



# 5.8 TREND MICRO™ TippingPoint™ Advanced Threat Protection Analyzer Syslog Content Mapping Guide

Breakthrough Protection Against APTs and Targeted Attacks



Endpoint Security



Network Security



Protected Cloud



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<http://docs.trendmicro.com/en-us/enterprise/tippingpoint-advanced-threat-protection-analyzer.aspx>

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This documentation introduces the main features of the product and/or provides installation instructions for a production environment. Read through the documentation before installing or using the product.

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# Preface

## Preface

Learn more about the following topics:

- *Documentation on page iv*
- *Audience on page v*
- *Document Conventions on page v*
- *About Trend Micro on page vi*

## Documentation

The documentation set for TippingPoint Advanced Threat Protection Analyzer includes the following:

**TABLE 1. Product Documentation**

DOCUMENT	DESCRIPTION
Administrator's Guide	<p>PDF documentation provided with the product or downloadable from the Trend Micro website.</p> <p>The Administrator's Guide contains detailed instructions on how to configure and manage TippingPoint ATP Analyzer, and explanations on TippingPoint ATP Analyzer concepts and features.</p>
Installation and Deployment Guide	<p>PDF documentation provided with the product or downloadable from the Trend Micro website.</p> <p>The Installation and Deployment Guide contains information about requirements and procedures for planning deployment, installing TippingPoint ATP Analyzer, and using the Preconfiguration Console to set initial configurations and perform system tasks.</p>
Syslog Content Mapping Guide	<p>PDF documentation provided with the product or downloadable from the Trend Micro website.</p> <p>The Syslog Content Mapping Guide provides information about log management standards and syntaxes for implementing syslog events in TippingPoint ATP Analyzer.</p>
Quick Start Card	<p>The Quick Start Card provides user-friendly instructions on connecting TippingPoint ATP Analyzer to your network and on performing the initial configuration.</p>
Readme	<p>The Readme contains late-breaking product information that is not found in the online or printed documentation. Topics include a description of new features, known issues, and product release history.</p>



DOCUMENT	DESCRIPTION
Online Help	Web-based documentation that is accessible from the TippingPoint ATP Analyzer management console.  The Online Help contains explanations of TippingPoint ATP Analyzer components and features, as well as procedures needed to configure TippingPoint ATP Analyzer.
Support Portal	The Support Portal is an online database of problem-solving and troubleshooting information. It provides the latest information about known product issues. To access the Support Portal, go to the following website:  <a href="http://esupport.trendmicro.com">http://esupport.trendmicro.com</a>

View and download product documentation from the Trend Micro Online Help Center:

<http://docs.trendmicro.com/en-us/home.aspx>

## Audience

The TippingPoint Advanced Threat Protection Analyzer documentation is written for IT administrators and security analysts. The documentation assumes that the reader has an in-depth knowledge of networking and information security, including the following topics:





- Network topologies
- Database management
- Antivirus and content security protection

The documentation does not assume the reader has any knowledge of sandbox environments or threat event correlation.

## Document Conventions

The documentation uses the following conventions:

**TABLE 2. Document Conventions**

CONVENTION	DESCRIPTION
UPPER CASE	Acronyms, abbreviations, and names of certain commands and keys on the keyboard
<b>Bold</b>	Menus and menu commands, command buttons, tabs, and options
<i>Italics</i>	References to other documents
Monospace	Sample command lines, program code, web URLs, file names, and program output
<b>Navigation &gt; Path</b>	The navigation path to reach a particular screen For example, <b>File &gt; Save</b> means, click <b>File</b> and then click <b>Save</b> on the interface
 <b>Note</b>	Configuration notes
 <b>Tip</b>	Recommendations or suggestions
 <b>Important</b>	Information regarding required or default configuration settings and product limitations
 <b>WARNING!</b>	Critical actions and configuration options

## About Trend Micro

As a global leader in cloud security, Trend Micro develops Internet content security and threat management solutions that make the world safe for businesses and consumers to exchange digital information. With over 20 years of experience, Trend Micro provides top-ranked client, server, and cloud-based solutions that stop threats faster and protect data in physical, virtual, and cloud environments.

As new threats and vulnerabilities emerge, Trend Micro remains committed to helping customers secure data, ensure compliance, reduce costs, and safeguard business integrity. For more information, visit:

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# Chapter 1

## Introduction

The TippingPoint Advanced Threat Protection Analyzer Syslog Content Mapping Guide provides information about log management standards and syntaxes for implementing syslog events in Trend Micro TippingPoint ATP Analyzer.

To enable flexible integration with third-party log management systems, TippingPoint Advanced Threat Protection Analyzer supports the following syslog formats:

LOG MANAGEMENT SYSTEM	DESCRIPTION
Common Event Format (CEF) For details, see <a href="#">Syslog Content Mapping - CEF on page 2-1</a>	CEF is an open log management standard created by HP ArcSight.  TippingPoint Advanced Threat Protection Analyzer uses a subset of the CEF dictionary.
Log Event Extended Format (LEEF) For details, see <a href="#">Syslog Content Mapping - LEEF on page 3-1</a>	LEEF is an event format developed for IBM Security QRadar.  TippingPoint Advanced Threat Protection Analyzer uses a subset of the LEEF dictionary.

<b>LOG MANAGEMENT SYSTEM</b>	<b>DESCRIPTION</b>
Trend Micro Event Format (TMEF) For details, see <a href="#">Syslog Content Mapping - TMEF on page 4-1</a>	TMEF is a superset of log fields that allow a third-party syslog collector to better control and mitigate detection events provided by TippingPoint Advanced Threat Protection Analyzer.

## Terminology

TERM	DESCRIPTION
CEF	Common Event Format
LEEF	Log Event Extended Format
TMEF	Trend Micro Event Format

## Events

Trend Micro TippingPoint Advanced Threat Protection Analyzer supports the following events:

**TABLE 1-1. Supported Events**

EVENT NAME	EVENT DESCRIPTION
Virtual Analyzer Analysis Logs: File Analysis Events	File analysis events from Virtual Analyzer.
Virtual Analyzer Analysis Logs: URL Analysis Events	URL analysis events from Virtual Analyzer.
Integrated Product Detection Logs: Detection Results Events	Detections from integrated products, like Advanced Threat Protection for Networks or IWSVA.
Virtual Analyzer Analysis Logs: Notable Characteristics Events	Notable characteristics from Virtual Analyzer results.
Virtual Analyzer Analysis Logs: Deny List Transaction Events	Suspicious objects from Virtual Analyzer results.





## Chapter 2

### Syslog Content Mapping - CEF


The following tables outline syslog content mapping between TippingPoint Advanced Threat Protection Analyzer log output and CEF syslog types:

- *CEF Virtual Analyzer Analysis Logs: File Analysis Events on page 2-2*
- *CEF Virtual Analyzer Analysis Logs: URL Analysis Events on page 2-5*
- *CEF Integrated Product Detection Logs: Detection Results Events on page 2-7*
- *CEF Virtual Analyzer Analysis Logs: Notable Characteristics Events on page 2-10*
- *CEF Virtual Analyzer Analysis Logs: Deny List Transaction Events on page 2-12*

## CEF Virtual Analyzer Analysis Logs: File Analysis Events

**TABLE 2-1. CEF Virtual Analyzer Analysis Logs: File Analysis Events**

CEF KEY	DESCRIPTION	VALUE
Header (logVer)	CEF format version	CEF: 0
Header (vendor)	Appliance vendor	Trend Micro
Header (pname)	Appliance product	TippingPoint Advanced Threat Protection Analyzer
Header (pver)	Appliance version	Example: 5.5.0.1191
Header (eventid)	Signature ID	200119
Header (eventName)	Description	Sample file sandbox analysis is finished
Header (severity)	Severity	3: Informational
cn1	Result of GRID/CSSS	<ul style="list-style-type: none"><li>• -1: GRID is unknown</li><li>• 0: GRID is not known good</li><li>• 1: GRID is known good</li></ul>
cn1Label	Result of GRID/CSSS	GRIDIsKnownGood

CEF KEY	DESCRIPTION	VALUE
cn2	ROZ rating (Virtual Analyzer internal code for analysis results)	<ul style="list-style-type: none"> <li>• -1: Unsupported file type in ROZ</li> <li>• 0: No risk found</li> <li>• 1: Low risk</li> <li>• 2: Medium risk</li> <li>• 3: High risk</li> </ul> <hr/>  <b>Note</b> Negative values always indicate errors.
cn2Label	ROZ rating (Virtual Analyzer internal code for analysis results)	ROZRating
cn3	PCAP ready	<ul style="list-style-type: none"> <li>• 0: PCAP is not ready</li> <li>• 1: PCAP is ready</li> </ul>
cn3Label	PCAP ready	PcapReady
cs1	Sandbox image type	Example: win7
cs1Label	Sandbox image type	SandboxImageType
cs2	Malware name	Example: HEUR_NAMETRICK.A
cs2Label	Malware name	MalwareName
cs3	Parent SHA1	Example: A29E4ACA70BEF4AF8CE75AF5 1032B6B91572AA0D
cs3Label	Parent SHA1	ParentFileSHA1
deviceExternalId	Appliance GUID	Example: 6B593E17AFB7-40FBBB28- A4CE-0462-A536


CEF KEY	DESCRIPTION	VALUE
dvc	Appliance IP address	Example: 10.1.144.199
dvchost	Appliance host name	Example: localhost
dvcmac	Appliance MAC address	Example: 00:0C:29:6E:CB:F9
fileHash	SHA1	Example: 1EDD5B38DE4729545767088C5 CAB395E4197C8F3
fileType	True file type	Example: RIFF bitmap file
fname	File name	Example: excel.rar
fsize	File size	Example: 131372
rt	Analysis time	Example: Mar 09 2015 17:05:21 GMT+08:00

Log sample:

```
CEF:0|Trend Micro|TippingPoint Advanced Threat Protection Analyzer|5.5.0.1202|200119|Sample file sandbox analysis is finished|3|rt=Feb 27 2015 09:49:06 GMT+00:00 dvc=10.204.191.249 dvchost=ATPAnalyzer dvcmac=EC:F4:BB:C6:F1:D0 deviceExternalId=758B04C9-F577-4B8A-B527-ABCB84FDAC83 fname=Invoice_06202013_QBK.exe fileHash=CF1A6CF231BDA185DEBF70B8562301798F286FAD fileType=WIN32 EXE fsize=117248 cs1Label=SandboxImageType cs1=win8 cs3Label=ParentFileSHA1 cs3=FF47AEE003778AA51E0326F53EF235C96D71D7CA cn1Label=GRIDIsKnownGood cn1=-1 cn2Label=ROZRating cn2=3 cs2Label=MalwareName cs2=TSPY_FAREIT.WT cn3Label=PcapReady cn3=1
```

## CEF Virtual Analyzer Analysis Logs: URL Analysis Events

**TABLE 2-2. CEF Virtual Analyzer Analysis Logs: URL Analysis Events**

CEF KEY	DESCRIPTION	VALUE
Header (logVer)	CEF format version	CEF: 0
Header (vendor)	Appliance vendor	Trend Micro
Header (pname)	Appliance product	TippingPoint Advanced Threat Protection Analyzer
Header (pver)	Appliance version	Example: 5.5.0.1191
Header (eventid)	Signature ID	200126
Header (eventName)	Description	URL sandbox analysis is finished
Header (severity)	Severity	3: Informational
cn2	ROZ rating (Virtual Analyzer internal code for analysis results)	<ul style="list-style-type: none"> <li>• -1: Unsupported file type in ROZ</li> <li>• 0: No risk found</li> <li>• 1: Low risk</li> <li>• 2: Medium risk</li> <li>• 3: High risk</li> </ul> <hr/>  <b>Note</b> Negative values always indicate errors.
cn2Label	ROZ rating (Virtual Analyzer internal code for analysis results)	ROZRating
cn3	PCAP ready	<ul style="list-style-type: none"> <li>• 0: PCAP is not ready</li> <li>• 1: PCAP is ready</li> </ul>

CEF KEY	DESCRIPTION	VALUE
cn3Label	PCAP ready	PcapReady
cs1	Sandbox image type	Example: win7
cs1Label	Sandbox image type	SandboxImageType
deviceExternalId	Appliance GUID	Example: 6B593E17AFB7-40FBBB28-A4CE-0462-A536
dvc	Appliance IP address	Example: 10.1.144.199
dvchost	Appliance host name	Example: localhost
dvcmac	Appliance MAC address	Example: 00:0C:29:6E:CB:F9
fileHash	SHA1	Example: 1EDD5B38DE4729545767088C5 CAB395E4197C8F3
request	URL	Example: http:// www.rainking.net/? utm_campaign=4-21-2014  http:// images.rainking.net/eloquaimage
rt	Analysis time	Example: Mar 09 2015 17:05:21 GMT+08:00

Log sample:

```
CEF:0|Trend Micro|TippingPoint Advanced Threat Protection Analyzer|5.5.0.1202|200126|URL sandbox analysis is finished|3|rt=Feb 27 2015 09:36:26 GMT+00:00 dvc=10.204.191.249 dvchost=ATPAnalyzer dvcmac=EC:F4:BB:C6:F1:D0 deviceExternalId=758B04C9-F577-4B8A-B527-ABCB84FDAC83 request=http://www.baidu.com:80/ fileHash=ACB5175554463DD2ADBDF78AD82C7D6BB8C8B6B cs1Label=SandboxImageType cs1=win8 cn2Label=ROZRating cn2=0 cn3Label=PcapReady cn3=1
```

## CEF Integrated Product Detection Logs: Detection Results Events

**TABLE 2-3. CEF Integrated Product Detection Logs: Detection Results Events**

CEF KEY	DESCRIPTION	VALUE
Header (logVer)	CEF format version	CEF: 0
Header (vendor)	Appliance vendor	Trend Micro
Header (pname)	Appliance product	TippingPoint Advanced Threat Protection Analyzer
Header (pver)	Appliance version	Example: 5.5.0.1191
Header (eventid)	Signature ID	200128
Header (eventName)	Description	SUBMISSION_ANALYZED
Header (severity)	TippingPoint Advanced Threat Protection Analyzer risk level mapping:	<ul style="list-style-type: none"> <li>• 1: Unrated</li> <li>• 2: No risk</li> <li>• 4: Low</li> <li>• 6: Medium</li> <li>• 8: High</li> </ul>
app	Application protocol	Example: FTP/HTTPS/MSN/...
c6a2	Source IPv6 address	Example: 2001:db8::1
c6a2Label	Source IPv6 address	srcIPv6
c6a3	Destination IPv6 address	Example: 2001:db8:a0b:12f0::1
c6a3Label	Destination IPv6 address	dstIPv6
cn1	Sample type	<ul style="list-style-type: none"> <li>• 0: File sample</li> <li>• 1: URL sample</li> </ul>
cn1Label	Sample type	sampleType

CEF KEY	DESCRIPTION	VALUE
cs1	Malware name	Example: HEUR_NAMETRICK.A
cs1Label	Malware name	malName
cs2	Email ID	Example: <20150414032514.494EF1E9A365@internalbeta.bcc.ddei>
cs2Label	Email ID	messageld
cs3	Application protocol group	Example: SMTP/HTTP/...
cs3Label	Application protocol group	appGroup
cs4	Submitter	Example: Advanced Threat Protection for Network
cs4Label	Submitter	submitter
cs5	Submitter host name	Example: shost1
cs5Label	Submitter host name	submitterName
deviceDirection	Associated direction	<ul style="list-style-type: none"> <li>• 0: inbound</li> <li>• 1: outbound</li> <li>• 2: unknown</li> </ul>
deviceExternalId	Appliance GUID	Example: 6B593E17AFB7-40FBBB28-A4CE-0462-A536
deviceProcessName	Appliance process name	Example: explorer.exe
dhost	Destination host name	Example: dhost1
dmac	Destination MAC address	Example: 00:0C:29:6E:CB:F9
dpt	Destination port	Value between 0 and 65535
dst	Destination IPv4 address	Example: 10.1.144.199



CEF KEY	DESCRIPTION	VALUE
duser	Email recipients	Example: user1@domain2.com;test@163.com
dvc	Appliance IP address	Example: 10.1.144.199
dvchost	Appliance host name	Example: localhost
dvcmac	Appliance MAC address	Example: 00:0C:29:6E:CB:F9
fileHash	SHA1	Example: 1EDD5B38DE4729545767088C5 CAB395E4197C8F3
fileType	True file type	Example: RIFF bitmap file
fname	File name	Example: excel.rar
fsize	File size	Example: 131372
msg	Email subject	Example: hello
request	URL	Example: http:// www.rainking.net/? utm_campaign=4-21-2014  http:// images.rainking.net/eloquaimage
requestClientApplication	User agent	Example: IE
rt	Event generation time at submitter	Example: Mar 09 2015 17:05:21 GMT+08:00
shost	Source host name	Example: shost1
smac	Source MAC address	Example: 00:0C:29:6E:CB:F9
spt	Source port	Value between 0 and 65535
src	Source IPv4 address	Example: 10.1.144.199
suser	Email sender	Example: user2@domain.com

Log sample:

```
CEF:0|Trend Micro|TippingPoint Advanced Threat Protection Analyzer|5.5.1.1034|200128|SUBMISSION_ANALYZED|1|rt=May 06 2016 14:34:29 GMT+08:00 dvc=192.168.1.1 dvchost=ATPAnalyzer dvcmac=b8:ca:3a:68:2f:cc deviceExternalId=F8E649AA-AF79-4545-9B5A-580BA993D5E3 src=192.168.14.59 spt=20819 smac=98:90:96:CA:78:1F host=nj-host1 dst=106.120.188.47 dpt=80 dmac=00:00:0C:9F:F0:0E dhost=106.120.188.47 cnlLabel=sampleType cnl=0 fname=sgim_usrzoneext.zip fsize=692 fileType=PKZIP fileHash=9D49696A96DB224F7E884146D801DD8C828D17BF request=http://pc.profile.pinyin.sogou.com/upload.php?hid\\=sgpy-windows-generic-device-id&v\\=7.9.0.7504&brand\\=1&platform\\=1&ifbak\\=1&ifmobile\\=0&ifauto\\=0&filename\\=sgim_usrzoneext.zip&m\\=ACB0BDECEF76784CD482133A068241B7 app=HTTP cs3Label=appGroup cs3=HTTP cs4Label=submitter cs4=TippingPoint Advanced Threat Protection for Networks cs5Label=submitterName cs5=ATPNetworks deviceDirection=1 requestClientApplication=sogou_ime/7.9.0.7504
```

## CEF Virtual Analyzer Analysis Logs: Notable Characteristics Events

**TABLE 2-4. CEF Virtual Analyzer Analysis Logs: Notable Characteristics Events**

CEF KEY	DESCRIPTION	VALUE
Header (logVer)	CEF format version	CEF: 0
Header (vendor)	Appliance vendor	Trend Micro
Header (pname)	Appliance product	TippingPoint Advanced Threat Protection Analyzer
Header (pver)	Appliance version	Example: 5.5.0.1191
Header (eventid)	Signature ID	200127
Header (eventName)	Description	Notable Characteristics of the analyzed sample
Header (severity)	Severity	6: Warning

CEF KEY	DESCRIPTION	VALUE
cs1	Violated policy name	Example: Internet Explorer Setting Modification
cs1Label	Violated policy name	PolicyCategory
cs2	Violated event analysis	Example: Modified important registry items
cs2Label	Violated event analysis	PolicyName
cs3	Sandbox image type	Example: win7
cs3Label	Sandbox image type	SandboxImageType
deviceExternalId	Appliance GUID	Example: 6B593E17AFB7-40FBBB28-A4CE-0462-A536
dvc	Appliance IP address	Example: 10.1.144.199
dvchost	Appliance host name	Example: localhost
dvcmac	Appliance MAC address	Example: 00:0C:29:6E:CB:F9
fileHash	SHA1	Example: 1EDD5B38DE4729545767088C5 CAB395E4197C8F3
fileType	True file type	Example: RIFF bitmap file
fname	File name	Example: excel.rar
fsize	File size	Example: 131372
msg	Details	Example: Source: ATSE \nDetection Name: TSPY_FAREIT.WT\nEngine Version: 9.755.1246\nMalware Pattern Version: 11.501.90
rt	Analysis time	Example: Mar 09 2015 17:05:21 GMT+08:00

Log sample:

```
CEF:0|Trend Micro|TippingPoint Advanced Threat Protection Analyzer|5.5.0.1202|200127|Notable Characteristics of the analyzed sample|6|rt=Feb 27 2015 09:49:06 GMT+00:00 dvc=10.204.191.249 dvchost=ATPAnalyzer dvcmac=EC:F4:BB:C6:F1:D0 deviceExternalId=758B04C9-F577-4B8A-B527-ABCB84FDAC83 fname=Invoice_06202013_QBK.exe fileHash=CF1A6CF231BDA185DEBF70B8562301798F286FAD fileType=WIN32 EXE fsize=117248 cs1Label=PolicyCategory cs1=Malformed, defective, or with known malware traits msg=Source: ATSE\nDetection Name: TSPY_FAREIT.WT\nEngine Version: 9.755.1246\nMalware Pattern Version: 11.501.90 cs2Label=PolicyName cs2=Detected as known malware
```

## CEF Virtual Analyzer Analysis Logs: Deny List Transaction Events

**TABLE 2-5. CEF Virtual Analyzer Analysis Logs: Deny List Transaction Events**

CEF KEY	DESCRIPTION	VALUE
Header (logVer)	CEF format version	CEF: 0
Header (vendor)	Appliance vendor	Trend Micro
Header (pname)	Appliance product	TippingPoint Advanced Threat Protection Analyzer
Header (pver)	Appliance version	Example: 5.5.0.1191
Header (eventid)	Signature ID	200120
Header (eventName)	Description	Deny List updated
Header (severity)	Severity	3: Informational
act	The action in the event	<ul style="list-style-type: none"> <li>• Add</li> <li>• Remove</li> </ul>

CEF KEY	DESCRIPTION	VALUE
cs1	Deny List type	<ul style="list-style-type: none"> <li>Deny List IP/Port</li> <li>Deny List URL</li> <li>Deny List File SHA1</li> <li>Deny List Domain</li> </ul>
cs1Label	Deny List type	type
cs2	Risk level	<ul style="list-style-type: none"> <li>Low</li> <li>Medium</li> <li>High</li> <li>Confirmed Malware</li> </ul>
cs2Label	Risk level	RiskLevel
deviceExternalId	Appliance GUID	Example: 6B593E17AFB7-40FBBB28- A4CE-0462-A536
dhost	Destination host name	Example: dhost1
dpt	Destination port	Value between 0 and 65535
dst	Destination IPv4 address	Example: 10.1.144.199
dvc	Appliance IP address	Example: 10.1.144.199
dvchost	Appliance host name	Example: localhost
dvcmac	Appliance MAC address	Example: 00:0C:29:6E:CB:F9
end	Deny List expired time	Example: Mar 09 2015 17:05:21 GMT+08:00
fileHash	SHA1	Example: 1EDD5B38DE4729545767088C5 CAB395E4197C8F3

CEF KEY	DESCRIPTION	VALUE
request	URL	Example: http://www.rainking.net/?utm_campaign=4-21-2014  http://images.rainking.net/eloquaimage
rt	Log generation time	Example: Mar 09 2015 17:05:21 GMT+08:00

Log sample:

```
CEF:0|Trend Micro|TippingPoint Advanced Threat Protection Analyzer|5.5.0.1202|200120|Deny List updated|3|rt=Feb 27 2015 09:49:41 GMT+00:00 dvc=10.204.191.249 dvchost=ATPAnalyzer dvcmac=EC:F4:BB:C6:F1:D0 deviceExternalId=758B04C9-F577-4B8A-B527-ABCB84FDAC83 cs1Label=type cs1=Deny List File SHA1 end=Mar 29 2015 09:49:06 GMT+00:00 act=Add fileHash=CF1A6CF231BDA185DEBF70B8562301798F286FAD cs2Label=RiskLevel cs2=High
```

## Chapter 3

### Syslog Content Mapping - LEEF

The following tables outline syslog content mapping between TippingPoint Advanced Threat Protection Analyzer log output and LEEF syslog types:

- *LEEF Virtual Analyzer Analysis Logs: File Analysis Events on page 3-2*
- *LEEF Virtual Analyzer Analysis Logs: URL Analysis Events on page 3-4*
- *LEEF Integrated Product Detection Logs: Detection Results Events on page 3-6*
- *LEEF Virtual Analyzer Analysis Logs: Notable Characteristics Events on page 3-9*
- *LEEF Virtual Analyzer Analysis Logs: Deny List Transaction Events on page 3-11*



**Note**

When using the LEEF log syntax, separate event attributes with <009> as a tab delimiter.


---

## LEEF Virtual Analyzer Analysis Logs: File Analysis Events

**TABLE 3-1. LEEF Virtual Analyzer Analysis Logs: File Analysis Events**

LEEF KEY	DESCRIPTION	VALUE
Header (logVer)	LEEF format version	LEEF: 1.0
Header (vendor)	Appliance vendor	Trend Micro
Header (pname)	Appliance product	TippingPoint Advanced Threat Protection Analyzer
Header (pver)	Appliance version	Example: 5.5.0.1191
Header (eventName)	Event Name	FILE_ANALYZED
deviceGUID	Appliance GUID	Example: 6B593E17AFB7-40FBBB28-A4CE-0462-A536
deviceMacAddress	Appliance MAC address	Example: 00:0C:29:56:B3:57
deviceProcessHash	Parent SHA1	Example: A29E4ACA70BEF4AF8CE75AF5 1032B6B91572AA0D
devTime	Log generation time	Example: Jan 28 2015 02:00:36 GMT+08:00
devTimeFormat	Time format	MMM dd yyyy HH:mm:ss z
dvc	Appliance IP address	Example: 10.1.144.199
dvchost	Appliance host name	Example: localhost
fileHash	SHA1	Example: 1EDD5B38DE4729545767088C5 CAB395E4197C8F3
fileType	True file type	Example: RIFF bitmap file
fname	File name	Example: excel.rar



LEEF KEY	DESCRIPTION	VALUE
fsize	File size	Example: 131372
gridIsKnownGood	Result of GRID/CSSS	<ul style="list-style-type: none"> <li>• -1: GRID is unknown</li> <li>• 0: GRID is not known good</li> <li>• 1: GRID is known good</li> </ul>
malName	Malware name	Example: HEUR_NAMETRICK.A
pcapReady	PCAP ready	<ul style="list-style-type: none"> <li>• 0: PCAP is not ready</li> <li>• 1: PCAP is ready</li> </ul>
pComp	Detection engine / component	Sandbox
rozRating	ROZ rating (Virtual Analyzer internal code for analysis results)	<ul style="list-style-type: none"> <li>• -1: Unsupported file type in ROZ</li> <li>• 0: No risk found</li> <li>• 1: Low risk</li> <li>• 2: Medium risk</li> <li>• 3: High risk</li> </ul> <hr/>  <b>Note</b> Negative values always indicate errors.
sev	Severity	3: Informational

**Note**

When using the LEEF log syntax, separate event attributes with <009> as a tab delimiter.

Log sample:


```
LEEF:1.0|Trend Micro|TippingPoint Advanced Threat Protection Analyzer|5.5.0.1202|FILE_ANALYZED|devTime=Feb 28 2015 02:45:48 GM
```

```
T+00:00<009>devTimeFormat=MMM dd yyyy HH:mm:ss z<009>sev=3<009>
pComp=Sandbox<009>dvc=10.204.191.249<009>dvchost=ATPAnalyzer<00
9>deviceMacAddress=EC:F4:BB:C6:F1:D0<009>deviceGUID=758B04C9-F5
77-4B8A-B527-ABCB84FDAC83<009>fname=Invoice_06202013_QBK.exe<00
9>fileHash=CF1A6CF231BDA185DEBF70B8562301798F286FAD<009>deviceP
rocessHash=FF47AEE003778AA51E0326F53EF235C96D71D7CA<009>malName
=TSPY_FAREIT.WT<009>fileType=WIN32 EXE<009>fsize=117248<009>dev
iceOSName=win8<009>gridIsKnownGood=-1<009>rozRating=3<009>pcapR
eady=1
```

## LEEF Virtual Analyzer Analysis Logs: URL Analysis Events

**TABLE 3-2. LEEF Virtual Analyzer Analysis Logs: URL Analysis Events**

LEEF KEY	DESCRIPTION	VALUE
Header (logVer)	LEEF format version	LEEF: 1.0
Header (vendor)	Appliance vendor	Trend Micro
Header (pname)	Appliance product	TippingPoint Advanced Threat Protection Analyzer
Header (pver)	Appliance version	Example: 5.5.0.1191
Header (eventName)	Event Name	URL_ANALYZED
deviceGUID	Appliance GUID	Example: 6B593E17AFB7-40FBBB28-A4CE-0462-A536
deviceMacAddress	Appliance MAC address	Example: 00:0C:29:56:B3:57
deviceOSName	Sandbox image type	Example: win7
devTime	Log generation time	Example: Jan 28 2015 02:00:36 GMT+08:00
devTimeFormat	Time format	MMM dd yyyy HH:mm:ss z

LEEF KEY	DESCRIPTION	VALUE
dvc	Appliance IP address	Example: 10.1.144.199
dvchost	Appliance host name	Example: localhost
fileHash	SHA1	Example: 1EDD5B38DE4729545767088C5 CAB395E4197C8F3
pcapReady	PCAP ready	<ul style="list-style-type: none"> <li>0: PCAP is not ready</li> <li>1: PCAP is ready</li> </ul>
pComp	Detection engine / component	Sandbox
rozRating	ROZ rating (Virtual Analyzer internal code for analysis results)	<ul style="list-style-type: none"> <li>-1: Unsupported file type in ROZ</li> <li>0: No risk found</li> <li>1: Low risk</li> <li>2: Medium risk</li> <li>3: High risk</li> </ul> <hr/>  <b>Note</b> Negative values always indicate errors.
sev	Severity	3: Informational
url	URL	Example: http://1.2.3.4/query?term=value

**Note**

When using the LEEF log syntax, separate event attributes with <009> as a tab delimiter.

Log sample:

```
LEEF:1.0|Trend Micro|TippingPoint Advanced Threat Protection An
```

```
alyzer|5.5.0.1202|URL_ANALYZED|devTime=Feb 27 2015 09:36:26 GMT
+00:00<009>devTimeFormat=MMM dd yyyy HH:mm:ss z<009>sev=3<009>p
Comp=Sandbox<009>dvc=10.204.191.249<009>dvchost=ATPAnalyzer<009
>deviceMacAddress=EC:F4:BB:C6:F1:D0<009>deviceGUID=758B04C9-F57
7-4B8A-B527-ABC84FDAC83<009>fileHash=ACB5175554463DD2ADBDF78A
D82C7D6BB8C8B6B<009>deviceOSName=win8<009>url=http://www.baidu.
com:80/<009>rozRating=0<009>pcapReady=
```

## LEEF Integrated Product Detection Logs: Detection Results Events

**TABLE 3-3. LEEF Integrated Product Detection Logs: Detection Results Events**

LEEF KEY	DESCRIPTION	VALUE
Header (logVer)	LEEF format version	LEEF: 1.0
Header (vendor)	Appliance vendor	Trend Micro
Header (pname)	Appliance product	TippingPoint Advanced Threat Protection Analyzer
Header (pver)	Appliance version	Example: 5.5.0.1191
Header (eventName)	Description	SUBMISSION_ANALYZED
app	Application protocol	Example: FTP/HTTPS/MSN/...
appGroup	Application protocol group	Example: SMTP/HTTP/...
deviceDirection	Associated direction	<ul style="list-style-type: none"> <li>• 0: inbound</li> <li>• 1: outbound</li> <li>• 2: unknown</li> </ul>
deviceProcessName	Appliance process name	Example: explorer.exe
devTime	Event generation time at submitter	Example: Jan 28 2015 02:00:36 GMT+08:00

LEEF KEY	DESCRIPTION	VALUE
devTimeFormat	Time format	MMM dd yyyy HH:mm:ss z
dhost	Destination host name	Example: dhost1
dst	Destination IPv4 address Destination IPv6 address	Example: 10.1.144.199 Example: 2001:db8:a0b:12f0::1
dstMAC	Destination MAC address	Example: 00:0C:29:6E:CB:F9
dstPort	Destination port	Value between 0 and 65535
duser	Email recipients	Example: user1@domain2.com;test@163.com
dvc	Appliance IP address	Example: 10.1.144.199
dvchost	Appliance host name	Example: localhost
deviceGUID	Appliance GUID	Example: 6B593E17AFB7-40FBBB28-A4CE-0462-A536
deviceMacAddress	Appliance MAC address	Example: 00:0C:29:6E:CB:F9
fileHash	SHA1	Example: 1EDD5B38DE4729545767088C5 CAB395E4197C8F3
fileType	True file type	Example: RIFF bitmap file
fname	File name	Example: excel.rar
fsize	File size	Example: 131372
mailMsgSubject	Email subject	Example: hello
malName	Malware name	Example: HEUR_NAMETRICK.A
messageId	Email ID	Example: <20150414032514.494EF1E9A365@internalbeta.bcc.ddei>

LEEF KEY	DESCRIPTION	VALUE
requestClientApplication	User agent	Example: IE
sampleType	Sample type	<ul style="list-style-type: none"> <li>0: File sample</li> <li>1: URL sample</li> </ul>
sev	TippingPoint Advanced Threat Protection Analyzer risk level mapping:	<ul style="list-style-type: none"> <li>1: Unrated</li> <li>2: No risk</li> <li>4: Low</li> <li>6: Medium</li> <li>8: High</li> </ul>
shost	Source host name	Example: shost1
src	Source IPv4 address Source IPv6 address	Example: 10.1.144.199 Example: 2001:db8::1
srcMAC	Source MAC address	Example: 00:0D:60:AF:1B:61
srcPort	Source port	Value between 0 and 65535
submitter	Submitter	Example: Advanced Threat Protection for Network
submitterName	Submitter host name	Example: shost1
suser	Email sender	Example: user2@domain.com
url	URL	Example: http://1.2.3.4/query?term=value

Log sample:

```
LEEF:1.0|Trend Micro|TippingPoint Advanced Threat Protection Analyzer|5.5.1.1034|SUBMISSION_ANALYZED|devTime=May 06 2016 14:33:52 GMT+08:00<009>devTimeFormat=MMM dd yyyy HH:mm:ss z<009>sev=1<009>dvc=192.168.1.1<009>dvchost=ATPAnalyzer<009>deviceMacAddress=b8:ca:3a:68:2f:c0<009>deviceGUID=F8E649AA-AF79-4545-9B5A-580BA993D5E3<009>src=192.168.88.108<009>srcPort=40167<009>srcMAC=
```

```
9C:99:A0:4B:7B:76<009>shost=android-e1b7f2d1e98eb838<009>dst=42
.62.93.35<009>dstPort=80<009>dstMAC=3C:61:04:96:97:00<009>dhost
=42.62.93.35<009>sampleType=0<009>fname=lla.zip<009>fsize=423<0
09>fileType=PKZIP<009>fileHash=4511117B782C243E01E830ED63BCBAB6
B9BD111E<009>url=http://stat.moji.com/aMoUp<009>app=HTTP<009>ap
pGroup=HTTP<009>submitter=TippingPoint Advanced Threat Protecti
on for Networks<009>submitterName=ATPNetworks<009>deviceDirecti
on=1<009>requestClientApplication=Apache-HttpClient/UNAVAILABLE
(java 1.4)
```

## LEEF Virtual Analyzer Analysis Logs: Notable Characteristics Events

**TABLE 3-4. LEEF Virtual Analyzer Analysis Logs: Notable Characteristics Events**

LEEF KEY	DESCRIPTION	VALUE
Header (logVer)	LEEF format version	LEEF: 1.0
Header (vendor)	Appliance vendor	Trend Micro
Header (pname)	Appliance product	TippingPoint Advanced Threat Protection Analyzer
Header (pver)	Appliance version	Example: 5.5.0.1191
Header (eventName)	Event Name	NOTABLE_CHARACTERISTICS
deviceGUID	Appliance GUID	Example: 6B593E17AFB7-40FBBB28- A4CE-0462-A536
deviceMacAddress	Appliance MAC address	Example: 00:0C:29:56:B3:57
deviceOSName	Sandbox image type	Example: win7
devTime	Log generation time	Example: Jan 28 2015 02:00:36 GMT+08:00
devTimeFormat	Time format	MMM dd yyyy HH:mm:ss z

LEEF KEY	DESCRIPTION	VALUE
dvc	Appliance IP address	Example: 10.1.144.199
dvchost	Appliance host name	Example: localhost
fileHash	SHA1	Example: 1EDD5B38DE4729545767088C5 CAB395E4197C8F3
fileType	True file type	Example: RIFF bitmap file
fname	File name	Example: excel.rar
fsize	File size	Example: 131372
msg	Details	Example: Process ID: 884 \nFile: %TEMP%\n~DF7A0C28F4D7D9E792.TMP \nType: VSDT_ERROR
pComp	Detection engine / component	Sandbox
ruleCategory	Violated policy name	Example: Internet Explorer Setting Modification
ruleName	Violated event analysis	Example: Modified important registry items
sev	Severity	6: Warning



**Note**

When using the LEEF log syntax, separate event attributes with <009> as a tab delimiter.

Log sample:

```
LEEF:1.0|Trend Micro|TippingPoint Advanced Threat Protection Analyzer|5.5.0.1202|NOTABLE_CHARACTERISTICS|devTime=Feb 28 2015 02:46:33 GMT+00:00<009>devTimeFormat=MMM dd yyyy HH:mm:ss z<009>sev=6<009>pComp=Sandbox<009>dvc=10.204.191.249<009>dvchost=ATPAnalyzer<009>deviceMacAddress=EC:F4:BB:C6:F1:D0<009>deviceGUID=7
```



```
58B04C9-F577-4B8A-B527-ABCB84FDAC83<009>fname=a254i.doc<009>fileHash=7A75D6934C5CDAAF6CA13F8FA4CA03E46DAA7623<009>fileType=Microsoft RTF<009>fsize=86016<009>ruleCategory=File drop, download, sharing, or replication<009>ruleName=Deletes file to compromise the system or to remove traces of the infection<009>msg=Process ID: 884\nFile: %TEMP%\~DF7A0C28F4D7D9E792.TMP\nType: VSDT_ERROR
```

## LEEF Virtual Analyzer Analysis Logs: Deny List Transaction Events

**TABLE 3-5. LEEF Virtual Analyzer Analysis Logs: Deny List Transaction Events**

LEEF KEY	DESCRIPTION	VALUE
Header (logVer)	LEEF format version	LEEF: 1.0
Header (vendor)	Appliance vendor	Trend Micro
Header (pname)	Appliance product	TippingPoint Advanced Threat Protection Analyzer
Header (pver)	Appliance version	Example: 5.5.0.1191
Header (eventName)	Event Name	DENYLIST_CHANGE
act	The action in the event	<ul style="list-style-type: none"> <li>• Add</li> <li>• Remove</li> </ul>
deviceExternalRiskType	Risk level	<ul style="list-style-type: none"> <li>• Low</li> <li>• Medium</li> <li>• High</li> <li>• Confirmed Malware</li> </ul>
deviceGUID	Appliance GUID	Example: 6B593E17AFB7-40FBBB28-A4CE-0462-A536
deviceMacAddress	Appliance MAC address	Example: 00:0C:29:56:B3:57

LEEF KEY	DESCRIPTION	VALUE
devTime	Log generation time	Example: Jan 28 2015 02:00:36 GMT+08:00
devTimeFormat	Time format	MMM dd yyyy HH:mm:ss z
dhost	Destination host name	Example: dhost1
dpt	Destination port	Value between 0 and 65535
dst	Destination IPv4 address	Example: 10.1.144.199
dvc	Appliance IP address	Example: 10.1.144.199
dvchost	Appliance host name	Example: localhost
end	Report end time	Example: Mar 09 2015 17:05:21 GMT+08:00
fileHash	SHA1	Example: 1EDD5B38DE4729545767088C5 CAB395E4197C8F3
pComp	Detection engine / component	Sandbox
sev	Severity	3: Informational
type	Deny List type	<ul style="list-style-type: none"> <li>• Deny List IP/Port</li> <li>• Deny List URL</li> <li>• Deny List File SHA1</li> <li>• Deny List Domain</li> </ul>
url	URL	Example: http://1.2.3.4/query?term=value



**Note**

When using the LEEF log syntax, separate event attributes with <009> as a tab delimiter.

Log sample:

```
LEEF:1.0|Trend Micro|TippingPoint Advanced Threat Protection Analyzer|5.5.0.1202|DENYLIST_CHANGE|devTime=Feb 28 2015 02:50:03 GMT+00:00<009>devTimeFormat=MMM dd yyyy HH:mm:ss z<009>sev=3<009>pComp=Sandbox<009>dvc=10.204.191.249<009>dvchost=ATPAnalyzer<009>deviceMacAddress=EC:F4:BB:C6:F1:D0<009> deviceGUID=758B04C9-F577-4B8A-B527-ABCB84FDAC83<009>end=Mar 30 2015 02:45:48 GMT+00:00<009>act=Add<009>fileHash=CF1A6CF231BDA185DEBF70B8562301798F286FAD<009>deviceExternalRiskType=High<009>type=Deny List File SHA1
```



# Chapter 4


## Syslog Content Mapping - TMEF

The following tables outline syslog content mapping between TippingPoint Advanced Threat Protection Analyzer log output and TMEF syslog types:

- *TMEF Virtual Analyzer Analysis Logs: File Analysis Events on page 4-2*
- *TMEF Virtual Analyzer Analysis Logs: URL Analysis Events on page 4-4*
- *TMEF Integrated Product Detection Logs: Detection Results Events on page 4-6*
- *TMEF Virtual Analyzer Analysis Logs: Notable Characteristics Events on page 4-10*
- *TMEF Virtual Analyzer Analysis Logs: Deny List Transaction Events on page 4-12*

## TMEF Virtual Analyzer Analysis Logs: File Analysis Events

**TABLE 4-1. TMEF Virtual Analyzer Analysis Logs: File Analysis Events**

TMEF KEY	DESCRIPTION	VALUE
Header (logVer)	TMEF format version	CEF: 0
Header (vendor)	Appliance vendor	Trend Micro
Header (pname)	Appliance product	TippingPoint Advanced Threat Protection Analyzer
Header (pver)	Appliance version	Example: 5.5.0.1191
Header (eventid)	Signature ID	200119
Header (eventName)	Description	FILE_ANALYZED
Header (severity)	Severity	3: Informational
cn1	Result of GRID/CSSS	<ul style="list-style-type: none"> <li>• -1: GRID is unknown</li> <li>• 0: GRID is not known good</li> <li>• 1: GRID is known good</li> </ul>
cn1Label	Result of GRID/CSSS	GRIDIsKnownGood
cn2	ROZ rating (Virtual Analyzer internal code for analysis results)	<ul style="list-style-type: none"> <li>• -1: Unsupported file type in ROZ</li> <li>• 0: No risk found</li> <li>• 1: Low risk</li> <li>• 2: Medium risk</li> <li>• 3: High risk</li> </ul>
		 <b>Note</b> Negative values always indicate errors.

TMEF KEY	DESCRIPTION	VALUE
cn2Label	ROZ rating (Virtual Analyzer internal code for analysis results)	ROZRating
cn3	PCAP ready	<ul style="list-style-type: none"> <li>• 0: PCAP is not ready</li> <li>• 1: PCAP is ready</li> </ul>
cn3Label	PCAP ready	PcapReady
deviceGUID	Appliance GUID	Example: 6B593E17AFB7-40FBBB28-A4CE-0462-A536
deviceMacAddress	Appliance MAC address	Example: 00:0C:29:6E:CB:F9
deviceOSName	Sandbox image type	Example: win7
deviceProcessHash	Parent SHA1	Example: A29E4ACA70BEF4AF8CE75AF5 1032B6B91572AA0D
dvc	Appliance IP address	Example: 10.1.144.199
dvchost	Appliance host name	Example: localhost
fileHash	SHA1	Example: 1EDD5B38DE4729545767088C5 CAB395E4197C8F3
fileType	True file type	Example: RIFF bitmap file
fname	File name	Example: excel.rar
fsize	File size	Example: 131372
malName	Malware name	Example: HEUR_NAMETRICK.A
pComp	Detection engine / component	Sandbox
rt	Analysis time	Example: Mar 09 2015 17:05:21 GMT+08:00

Log sample:


```
CEF:0|Trend Micro|TippingPoint Advanced Threat Protection Analyzer|5.5.0.1221|200119|FILE_ANALYZED|3|rt=Jun 26 2015 05:29:57 GMT+00:00 pComp=Sandbox dvc=10.204.70.173 dvchost=ATPAnalyzer deviceMacAddress=00:0C:29:69:19:03 deviceGUID=6EDFB737-5EBA-42B7-8D2E-D0789F19FEF4 fname=Establishes_uncommon_connection fileHash=0C450F48E48CEF0B161C254C9E57816CD20FA918 deviceProcessHash=A754E779292F392AE7692D0D2A55D2ECB71B5332 malName=BKDR_NORA WEC.SMG fileType=UPX EXE fsize=149504 deviceOSName=fsdf cn1Label=GRIDIsKnownGood cn1=-1 cn2Label=ROZRating cn2=3 cn3Label=PcapReady cn3=1
```

## TMEF Virtual Analyzer Analysis Logs: URL Analysis Events

**TABLE 4-2. TMEF Virtual Analyzer Analysis Logs: URL Analysis Events**

TMEF KEY	DESCRIPTION	VALUE
Header (logVer)	TMEF format version	CEF: 0
Header (vendor)	Appliance vendor	Trend Micro
Header (pname)	Appliance product	TippingPoint Advanced Threat Protection Analyzer
Header (pver)	Appliance version	Example: 5.5.0.1191
Header (eventid)	Signature ID	200126
Header (eventName)	Description	URL_ANALYZED
Header (severity)	Severity	3: Informational



TMEF KEY	DESCRIPTION	VALUE
cn2	ROZ rating (Virtual Analyzer internal code for analysis results)	<ul style="list-style-type: none"> <li>-1: Unsupported file type in ROZ</li> <li>0: No risk found</li> <li>1: Low risk</li> <li>2: Medium risk</li> <li>3: High risk</li> </ul> <hr/>  <b>Note</b> Negative values always indicate errors.
cn2Label	ROZ rating (Virtual Analyzer internal code for analysis results)	ROZRating
cn3	PCAP ready	<ul style="list-style-type: none"> <li>0: PCAP is not ready</li> <li>1: PCAP is ready</li> </ul>
cn3Label	PCAP ready	PcapReady
deviceGUID	Appliance GUID	Example: 6B593E17AFB7-40FBBB28-A4CE-0462-A536
deviceMacAddress	Appliance MAC address	Example: 00:0C:29:6E:CB:F9
deviceOSName	Sandbox image type	Example: win7
dvc	Appliance IP address	Example: 10.1.144.199
dvchost	Appliance host name	Example: localhost
fileHash	SHA1	Example: 1EDD5B38DE4729545767088C5 CAB395E4197C8F3
pComp	Detection engine / component	Sandbox

TMEF KEY	DESCRIPTION	VALUE
request	URL	Example: http://www.rainking.net/?utm_campaign=4-21-2014  http://images.rainking.net/eloquaimage
rt	Analysis time	Example: Mar 09 2015 17:05:21 GMT+08:00

Log sample:

```
CEF:0|Trend Micro|TippingPoint Advanced Threat Protection Analyzer|5.5.0.1221|200126|URL_ANALYZED|3|rt=Jun 26 2015 05:24:26 GMT+00:00 pComp=Sandbox dvc=10.104.70.173 dvchost=ATPAnalyzer deviceMacAddress=00:0C:29:69:19:03 deviceGUID=6EDFB737-5EBA-42B7-8D2E-D0789F19FEF4 request=https://wx.qq.com:443/ fileHash=B A4AA53108D98F5195D1F490D05716F0B6D7B7EA deviceOSName=fsdf cn2Label=ROZRating cn2=-14 cn3Label=PcapReady cn3=0
```

## TMEF Integrated Product Detection Logs: Detection Results Events

**TABLE 4-3. TMEF Integrated Product Detection Logs: Detection Results Events**

TMEF KEY	DESCRIPTION	VALUE
Header (logVer)	TMEF format version	CEF: 0
Header (vendor)	Appliance vendor	Trend Micro
Header (pname)	Appliance product	TippingPoint Advanced Threat Protection Analyzer
Header (pver)	Appliance version	Example: 5.5.0.1191
Header (eventid)	Signature ID	200128
Header (eventName)	Description	SUBMISSION_ANALYZED

TMEF KEY	DESCRIPTION	VALUE
Header (severity)	TippingPoint Advanced Threat Protection Analyzer risk level mapping:	<ul style="list-style-type: none"> <li>• 1: Unrated</li> <li>• 2: No risk</li> <li>• 4: Low</li> <li>• 6: Medium</li> <li>• 8: High</li> </ul>
app	Application protocol	Example: FTP/HTTPS/MSN/...
appGroup	Application protocol group	Example: SMTP/HTTP/...
c6a2	Source IPv6 address	Example: 2001:db8::1
c6a2Label	Source IPv6 address	srcIPv6
c6a3	Destination IPv6 address	Example: 2001:db8:a0b:12f0::1
c6a3Label	Destination IPv6 address	dstIPv6
cn1	Sample type	<ul style="list-style-type: none"> <li>• 0: File sample</li> <li>• 1: URL sample</li> </ul>
cn1Label	Sample type	sampleType
cs1	Email ID	Example: <20150414032514.494EF1E9A365@internalbeta.bcc.ddei>
cs1Label	Email ID	messageId
cs2	Submitter	Example: Advanced Threat Protection for Network
cs2Label	Submitter	submitter
cs3	Submitter host name	Example: shost1
cs3Label	Submitter host name	submitterName

TMEF KEY	DESCRIPTION	VALUE
deviceDirection	Associated direction	<ul style="list-style-type: none"> <li>• 0: inbound</li> <li>• 1: outbound</li> <li>• 2: unknown</li> </ul>
deviceGUID	Appliance GUID	Example: 6B593E17AFB7-40FBBB28-A4CE-0462-A536
deviceMacAddress	Appliance MAC address	Example: 00:0C:29:6E:CB:F9
deviceProcessName	Appliance process name	Example: explorer.exe
dhost	Destination host name	Example: dhost1
dmac	Destination MAC address	Example: 00:0C:29:6E:CB:F9
dpt	Destination port	Value between 0 and 65535
dst	Destination IPv4 address	Example: 10.1.144.199
duser	Email recipients	Example: user1@domain2.com;test@163.com
dvc	Appliance IP address	Example: 10.1.144.199
dvchost	Appliance host name	Example: localhost
fileHash	SHA1	Example: 1EDD5B38DE4729545767088C5 CAB395E4197C8F3
fileType	True file type	Example: RIFF bitmap file
fname	File name	Example: excel.rar
fsize	File size	Example: 131372
mailMsgSubject	Email subject	Example: hello
malName	Malware name	Example: HEUR_NAMETRICK.A

TMEF KEY	DESCRIPTION	VALUE
request	URL	Example: http://www.rainking.net/?utm_campaign=4-21-2014  http://images.rainking.net/eloquaimage
requestClientApplication	User agent	Example: IE
rt	Event generation time at submitter	Example: Mar 09 2015 17:05:21 GMT+08:00
shost	Source host name	Example: shost1
smac	Source MAC address	Example: 00:0C:29:6E:CB:F9
spt	Source port	Value between 0 and 65535
src	Source IPv4 address	Example: 10.1.144.199
suser	Email sender	Example: user2@domain.com

Log sample:

```
CEF:0|Trend Micro|TippingPoint Advanced Threat Protection Analyzer|5.5.1.1034|200128|SUBMISSION_ANALYZED|1|rt=May 06 2016 09:03:17 GMT+08:00 dvc=192.168.1.1 dvchost=ATPAnalyzer deviceMacAddress=b8:ca:3a:68:2f:cc deviceGUID=F8E649AA-AF79-4545-9B5A-580BA993D5E3 src=192.168.50.93 spt=57775 smac=F4:8E:38:94:D1:71 shost=nj-host1 dst=106.120.188.46 dpt=80 dmac=00:00:0C:9F:F0:32 dhost=106.120.188.46 cnlLabel=sampleType cnl=0 fname=sgim_phrases.zip fsize=935 fileType=PKZIP fileHash=022D39959243995944F024C3E079CAD8EFF06468 request=http://pc.profile.pinyin.sogou.com/upload.php?hid\\=sgpy-windows-generic-device-id&v\\=8.0.0.7807&brand\\=1&platform\\=6&ifbak\\=1&ifmobile\\=0&ifauto\\=1&filename\\=sgim_phrases.zip&m\\=6A844AC16D9A0CBB99D333F9EDDA4DD5 app=HTTP appGroup=HTTP cs2Label=submitter cs2=TippingPoint Advanced Threat Protection for Networks cs3Label=submitterName cs3=ATPNetworks deviceDirection=1 requestClientApplication=sogou_ime/8.0.0.7807
```

## TMEF Virtual Analyzer Analysis Logs: Notable Characteristics Events

**TABLE 4-4. TMEF Virtual Analyzer Analysis Logs: Notable Characteristics Events**

TMEF KEY	DESCRIPTION	VALUE
Header (logVer)	TMEF format version	CEF: 0
Header (vendor)	Appliance vendor	Trend Micro
Header (pname)	Appliance product	TippingPoint Advanced Threat Protection Analyzer
Header (pver)	Appliance version	Example: 5.5.0.1191
Header (eventid)	Signature ID	200127
Header (eventName)	Description	NOTABLE_CHARACTERISTICS
Header (severity)	Severity	6: Warning
deviceGUID	Appliance GUID	Example: 6B593E17AFB7-40FBBB28-A4CE-0462-A536
deviceMacAddress	Appliance MAC address	Example: 00:0C:29:6E:CB:F9
deviceOSName	Sandbox image type	Example: win7
dvc	Appliance IP address	Example: 10.1.144.199
dvchost	Appliance host name	Example: localhost
fileHash	SHA1	Example: 1EDD5B38DE4729545767088C5 CAB395E4197C8F3
fileType	True file type	Example: RIFF bitmap file
fname	File name	Example: excel.rar
fsize	File size	Example: 131372

TMEF KEY	DESCRIPTION	VALUE
msg	Details	Example: ATSE\nDetection Name: TROJ_FAM_00004f2.TOMA\nEngine Version: 9.826.1078\nMalware Pattern Version: 11.749.92
pComp	Detection engine / component	Sandbox
rt	Analysis time	Example: Mar 09 2015 17:05:21 GMT+08:00
ruleCategory	Violated policy name	Example: Internet Explorer Setting Modification
ruleName	Violated event analysis	Example: Modified important registry items

Log sample:

```
CEF:0|Trend Micro|TippingPoint Advanced Threat Protection Analyzer|5.5.0.1221|200127|NOTABLE_CHARACTERISTICS|6|rt=Jun 26 2015 05:24:01 GMT+00:00 pComp=Sandbox dvc=10.204.70.173 dvchost=ATPAnalyzer deviceMacAddress=00:0C:29:69:19:13 deviceGUID=6EDFB737-5EBA-42B7-8D2E-D0789F19FEF4 fname=Sends_email fileHash=1A37D76D3669FC0BF0CBAABB3C149BAC43491663 fileType=WIN32 EXE fsize=92160 ruleCategory=Malformed, defective, or with known malware traits ruleName=Detected as probable malware msg=Source: ATSE\nDetection Name: TROJ_FAM_00004f2.TOMA\nEngine Version: 9.826.1078\nMalware Pattern Version: 11.749.92 deviceOSName=fsdf
```

## TMEF Virtual Analyzer Analysis Logs: Deny List Transaction Events

**TABLE 4-5. TMEF Virtual Analyzer Analysis Logs: Deny List Transaction Events**

TMEF KEY	DESCRIPTION	VALUE
Header (logVer)	TMEF format version	CEF: 0
Header (vendor)	Appliance vendor	Trend Micro
Header (pname)	Appliance product	TippingPoint Advanced Threat Protection Analyzer
Header (pver)	Appliance version	Example: 5.5.0.1191
Header (eventid)	Signature ID	200120
Header (eventName)	Description	DENYLIST_CHANGE
Header (severity)	Severity	3: Informational
act	The action in the event	<ul style="list-style-type: none"> <li>• Add</li> <li>• Remove</li> </ul>
cs1	Deny List type	<ul style="list-style-type: none"> <li>• Deny List IP/Port</li> <li>• Deny List URL</li> <li>• Deny List File SHA1</li> <li>• Deny List Domain</li> </ul>
cs1Label	Deny List type	type
deviceGUID	Appliance GUID	Example: 6B593E17AFB7-40FBBB28-A4CE-0462-A536
deviceMacAddress	Appliance MAC address	Example: 00:0C:29:6E:CB:F9



TMEF KEY	DESCRIPTION	VALUE
deviceExternalRiskType	Risk level	<ul style="list-style-type: none"> <li>• Low</li> <li>• Medium</li> <li>• High</li> <li>• Confirmed Malware</li> </ul>
dhost	Destination host name	Example: dhost1
dvc	Appliance IP address	Example: 10.1.144.199
dvchost	Appliance host name	Example: localhost
end	Report end time	Example: Mar 09 2015 17:05:21 GMT+08:00
fileHash	SHA1	Example: 1EDD5B38DE4729545767088C5 CAB395E4197C8F3
pComp	Detection engine / component	Sandbox
rt	Log generation time	Example: Mar 09 2015 17:05:21 GMT+08:00

Log sample:

```
CEF:0|Trend Micro|TippingPoint Advanced Threat Protection Analyzer|5.5.0.1221|200120|DENYLIST_CHANGE|3|rt=Jun 26 2015 05:55:02 GMT+00:00 pComp=Sandbox dvc=10.204.70.17 dvchost=ATPAnalyzer deviceMacAddress=01:0C:29:69:19:03 deviceGUID=6EDFB737-5EBA-42B7-8D2E-D0789F19FEF4 clLabel=type cs1=Deny List Domain end=Jul 26 2015 05:47:16 GMT+00:00 act=Add dhost=ns1.player1352.com deviceExternalRiskType=High
```



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