



TECHNOLOGY PARTNER PROGRAM

USE CASE DOCUMENTATION

Author: Boldon James

Contents

Partner Information	3
Use cases for integration into Palo Alto Networks Next-Generation Security Operating Platform	3
Palo Alto Networks Products for Integration	3
Integration Benefits	4
Integration Diagram	4
Palo Alto Networks Configuration	5
Patterns and Selection Strategy	5
File Property Pattern Type Method	6
File Property Pattern Type Method	7
Regular Expression Pattern Type Method	8
Filtering	9
Troubleshooting	9

Partner Information

Partner information	
Date	November 11, 2019
Partner Name	Boldon James
Web Site	https://www.boldonjames.com/
Product Name	Classifier Foundation Suite
Partner Contact	Steve Cooper (866)633 1116 Director – Product Technology & Partner Alliances Steve.Cooper@BoldonJames.com
Support Contact	Support@BoldonJames.com US: +1 (866)633 1116 UK: +44 (0) 3333 444 739
Product Description	Boldon James data classification solutions helps you categorize, label and protect data. Advanced data classification fuses categorization with labelling to deliver a powerful data protection and governance punch. Enabling organizations to better manage and control their data, streamline operational performance and improve return on technology investment.

Use cases for integration into Palo Alto Networks Next-Generation Security Operating Platform

- Data Filtering with Custom Boldon James Classifier
 - o Detect Classified Files crossing the NGFW
 - o Alert/Block Files crossing the NGFW

Palo Alto Networks Products for Integration

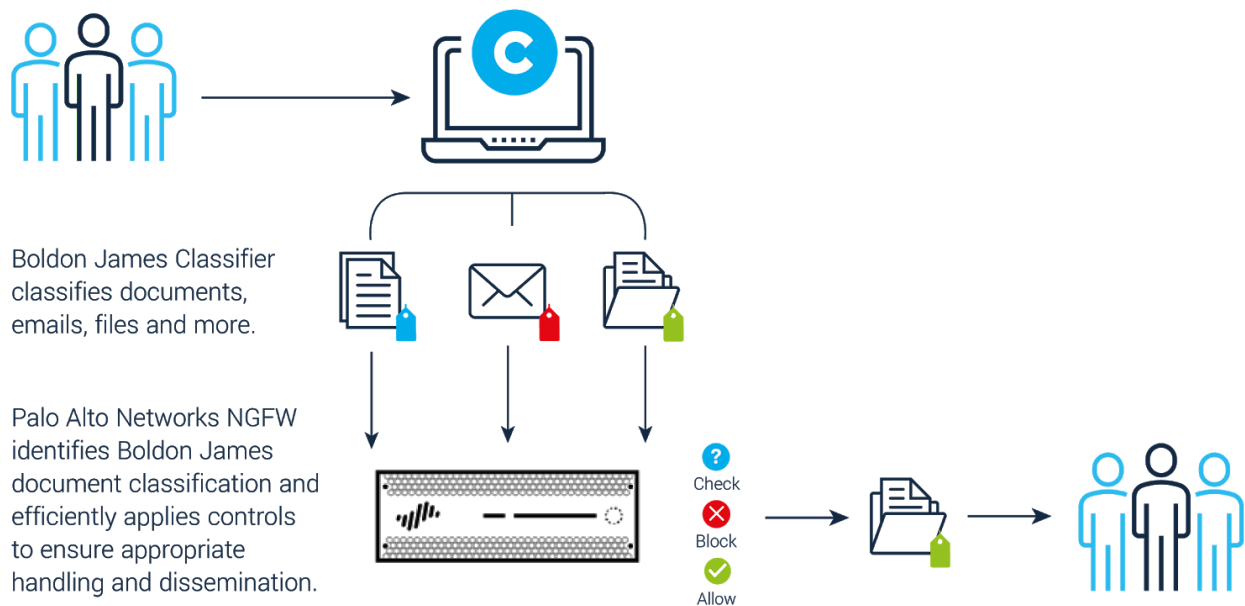
Palo Alto Networks Product	Integration Status	Palo Alto Networks versions tested	Boldon James versions tested
AutoFocus			
Cortex XDR			
Cortex XDR Analytics			

MineMeld			
NGFW	Validated	PAN-OS 9.0	Version 3.1
Panorama			
Prisma Access			
Prisma Cloud			
Prisma SaaS			
Traps			
VM-Series			
WildFire			
Other			

Integration Benefits

- The combined solution between Palo Alto Networks NGFW and Boldon James allows granular detection of Classifier through NGFW Data Filtering
- Provide enforcement of Blocking/Alerting files passing via Network across the Palo Alto Networks NGFW

Integration Diagram

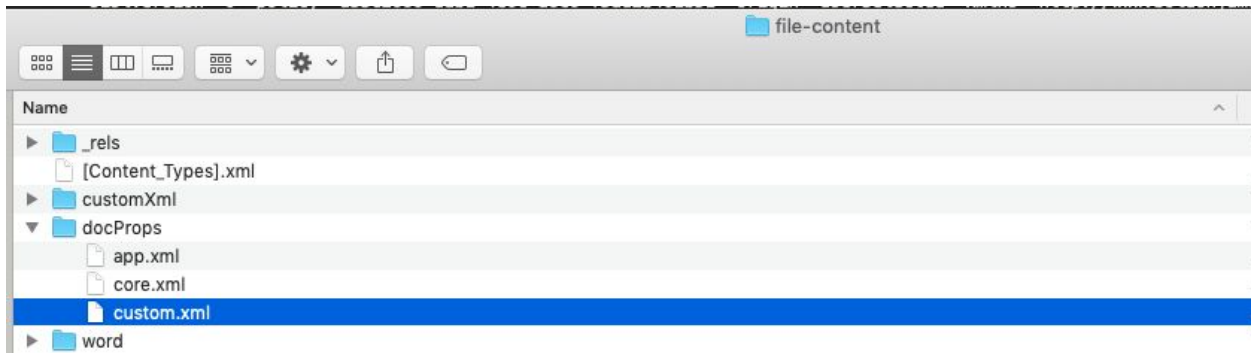


Palo Alto Networks Configuration

Patterns and Selection Strategy

The raw data can be viewed by unpacking one of your files with the Boldon James tagging, then locating the custom.xml under the docProps folder or viewing the file properties custom tab:

Unzipped Word .docx with Boldon James Classifier

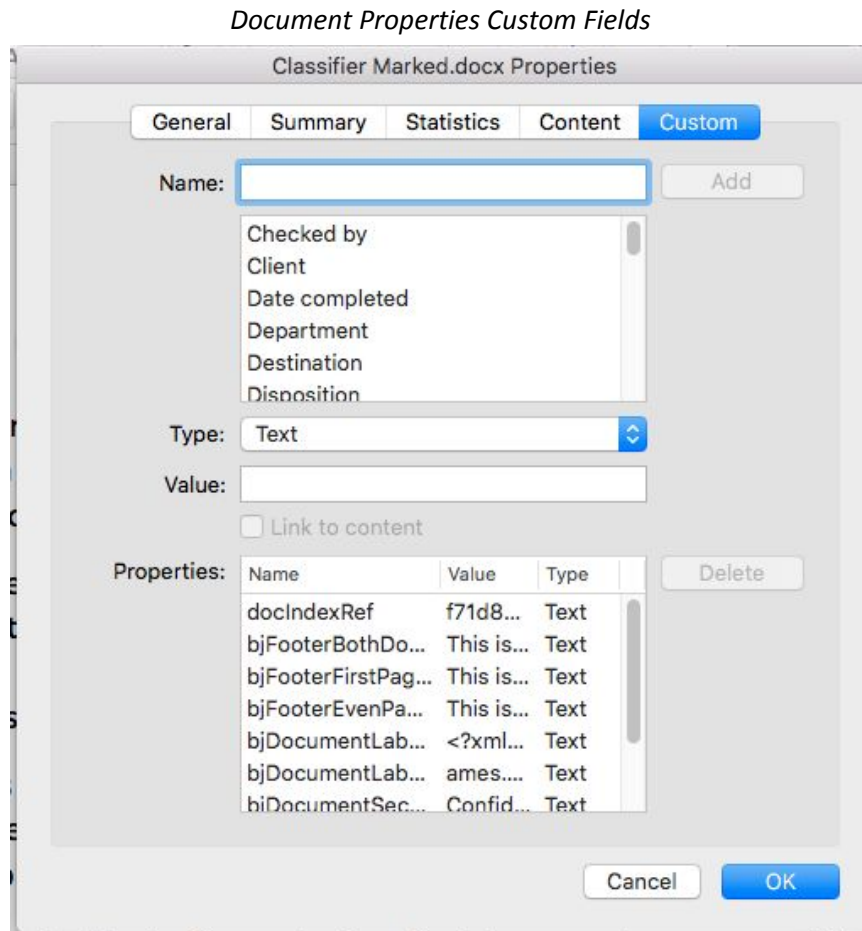


Raw XML of custom.xml

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<Properties xmlns="http://schemas.openxmlformats.org/officeDocument/2006/custom-properties" xmlns:vt="
http://schemas.openxmlformats.org/officeDocument/2006/docPropsVTypes"><property fmtid="{D5CDD505-2E9C-101B-9397-08002B2CF9AE}"
 pid="2" name="docIndexRef"><vt:lpwstr>f71d87a6-443b-4803-a4e3-dac90f19a9d5</vt:lpwstr></property><property fmtid="
{D5CDD505-2E9C-101B-9397-08002B2CF9AE}" pid="3" name="bjFooterBothDocProperty"><vt:lpwstr>This is a CONFIDENTIAL document
and restricted to INTERNAL staff members only._x000d_
DO NOT DISTRIBUTE OUTSIDE THE ORGANISATION.</vt:lpwstr></property><property fmtid="{D5CDD505-2E9C-101B-9397-08002B2CF9AE}"
 pid="4" name="bjFooterFirstPageDocProperty"><vt:lpwstr>This is a CONFIDENTIAL document and restricted to INTERNAL staff
members only._x000d_
DO NOT DISTRIBUTE OUTSIDE THE ORGANISATION.</vt:lpwstr></property><property fmtid="{D5CDD505-2E9C-101B-9397-08002B2CF9AE}"
 pid="5" name="bjFooterEvenPageDocProperty"><vt:lpwstr>This is a CONFIDENTIAL document and restricted to INTERNAL staff
members only._x000d_
DO NOT DISTRIBUTE OUTSIDE THE ORGANISATION.</vt:lpwstr></property><property fmtid="{D5CDD505-2E9C-101B-9397-08002B2CF9AE}"
 pid="6" name="bjDocumentLabelXML"><vt:lpwstr>&lt;?xml version="1.0" encoding="us-ascii"?&gt;&lt;sisl
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" sislVersion="0"
policy="a33c2686-dab1-4e6c-a8c6-f5ad2b461b51" origin="userSelected" xmlns="http://www.boldonj/></property><property
fmtid="{D5CDD505-2E9C-101B-9397-08002B2CF9AE}" pid="7" name="bjDocumentLabelXML-0"><vt:lpwstr>ames.com/2008/01/sie/internal/
label&gt;&lt;element uid="6b17dba2-5dfe-43e5-b19c-fe0929b42854" value="" /&gt;&lt;element
uid="352b9ac5-3257-46a3-b08c-36098716bbb1" value="" /&gt;&lt;element uid="efca57f2-4afe-42aa-aae2-6f1b9b88c75d" value="" /&gt
&lt;/sisl&gt;</vt:lpwstr></property><property fmtid="{D5CDD505-2E9C-101B-9397-08002B2CF9AE}" pid="8" name="
bjDocumentSecurityLabel"><vt:lpwstr>Confidential - Internal - Human Resources</vt:lpwstr></property><property fmtid="
{D5CDD505-2E9C-101B-9397-08002B2CF9AE}" pid="9" name="MyCompanyClassification"><vt:lpwstr>[
xyzyconfidential-plughinternal-ploverhumanresources]</vt:lpwstr></property><property fmtid="
{D5CDD505-2E9C-101B-9397-08002B2CF9AE}" pid="10" name="bjSaver"><vt:lpwstr>f4P2Mp6ma+6kUl856KPjm/R0oFDVfTz7</vt:lpwstr></
property><property fmtid="{D5CDD505-2E9C-101B-9397-08002B2CF9AE}" pid="11" name="bjLabelHistoryID"><vt:lpwstr>
{886089C9-8244-4179-BC40-68915D620B79}</vt:lpwstr></property></Properties>
```

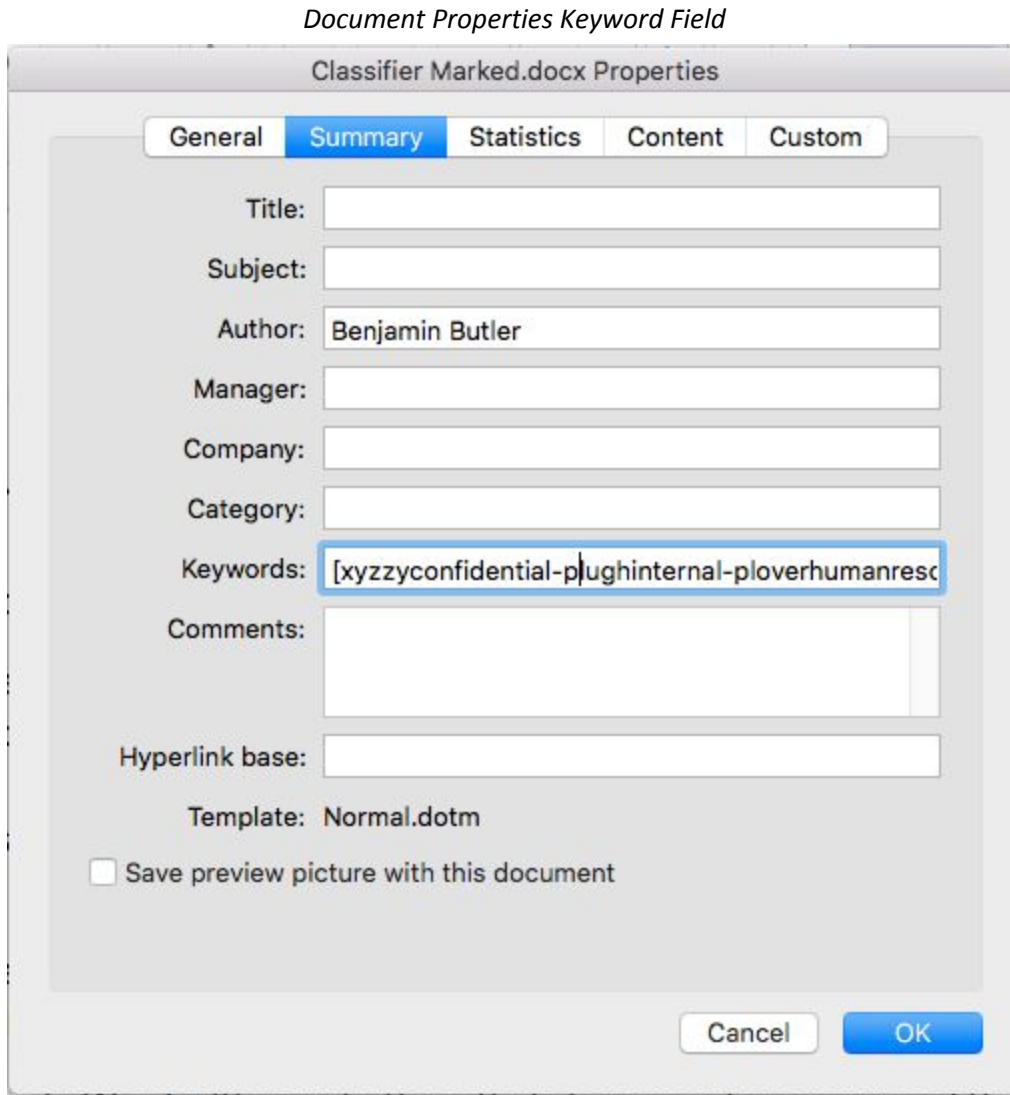
File Property Pattern Type Method

Use the exposed Keywords field that is a Pattern Type under File Property.



File Property Pattern Type Method

Using the exposed Keywords field that is a Pattern Type under File Property.



Data Patterns



Objects > Custom Objects > Data Pattern Profile > Pattern Type File Property

Regular Expression Pattern Type Method

You can choose to add context in several sections. Your file will be unique to your configuration, environment and so on, so use this as an example as a guide, but make sure the specifics are relevant to you.

Example strings in custom.xml

```
property fmtid="{D5CDD505-2E9C-101B-9397-08002B2CF9AE}" pid="3"
name="bjFooterBothDocProperty"><vt:lpwstr>This is a CONFIDENTIAL document
and restricted to INTERNAL staff members only._x000d_
DO NOT DISTRIBUTE OUTSIDE THE ORGANISATION.</vt:lpwstr></property>
```

There is a Key Value combo here to look at **name="bjFooterBothDocProperty"** and **"This is a CONFIDENTIAL"**.

Focused string for our REGEX

```
name="bjFooterBothDocProperty"><vt:lpwstr>This is a CONFIDENTIAL
```

We can create a data pattern on any of the keywords in the properties. The strategy used in this demonstration was a combination of unique patterns to eliminate false positives.

To match **bjFooterBothDocProperty** anywhere in the file we write, followed by **CONFIDENTIAL** anywhere after the first match:

.*(bjFooterBothDocProperty).*(CONFIDENTIAL)

Note: This is greedy in regex terms, meaning using ***** wildcards will cause a performance hit, so using something more specific is better. However the trade-off is the more specific, the greater the likelihood of False Negatives goes up.

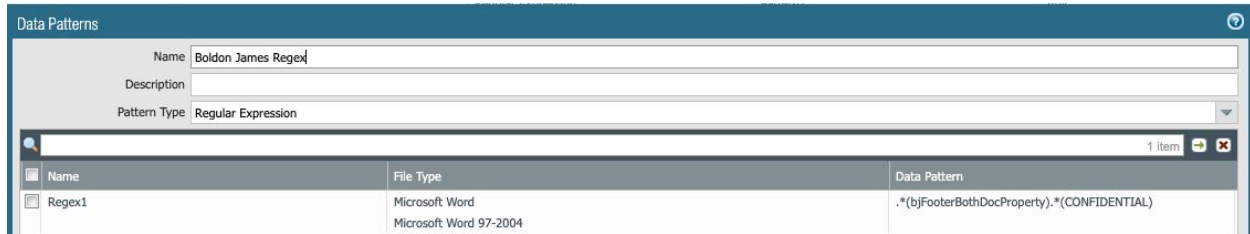
Also if we looked further within the XML, we could see the potential for at least 3 more examples to match on:

Example Regex Patterns

```
.*(bjFooterBothDocProperty).*(CONFIDENTIAL)
.*(bjFooterEvenPageDocProperty).*(CONFIDENTIAL)
.*(bjDocumentSecurityLabel).*(CONFIDENTIAL)
.*(bjDocumentLabelXML).*(CONFIDENTIAL)
```

This would look like the following on the NGFW:

Data Pattern Examples



Objects > Custom Objects > Data Pattern Profile > Pattern Type Regular Expression

Filtering

Then we must add the Pattern to a Data Filtering Profile.

Troubleshooting

- Support:
 - o Support@BaldonJames.com
 - o US: +1 (866)633 1116
 - o UK: +44 (0) 3333 444 739
- *Baldon James is a member of [TSA Net](#)*