

Plugin Review

atto_chemrender

For

UCL

by

Catalyst IT Europe Limited

Version: 1.0

February 2021

Commercial in Confidence

catalyst 

open source technologists

Olivier House, 18 Marine Parade, Brighton, East Sussex, BN2 1TL, United Kingdom
+44 (0) 1273 929 450 // info@catalyst-eu.net // www.catalyst-eu.net

Table of Contents

Introduction.....	2
Overview.....	2
Summary.....	2
Plugin Overview.....	2
Review Results.....	3
Security.....	3
Coding Quality.....	4
Performance.....	5
Review Environment.....	6

Revision History			
Modified By	Date	Version	Change
Conn Warwicker	17 Feb 2021	1.0	Initial Retroactive Review

Introduction

Overview

The following review of the atto_chemrender plugin has been carried out in accordance with our [Code and Deployment Process Standard](#).

Summary

The plugin atto_chemrender falls into the ● **medium risk (amber)** category. Whilst the plugin appears to function correctly, the styles are broken and it only officially supports Moodle 2.7, so the plugin should be updated and any issues fixed.

About Our Plugin Review Risk Ratings

● Low Risk (Green)

The plugin is free from any noticeable issues. Performance impacts are unlikely and no security threats are present. The plugin is well maintained by the third party maintainer.

Plugin may be deployed to your service.

● Medium Risk (Amber)

The plugin review has presented concerns or issues with the plugin. It may show potential performance issues or be poorly maintained by the third party maintainer.

The plugin may be released to your service but Catalyst reserve the right to remove it without warning and without permission, should it place our SLA at risk.

● High Risk (Red)

The plugin review has identified issues in the plugin, most likely related to security or performance. You will receive clear reasoning in your plugin review document.

The plugin is not authorised for use on your service until issues are fixed.

Plugin Overview

From the README file:

"Chemical structure editor and molecular data file import plugin for the Atto HTML Editor.

A chemistry molecule or spectrum can be inserted into a text area and rendered with the ChemRender filter using either the JSmol or the ChemDoodle library.

Specific display options are available for .mol, .jdx, and .pdb file types."

Item	Result
Version	2016040100
Release	1.0.1
Requires	2014050800 (Moodle 2.7)
Usage	47 sites
Author/copyright holder	2016 UC Regents
Online reviews	None
Compatibility	Plugin version on moodle.org officially supports Moodle 2.7 only.

Review Results

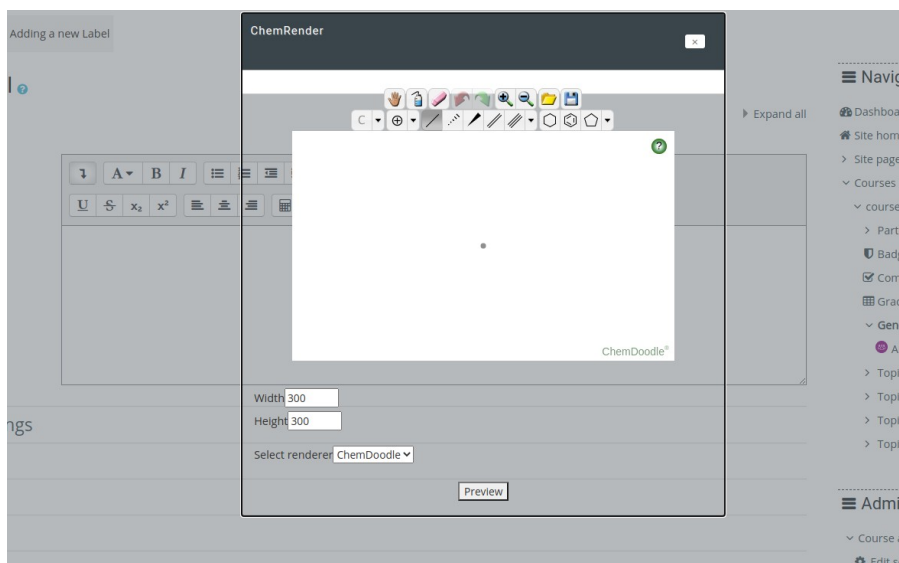
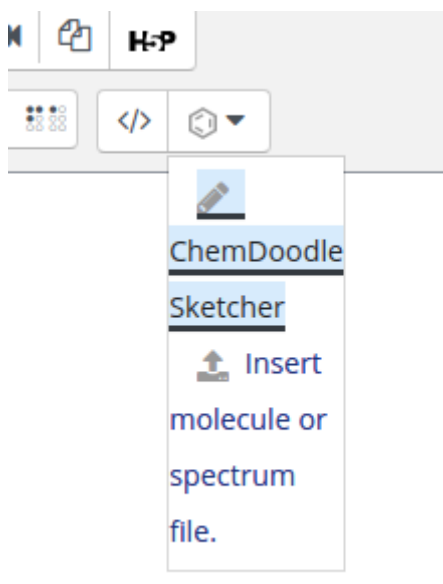
Security

Only one security issue noted – iframe_sketcher.php missing an authentication check.

Item	Result
Permissions	OK – No permissions checks required
Authentication	MISSING – One file missing an login check.
Form inputs	N/A – No forms in this plugin
Other inputs	N/A
External data in HTML	OK
Cross site scripting	OK
SQL parametrised	N/A
Data exposure	OK
Shell commands	N/A
CSRF	N/A
Data leakage	OK
Transmission to third parties	N/A

Coding Quality

When selecting the icon from the atto toolbar, the styles are all broken. See screenshots:



If you try to save the diagram without entering a name, you get a popup warning, but then the form submits anyway and you go to an error page and lose your diagram.

Plugin appears to require filter_chemrender, but it is not defined as a dependency.

Item	Result
Outstanding bugs upstream	2

Item	Result
Installation	OK
Notices seen	OK - No notices seen.
Basic functionality	OK - The actual functionality seems to work and lets you create chemical diagrams, which save to files to be displayed by the dependant filter_chemrender plugin.
Admin functionality	OK
Backup	N/A
Restored	N/A
Removed	OK
Coding standards violations	A TOTAL OF 1 ERROR AND 1 WARNING WERE FOUND IN 2 FILES: - lib.php:72 line too long - iframe_sketcher.php missing login check
Abstraction	OK
Unit testing	N/A
Side effects	Unknown
Code documentation	Code could use a bit more commenting.

Performance

No performance issues noted.

Item	Result
Really big synchronous jobs	N/A
Database killing queries	N/A
Page response time	OK
Disk usage	OK - Each diagram created will create a text file in the filedir, however these should be quite small (< 2KB)

Review Environment

Item	Result
Plugin name	atto_chemrender
Plugin git hash	eb96c664cd78844213677a9c2576f3586936e029
Plugin upstream repository	https://github.com/ucla/moodle-atto-chemrender
Plugin repository	https://github.com/ucla/moodle-atto-chemrender
Main git hash	0fb459175246aaca4cdae983bb007a9f34de4b20
Main git repo	git.catalyst-eu.net:ucl/moodle
Database version	mysqlnd 5.0.12-dev - 20150407
Database character encoding	utf-8
Database dump date	N/A
Site data dump date	N/A