

Security Advisory 2020-04-24 - Xray for Jira Server and Data Center

Xray for Jira Server and Data Center - XXE vulnerability at XML result import

Summary	XXE vulnerability at result import (Test Run Result field)
Advisory Release Date	10 Apr 2020 10:00 AM CET
Product	Xray for Jira Server & Data Center Xray for Jira Cloud customers are not affected.
Affected on Xray for Jira Server & Jira Data Center Versions	<ul style="list-style-type: none">All versions from 2.1.0 up to 3.6.2
Fixed on Xray Jira Server & Jira Data Center Versions	<ul style="list-style-type: none">3.6.3

Summary of Vulnerability

This advisory discloses a **critical severity** security vulnerability which was present Xray versions of for Jira Server & Data Center from [2.1.0](#) until [3.6.3](#). Versions of Jira Server & Data Center affected by this vulnerability:

- from 2.1.0 to 3.6.2 (fixed in 3.6.3).

Customers who have upgraded Xray for Jira Server & Data Center to version 3.6.3 or higher are not affected.

Customers who are on any of the affected versions, upgrade your Xray for Jira Server & Data Center installations immediately to fix this vulnerability.

XXE vulnerability at XML result import (Test Run Result field)

Severity


We rate the severity level of this vulnerability as **critical**, according to the scale published in [Atlassian severity levels](#). The scale allows us to rank the severity as critical, high, moderate, or low.

This is our assessment and you should evaluate its applicability to your own IT environment.

Description

There is an XXE vulnerability while using POST method of **any** of the *import/execution/* XML* endpoints which allows attackers to get read access to the filesystem on behalf of the user running Jira.

Attackers are able to access filesystem by uploading a specific XML as result in any of the Xray endpoints accepting XML result files.

This issue can be tracked here:  [XRAY-4738](#) - XXE vulnerability at XML result import (Test Run Result field) CLOSED

Fix

We have released Xray for Jira Server & DC version 3.6.3 which is available for upgrade through the Atlassian Marketplace.

What You Need to Do

Upgrade

You can upgrade to the latest version of Xray for Jira Server & Data Center using the Universal Plugin Manager as explained in [Updating apps](#).

Mitigation

Workaround 1 - Tomcat (*requires restart*)

Block the endpoint from being accessed directly in the Tomcat configuration files, only for the POST method:

1. Shut down the application, and backup your `$application-install/atlassian-jira/WEB-INF/web.xml` file
2. Add the following block inside the `<web-app>` element:

```
<security-constraint>
<web-resource-collection>
  <url-pattern>/rest/raven/1.0/import/execution/junit/*</url-pattern>
  <url-pattern>/rest/raven/1.0/import/execution/testng/*</url-pattern>
  <url-pattern>/rest/raven/1.0/import/execution/nunit/*</url-pattern>
  <url-pattern>/rest/raven/1.0/import/execution/robot/*</url-pattern>
  <http-method>POST</http-method>
</web-resource-collection>
<auth-constraint />
</security-constraint>
```

3. Restart the Jira application
4. If you try to send a POST request to the endpoint `<JIRA_BASE_URL>/rest/raven/1.0/import/execution` that accepts XML file format a 403 error with Jira HTML page stating that "Access to the requested resource has been denied" will be returned

Workaround 2 - Reverse Proxy

Block the endpoint from being accessed on the proxy server-side, only for the POST method (Tested on Apache HTTPD):

1. Open the virtual host configuration
2. Add the following inside the virtual host to block the endpoint POST actions `/rest/raven/1.0/import/execution/(junit|testng|nunit|robot)`

```
<LocationMatch "/rest/raven/1.0/import/execution/(junit|testng|nunit|robot)">
  Deny from all
</LocationMatch>
```

3. Ensure all connectors pass through the proxy
4. Restart Apache

Example Virtual Host:

```
<VirtualHost *:80>

    ServerName getxray.app

    ProxyRequests Off
    ProxyVia Off

    <Proxy *>
        Require all granted
    </Proxy>

    <LocationMatch "/rest/raven/1.0/import/execution/(junit|testng|nunit|robot)">
        Deny from all
    </LocationMatch>

    ProxyPass          /jira          http://localhost:8080/jira
    ProxyPassReverse    /jira          http://localhost:8080/jira

</VirtualHost>
```

Support

If you have questions or concerns regarding this advisory, please raise a support request at <https://xraysupport.xpand-it.com/>.