



Vulnerability Advisory

Name	ChemviewX ActiveX Multiple Stack Overflows
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Affected Software	ChemView ActiveX v1.9.5
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Description

Hyleos ChemviewX is a free ActiveX control used to visualize chemical structures from MDL or MOL files. The ClassID of the object is {C372350A-1D5A-44DC-A759-767FC553D96C} and the control is marked safe for scripting.

Two stack overflows were discovered in the control, both overflow conditions can be used to gain command execution.

Exploitation

The methods SaveasMolFile and ReadMolFile are both vulnerable to a stack overflow condition which can be reached when supplying more than 400 white-space characters in the filename argument. Both tab and space characters can be used to trigger the overflow condition.

The 401-404th byte will result in the overflow of the return pointer. This vulnerability can be used to gain command execution when combined with a JavaScript heap spray by jumping into a pre-allocated heap.

Vendor Advice and Recommendations

The vendor was contacted multiple times over a two month period without any response. Use of this control is not suggested.

If you use this ActiveX control consider setting the kill bit for the control's Classid ({C372350A-1D5A-44DC-A759-767FC553D96C}), or uninstall the control.

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