

# Solr vulnerability - CVE-2017-12629

## Enterprise Manager

Enterprise Manager (formerly ESM) includes a version of Apache Solr which is vulnerable to attack allowing remote code execution. Further information can be found here: <https://nvd.nist.gov/vuln/detail/CVE-2017-12629>

**Mitigation:** It is recommended that you follow the steps below appropriate for your Operating System.

## For Windows

**Note:** File paths vary depending on installation, 64-bit or 32-bit.

1. Launch services, then stop 'solrJetty'
2. Click the 'Start' button and type 'Notepad.exe'. Right-click notepad and select 'Run as administrator'.
3. Click 'File', then 'Open', and navigate to the following file based on your install location:
  - For 64-bit: "C:\exacqVisionESM\apache\_solr\apache-solr\server\solr\collection1\conf\solrconfig.xml"
  - For 32-bit: "C:\exacqVisionESM\apache\_solr\apache-solr\solr\collection1\conf\solrconfig.xml"
4. Add the following highlighted section just above the "Function Parsers" line:

```
-->
<!-- example of registering a query parser -->
<!--
<queryParser name="myparser" class="com.mycompany.MyQParserPlugin"/>
-->
<queryParser name="xmlparser" class="solr.ExtendedDismaxQParserPlugin"/>
<!-- Function Parsers
http://wiki.apache.org/solr/FunctionQuery
```

5. If 64-bit, click 'File', then 'Open', and navigate to the following file:  
"C:\exacqVisionESM\apache\_solr\apache-solr\bin\solr.cmd"
  - Find the line: set START\_OPTS=%START\_OPTS% !GC\_TUNE!  
%GC\_LOG\_OPTS%
  - Below this line, add the following: set  
"START\_OPTS=%START\_OPTS% -Ddisable.configEdit=%true%"
6. Save the file.

7. Click 'File', then 'Open', and navigate to the following file based on your install location:
  - For 64-bit: Launch 'regedit' from start menu.
    - i. Go to HKEY\_LOCAL\_MACHINE->SYSTEM->ControlSet001->Services->solrJetty
    - ii. Double click ImagePath
    - iii. In value data put double quotes around  
C:\PROGRA~1\EXACQV~1\ENTERP~1\apache\_solr\apache-solr\scripts\prunsv.exe
  - For 32-bit: "C:\exacqVisionESM\apache\_solr\apache-solr\scripts\serviceinstall.bat"
    - i. Find the entry: ++JvmOptions=-XX:MaxPermSize=128M
    - ii. Add a space after this entry and add: ++JvmOptions=-Ddisable.configEdit=true
    - iii. Fine the quoted text: --  
Install="C:\exacqVisionEsm\apache\_solr\apache-solr\scripts\prunsv.exe\"
    - iv. Replace it with: --  
Install="C:\exacqVisionEsm\apache\_solr\apache-solr\scripts\prunsv.exe\"

**Note:** Ensure there is a space after this entry.

8. Save the file and close Notepad.
9. Click the Windows 'Start' button and type 'cmd'. Right-click on "Command Prompt" and select 'Run as administrator'.
10. Run the following two commands sequentially:

```
C:\exacqVisionEsm\apache_solr\apache-solr\scripts\serviceinstall.bat
```

```
C:\exacqVisionEsm\apache_solr\apache-solr\scripts\serviceinstall.bat  
INSTALL
```

11. Launch services, then start 'solrJetty'

## For Linux

**Note:** File paths vary depending on installation, 64-bit or 32-bit.

1. Open a Terminal.
2. Stop ESMWebservice with the following command:  
    `sudo /usr/local/exacq/esm/scripts/ESMWebservice stop`  
    Enter your password and press "Enter"
3. Open 'gedit' (or your preferred text editor) with 'sudo' privileges with the following command: `sudo gedit`
4. Click 'File', then 'Open', and navigate to the following file based on your install location:  
    For 64bit: `"/usr/local/exacq/esm/apache_solr/apache-solr/server/solr/collection1/conf/solrconfig.xml"`  
  
    For 32bit: `"/usr/local/exacq/esm/apache_solr/apache-solr/solr/collection1/conf/solrconfig.xml"`
5. Add the following highlighted section just above the "Function Parsers" line:

```
-->  
<!-- example of registering a query parser -->  
<!--  
<queryParser name="myparser" class="com.mycompany.MyQParserPlugin"/>  
-->  
  
<queryParser name="sniparser" class="solr.ExtendedDismaxQParserPlugin"/>  
  
<!-- Function Parsers  
  
<!-- http://wiki.apache.org/solr/FunctionQuery
```

6. Save the file.
7. Click 'File', then 'Open', and navigate to the following file based on your install location:

For 64-bit: `"/usr/local/exacq/esm/apache_solr/apache-solr/bin/solr"`  
Before the line that reads: `SOLR_START_OPTS`  
Add the line: `DISABLE_CONFIG_EDIT="true"`

For 32-bit: `"/usr/local/exacq/esm/apache_solr/apache-solr/scripts/ctl.sh"`  
After the line: `SOLR_PID=""`  
Add a new line: `DISABLE_CONFIG_EDIT="true"`  
Change the line: `SOLR=`  
To: `SOLR="$JAVABIN -Dsolr.solr.home=$SOLR_HOME -Djetty.logs=$INSTALL_PATH/logs/ -Djetty.home=$INSTALL_PATH/ -`

```
jar $INSTALL_PATH/start.jar $INSTALL_PATH/etc/jetty.xml -  
Ddisable.configEdit=$DISABLE_CONFIG_EDIT"
```

8. Save the file and close gedit.
9. Back in the terminal, run the following command

```
sudo /usr/local/exacq/esm/apache_solr/ctlscript.sh restart
```

10. Restart ESMWebservice with the following command:

```
sudo /usr/local/exacq/esm/scripts/ESMWebservice start
```