



**ChemAxon**  
*discovery informatics*

# JChem Web Services

Andras Stracz



**Web Clients**

**PHP**

**JavaScript**

# Mobile Devices



JavaScript

Java

Objective C

# Scripting Languages

A close-up photograph of a fountain pen with a gold nib and a dark barrel, resting on a piece of paper with handwritten text. The pen is positioned diagonally across the frame. The background is softly blurred, showing more of the handwritten text on the paper.

Python

Groovy

JavaScript

# Ready for Integration



Easy to Learn



# A web application

**Plexus** – JavaScript Application

Marvin for JS

**Backend** – REST web services

Caching/  
Meta-data/  
Monitoring

JChem  
Base

Calculators

Markush  
Enum.

Etc.

# Functionality

Connection  
Management

Meta-data  
Handling

ChemAxon JChem

Caching

Progress  
Monitoring



# Available Products

## **JChem „Classic” Web Services**

This is **our existing SOAP** Web Service platform –  
5.x

## **JChem Web Services**

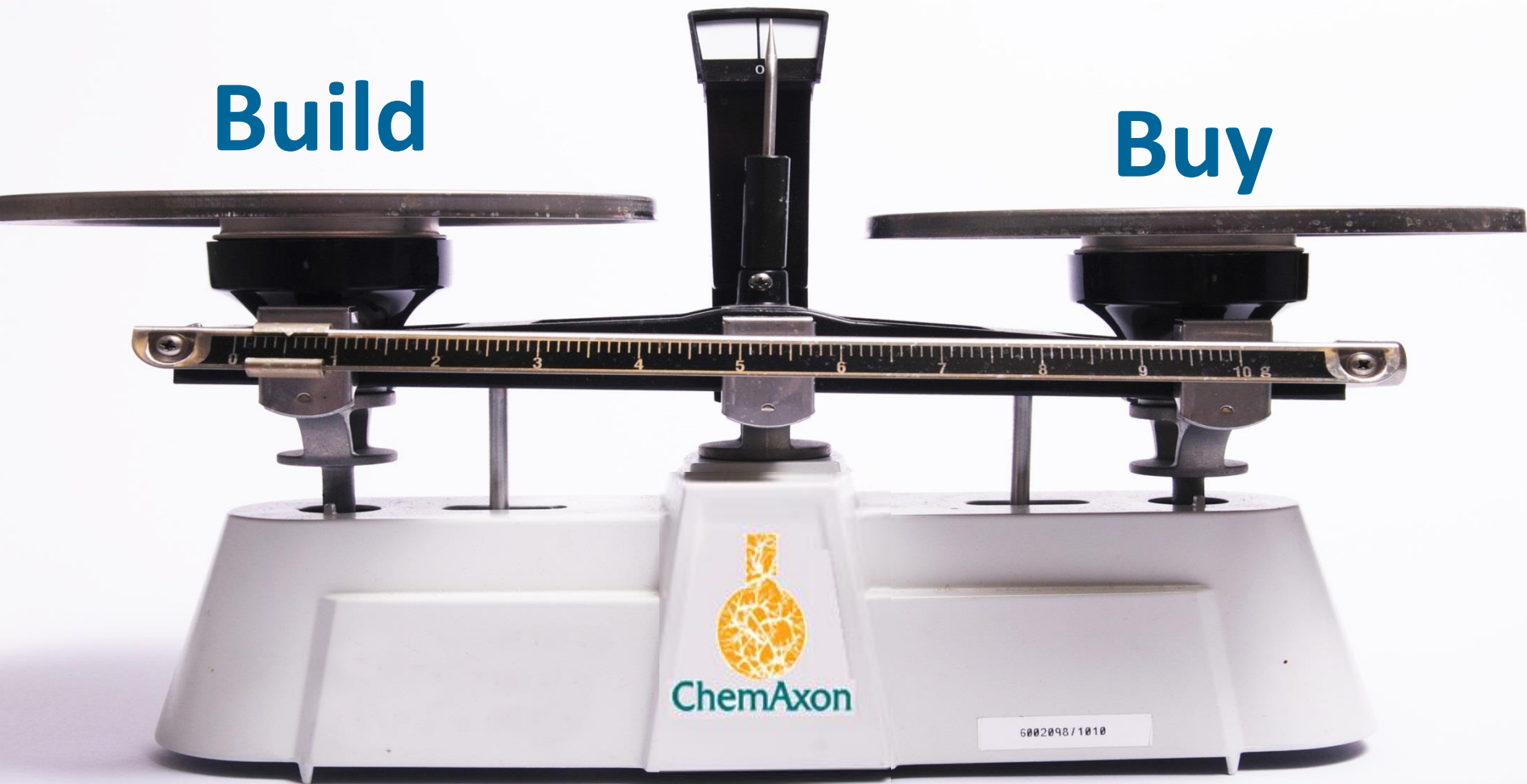
Our brand **new REST** Web Services  
product – 6.x

# Provided Services

Service Category	SOAP	REST
Database	Yes	6.0
Molecular Conversion	Yes	6.0
Chemical Terms	Yes	6.0
Markush Enumeration	Yes	6.0
Standardization	Yes	6.1
Structure Checker	No	6.1
Admin Functions ()	No	6.0
Authentication / ACL	No	6.1

**Build**

**Buy**



# Why in-house development is hard?

”It is **three times as difficult to build reusable components as single use components...**”

”...a reusable component **should be tried out in three different applications** before it will be sufficiently general to accept into a reuse library.”

“Biggerstaff's Rules of Three.”

# Road Map

- **Integration** with Registration System and IJC Web Client
- **Expose all** of SOAP Web Services' existing features
- **Authentication/Access Control**
- Built-in **distributed** functionalities

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