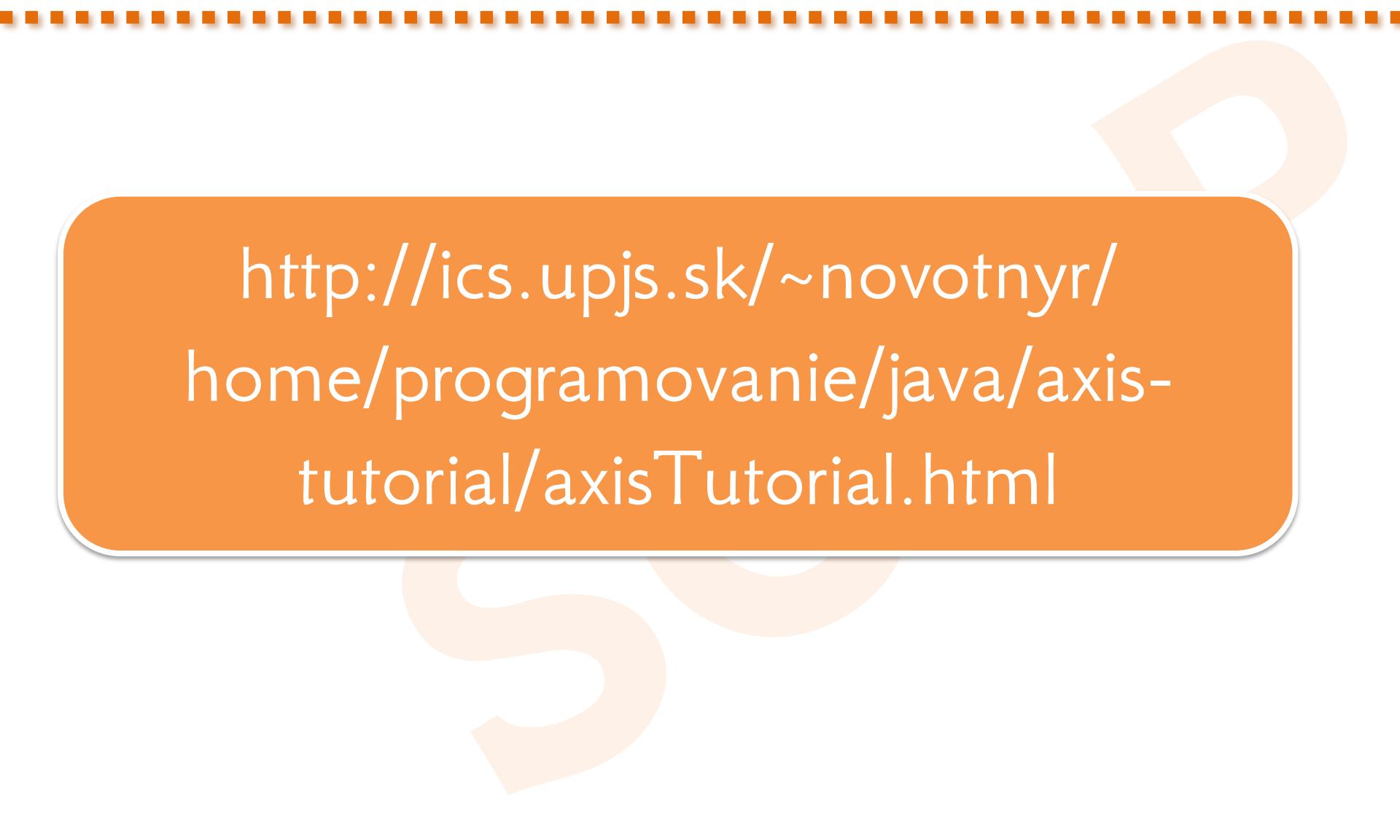
**Basic****Advanced****Custom Args**WSDL: output directory:  server-side:  (emit server-side bindings for web service)all:  (generate code for all elements, even unreferenced ones)deployScope: skeletonDeploy: noImports:  (only generate code for immediate WSDL document)noWrapped:  (turn off support for "wrapped" document/literal)testCase:  (emit junit testcase class for web service)helperGen:  (emits separate Helper classes for meta data)wrapArrays:  (Prefer generating JavaBean classes for certain schema array patterns)

# Java klient (main())

```
TranslatorLocator locator = new TranslatorLocator();
TranslatorSoap translator = locator.getTranslatorSoap();
System.out.println(translator.translate("pes"));
```

závislosť na  
knižniciach  
Axisu

# Článok o Axise: server + klient



[http://ics.upjs.sk/~novotnyr/  
home/programovanie/java/axis-  
tutorial/axisTutorial.html](http://ics.upjs.sk/~novotnyr/home/programovanie/java/axis-tutorial/axisTutorial.html)



# SOAP a PHP

# SoapServer: štandard v PHP

<http://php.net/manual/en/class.soapserver.php>

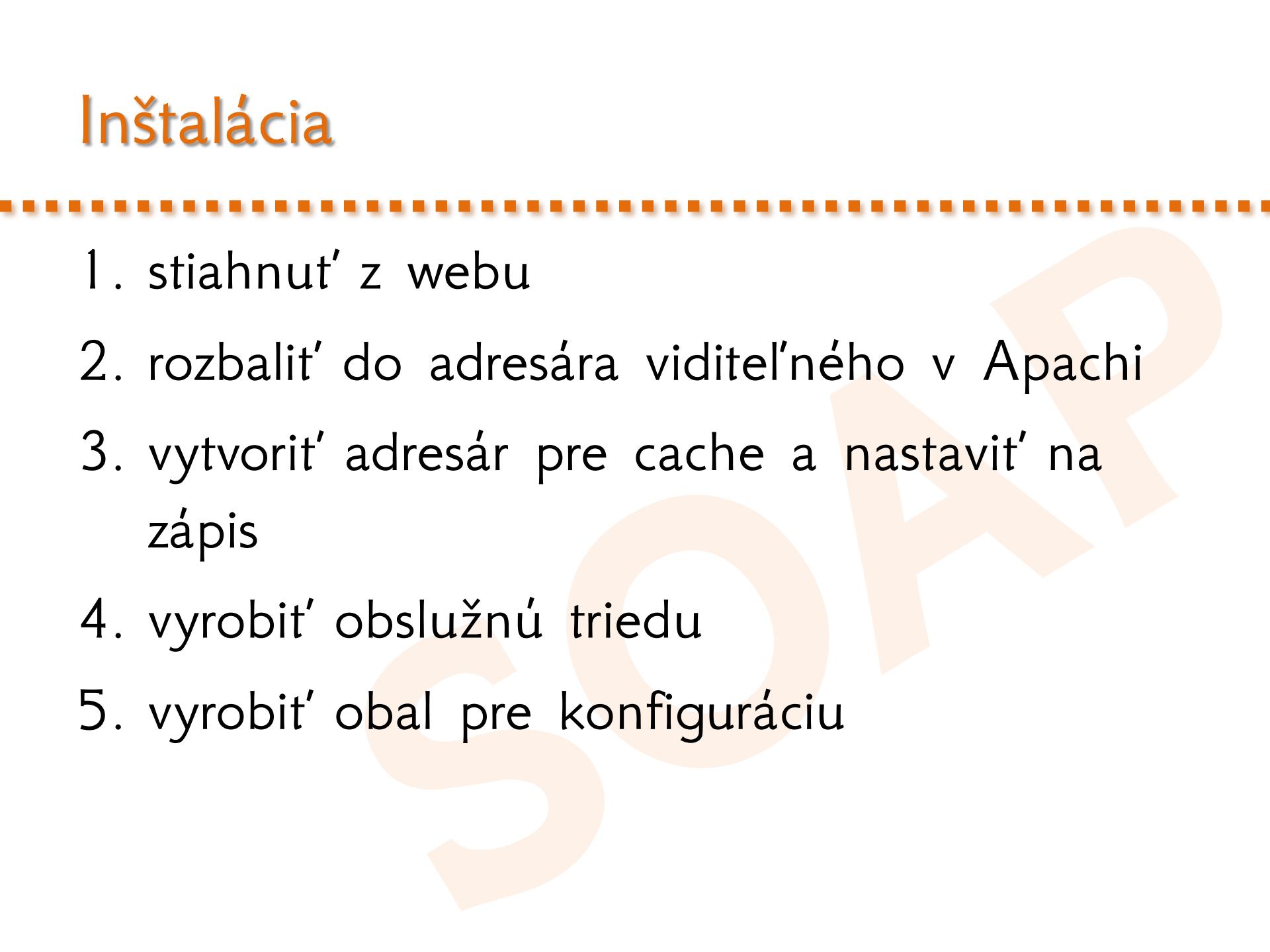
- zabudovaný v PHP
- len RPC/encoded
- **biedna** dokumentácia
- implementácia v C
- vývoj **roky** stojí

# PhpWsdl

<http://code.google.com/p/php-wsdl-creator>

- nadstavba nad SoapServerom
- lepšie API
- **automatické** generovanie **WSDL**
  - a rozličných klientov

# Inštalácia



1. stiahnut' z webu
2. rozbalit' do adresára viditeľného v Apache
3. vytvorit' adresár pre cache a nastavit' na zápis
4. vyrobit' obslužnú triedu
5. vyrobit' obal pre konfiguráciu

```
class Translator {  
    /**  
     * @param string $word  
     * @return string  
    */
```

```
    public function translate($word) {  
        $dictionary = array("macka" => "cat", "pes" => "dog");  
        $word=utf8_decode($word);  
        if(isset($dictionary[$word])) {  
            return utf8_encode($dictionary[$word]);  
        } else {  
            return "???";  
        }  
    }  
}
```

dátové typy

translate(): zverejnená operácia  
utf8\_????(): konverzné operácie

```
require_once('class.translator.php');  
require_once('class.phpwsdl.php');
```

obslužná trieda +  
jadro

```
$soap=PhpWsdl::CreateInstance(null, null, './cache',  
    Array('class.translator.php'),  
    null, null, null, false, false);
```

vytvorenie  
inštancie

```
ini_set('soap.wsdl_cache_enabled',0);  
PhpWsdl::$CacheTime=0;
```

vypnutie cache  
pre WSDL

```
$soap->RunServer();
```

spustenie

# Parametre konštruktora

<b>null</b>	menný priestor sa určí automaticky
<b>null</b>	URL pre endpoint sa určí automaticky
<b>"./cache"</b>	adresár s cache (s právom na zápis)
<b>Array("class.translator.php")</b>	obslužné triedy
<b>null</b>	názov obslužnej triedy sa určí automaticky
<b>null</b>	zverejnené metódy sú anotované
<b>null</b>	komplexné typy sú anotované
<b>false</b>	neposielat' hned' WSDL
<b>false</b>	server nespúšťať v konštruktore

# Translator SOAP WebService interface description

Endpoint URI: <http://x64.ics.upjs.sk/~novotnyr/ws/kopr.php>

WSDL URI: <http://x64.ics.upjs.sk/~novotnyr/ws/kopr.php?WSDL>

PHP SOAP client download URI: <http://x64.ics.upjs.sk/~novotnyr/ws/kopr.php?PHPSOAPCLIENT>

## Index

Public methods:

- [translate](#)

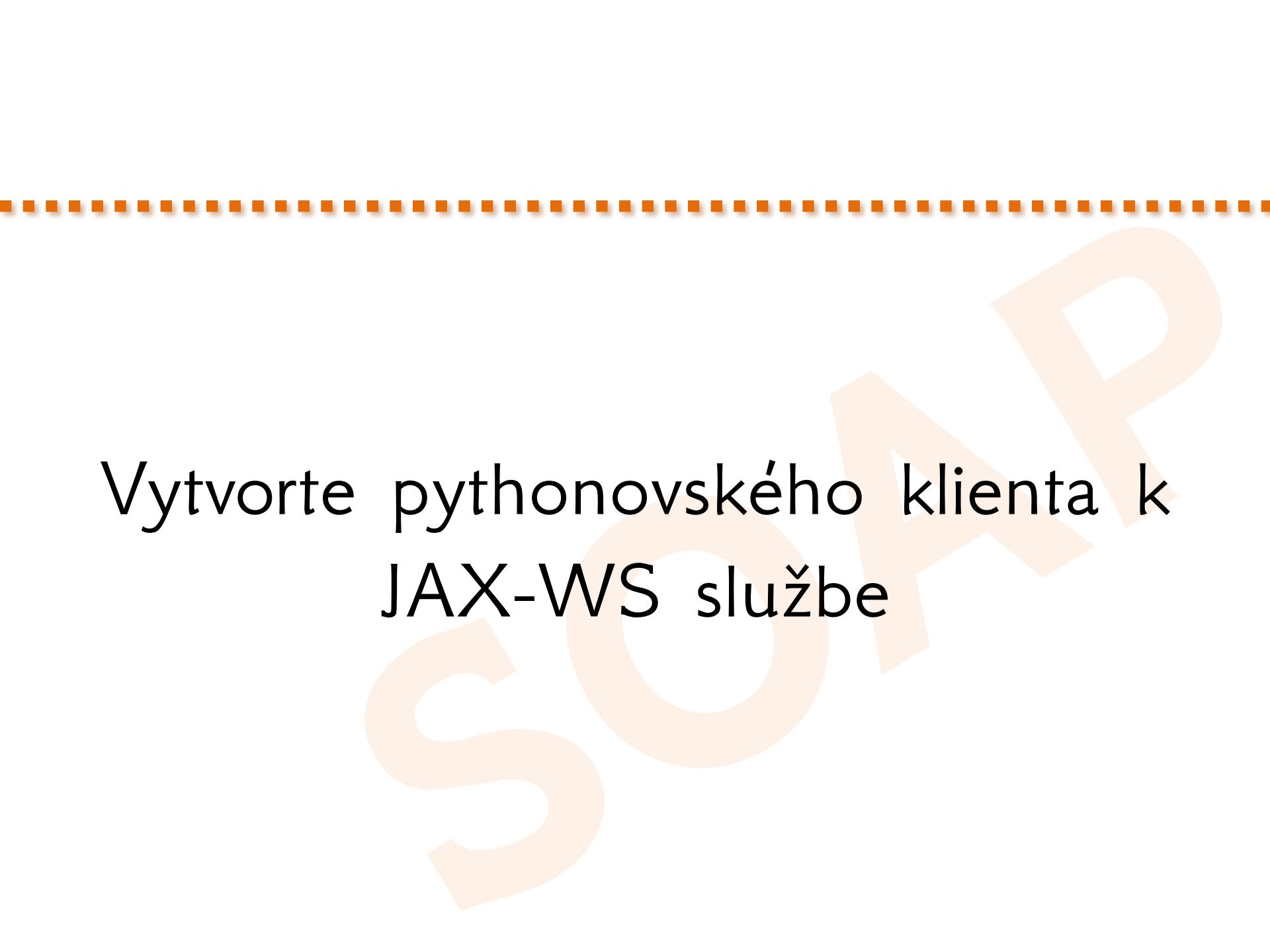
## Public methods

### translate

`string translate ( string word )`

automaticky  
generované  
WSDL

```
<wsdl:definitions xmlns:tns="http://x64.ics.upjs.sk/~novotnyr/ws/"  
    xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/" xmlns:s="http://www.w3.org/2001/XMLSchema"  
    xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"  
    xmlns:soapenc="http://schemas.xmlsoap.org/soap/encoding/"  
    targetNamespace="http://x64.ics.upjs.sk/~novotnyr/ws/">>  
    <wsdl:message name="translateSoapIn">  
        <wsdl:part name="word" type="s:string"/>  
    </wsdl:message>  
    <wsdl:message name="translateSoapOut">  
        <wsdl:part name="return" type="s:string"/>  
    </wsdl:message>  
    <wsdl:portType name="TranslatorSoap">  
        <wsdl:operation name="translate">  
            <wsdl:input message="tns:translateSoapIn"/>  
            <wsdl:output message="tns:translateSoapOut"/>  
        </wsdl:operation>  
    </wsdl:portType>  
    <wsdl:binding name="TranslatorSoap" type="tns:TranslatorSoap">  
        <soap:binding transport="http://schemas.xmlsoap.org/soap/http" style="rpc"/>  
        <wsdl:operation name="translate">  
            <soap:operation soapAction="http://x64.ics.upjs.sk/~novotnyr/ws/translate"/>  
            <wsdl:input>  
                <soap:body use="encoded" encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"  
                    namespace="http://x64.ics.upjs.sk/~novotnyr/ws/" parts="word"/>  
            </wsdl:input>  
            <wsdl:output>  
                <soap:body use="encoded" encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"  
                    namespace="http://x64.ics.upjs.sk/~novotnyr/ws/" parts="return"/>  
            </wsdl:output>  
        </wsdl:operation>  
    </wsdl:binding>  
    <wsdl:service name="Translator">  
        <wsdl:port name="TranslatorSoap" binding="tns:TranslatorSoap">  
            <soap:address location="http://x64.ics.upjs.sk/~novotnyr/ws/kopr.php"/>  
        </wsdl:port>  
    </wsdl:service>  
</wsdl:definitions>
```



Vytvorte pythonovského klienta k  
JAX-WS službe

<http://ics.upjs.sk/~novotnyr/blog/1481/pysimplesoap-pythonovsky-klient-k-webovej-sluzbe-jax-ws-2-0-2013>