

Supported Protocols and Applications

Layer-7 & Behavioral Protocol Signatures

ipoque's application classification engine is able to identify the protocol of network traffic based on a combination of deep packet inspection (DPI) and behavioral analysis – not matter if they are plain text or using advanced encryption and obfuscation techniques.

The following list includes all supported protocols (in bold) and the most important applications using these protocols. The most up-to-date version of this protocol list and more information about ipoque's products are available on our Web site <http://www.ipoque.com>.

Regular Signature Updates

Regular firmware updates available at least every two months ensure the continuing effectiveness of the protocol signatures. Every customer with a valid support contract gets an account on ipoque's support portal at <http://portal.ipoque.com>. Upon

availability of a new firmware, ipoque or the sales partner send e-mail notifications to all customers who can then download and install the update.

Custom Protocol Definition

Custom protocol definitions allow the administrator to specify protocol patterns based on the following criteria:

- Layer-4 protocol (i.e. TCP, UDP)
- Layer-4 ports (lists and ranges of source and destination ports)
- Layer-7 protocol
- HTTP host list or URL list for HTTP-based layer-7 protocols
- Traffic direction (i.e. inbound, outbound)

These custom protocols can then be used in rule definitions just as normal layer-7 protocols. For example, this makes it possible to individually manage video streams of different Web platforms such as YouTube.

Supported Protocols and Applications

Peer-to-Peer (P2P)

Aimini	BitComet 0.61 - 0.91	LimeWire 4.12.11	μ Torrent 1.8.4	oDC 5.31
AppleJuice	BitComet 0.93	LimeWire 4.12.15	μ Torrent 1.6	Revconnect 0.674
AppleJuice 0.29.142.229	BitComet 0.96	LimeWire 4.12.6	μ Torrent 1.6.2	SababaDC 1.02
AppleJuice 0.30.146	BitComet 0.99	LimeWire 4.13.0beta	μ Torrent 1.7	ShakesPeer 0.9.5
AppleJuice 0.31.149.110	BitComet 1.0	LimeWire 4.13.14	μ Torrent 1.7.2	StrongDC++ 2.3.0
Ares	BitComet 1.01 - 1.10	LimeWire 4.13.2beta	μ Torrent 1.7.5	Valknut 0.49
Ares 1.9.2	BitComet 1.14	LimeWire 4.14.10	μ Torrent 1.7.7	eDonkey
Ares 2.0.8	BitFlu 0.91	LimeWire 4.14.8	μ Torrent 1.7beta	aMule 2.2.5
Ares 2.0.9	BitLord 2.0beta	LimeWire 4.16.7	μ Torrent 1.8.0	aMule 2.1.3
Ares 2.1.1.3035	BitLord 0.56	LimeWire 4.17.3	μ Torrent 1.8.0rc2	aMule 2.2.3
Filepipe 2.7	BitLord 1.01	LimeWire 4.18.1	μ Torrent 1.8.0rc6	eDonkey2000 1.4.5
KCEasy 0.19	BitLord 1.1	LimeWire 4.18.3	μ Torrent 1.8.1	eMule and its Mods 0.46c
BitTorrent (encrypted and unencrypted)	BitPump	LimeWire 4.18.8	μ Torrent 1.8.2	eMule and its Mods 0.47a - 0.47c
ABC 3.1	Bits on Wheels 1.0.6	LimeWire 5.0.11	μ Torrent 1.8.3beta	eMule and its Mods 0.48a
Acquisition 2.1	BitSpirit 3.6.0.200	LimeWire 5.1.2	μ Torrent 1.8.3stable	eMule and its Mods 0.49a - 0.49c
Anatomic P2P 0.1	BitTornado 0.3.17	LimeWire 5.2.13	WizBit	obfuscated eMule ext.
Arctic Torrent 1.2.3	BitTornado 0.3.18	LimeWire 5.3.0beta	XTorrent 1.1	eMule Plus 1.2e
Azureus / Vuze 2.3.0.6	BitTorrent/Mainline 4.26.0	Localhost	ZipTorrent	Hydranode 0.3.0
Azureus / Vuze 2.4.0.2	BitTorrent/Mainline 5.0.0 - 5.0.9	MLDonkey 3.0.0	DirectConnect	Jubster
Azureus / Vuze 2.5.0.0	BitTorrent/Mainline 6.0.1 - 6.0.3	MonoTorrent 0.72	ApexDc++ 1.2.1	Lphant 3.0
Azureus / Vuze 2.5.0.2	BitTorrent/Mainline 6.1.1	MooPolice 2.0	BCDC++ 0.750b	Lphant 3.01
Azureus / Vuze 3.0	BitTorrent/Mainline 6.1.2	MooPolice 2.2	CZDC 0.699[b2]	Lphant 3.50 - 3.51
Azureus / Vuze 3.0.0.9.4b	BitTorrent/Mainline 6.1.2a	Opera 10.00	DC#	Lphant 4.0
Azureus / Vuze 3.0.1.6a	BitTorrent/Mainline 6.2	Qbittorrent 1.5.1	DC++ 0.691	Lphant 5.1
Azureus / Vuze 3.0.3.0	BitTyrant 1.1.1	QTorrent 0.9.5	DC++ 0.695	MLDonkey 3.0.0
Azureus / Vuze 3.0.5.0	Blizzard Downloader	rTorrent 0.8.5	DC++ 0.698 - 0.6.9.9	Morpheus 5.4.0.1080
Azureus / Vuze 3.0.5.2	Blog Torrent - BTG 0.9.2	Rufus 0.6.9	DC++ 0.705	Morpheus 5.5.1
Azureus / Vuze 3.0.5.2a	BitManager 1.99.4	Rufus 0.7beta	DC++ 0.7091	Shareaza 2.4.0.0
Azureus / Vuze 3.0.5.2b	BTSharp	Shareaza 2.2.5.3	DC++ 0.750	xMule 1.13.6
Azureus / Vuze 3.1.0.0	burst! 3.1.0b	Shareaza 2.3.1.0	dc_gui	Filetopia
Azureus / Vuze 3.1.1.0	CTorrent 1.3.4	Shareaza 2.4.0.0	dcic 0.85.9	Filetopia 3.04
Azureus / Vuze 4.0.0.2	Deluge 1.1.9	sharktorrent 0.1.8.4	Dolda Connect 1.3	Freenet
Azureus / Vuze 4.0.0.4	FlashGet 1.9.6	SymTorrent 1.41	Elise 0.005	Freenet 0.7
Azureus / Vuze 4.1.0.0	FlashGet 3.2.0.1060beta	Tomato Torrent 1.5.1	fulDC 6.78	Freenet 0.7.5
Azureus / Vuze 4.1.0.2	freeloader	TorrentFlux 2.4	fulDC 6.79	Gnutella
Azureus / Vuze 4.1.0.4	G3 Torrent 1.01	TorrentSpy	GtkDC	Acquisition 2.1
Azureus / Vuze 4.2.0.0	Gnome BitTorrent 0.0.32	TorrentSwapper 1.0	ldcc	Aqclite 0.3.5
Azureus / Vuze 4.2.0.2	Halite 0.3.1	TorrentVolve 1.4beta	LinuxDC++ 1.0.2	Apollon 1.0.2.1
Azureus / Vuze 4.2.0.2	KTorrent 3.2.3	Transmission 1.74	microdc	Cabos 0.8.1
Azureus / Vuze 4.2.0.8	KTorrent 3.3beta	Turbo Torrent	microdc2 0.15.6	CocoGnut 1.21

... Peer-to-Peer (P2P)

DM2 1.23.1	LimeWire 4.18.3	BearShare 6.1	Mute	SoulSeek 157 test 8
Filepipe	LimeWire 4.18.8	BearShare 7.0 - 7.1	OpenFT	pySoulSeek
FrostWire 4.18.1	LimeWire 5.0.11	iMesh 7.1	OpenFT 0.5.2	StealthNet
giFT 0.0.11	LimeWire 5.1.2	iMesh 7.2.0	Filepipe	Thunder / Webthunder
Gnucleus 2.0.2.0	LimeWire 5.2.13	iMesh 8.1.0.60.352	OFF	Thunder/Webthunder 5.6.9.344
Gnucleus 1.8.6.0	LimeWire 5.3.0beta	iMesh 9.0	OFF 0.17.00	Thunder/Webthunder 5.8.10.675
Gtk-gnutella 0.96.6	MLDonkey 3.0.0	iMesh Lite 5.0.2	OFF 0.19.13	Thunder/Webthunder 5.8.12.689
Gluz	Morpheus 5.4.0.1080	KaZaa / Fasttrack	Pando	Thunder/Webthunder 5.8.13.699
KCeasy 0.19	Morpheus 5.5.1	Apollon 1.0.2.1	Pando 1.5.5.1	Thunder/Webthunder 5.8.9.662
Kiwi Alpha 3.1.4	Mutella 0.4.5	Grokster	Pando 1.6	Thunder/Webthunder 5.9.7.1062
LimeWire 4.12.11	Phex 3.4.2.116	Kazaa 3.2.7	Pando 2.0.0.5	WinMX
LimeWire 4.12.15	Poisoned 0.5191	Kazaa Lite	Pando 2.0.2.2	WinMX 3.53
LimeWire 4.12.6	Qtella 0.7.0	KCeasy 0.19	Pando 2.0.3.0	WinMX 3.54beta4
LimeWire 4.13.0beta	Shareaza 2.4.0.0	MLDonkey 3.0.0	Pando 2.3.0.0	Winyy
LimeWire 4.13.14	Swapper.NET 4.5.1660.30216	Mammoth 0.1.3	Pando 2.3.0.2	Winyy 2.0b7.1
LimeWire 4.13.2beta	Symella 1.40	Filepipe	Pando 2.3.2.3	XDCC
LimeWire 4.14.10	XFactor	Manolito	SoulSeek	XDCC Catcher 2.3
LimeWire 4.14.8	XNap 3.0	Blubster 3.02	SoulSeek 156	XDCC Fetcher 1.432
LimeWire 4.16.7	XoloX 2.0	Manolito 1.18 - 1.19	SoulSeek 156b	XDCC Fetcher 1.409
LimeWire 4.17.3	iMesh	Manolito 3.07	SoulSeek 156c	XDCC Klipper 4.5
LimeWire 4.18.1	BearFlux 1.2	Piolet 3.07	SoulSeek 157 NS 13e	

Instant Messaging (IM)

Gadu-Gadu	Jabber/Google Talk (XMPP)	Miranda 0.7.13 - 0.7.14	Miranda 0.7.17	Miranda 0.8.0a27
GaduGadu V-Datum 17.02.09	Aytm 0.4.6	Miranda 0.7.17	Miranda 0.7.6 - 0.7.7.	original Yahoo client 3.0
GaduGadu V-Datum 14.04.09	Gaim	Miranda 0.7.6 - 0.7.7	Miranda 0.8.0a25	original Yahoo client 3.5
GaduGadu V-Datum 01.09.09	GMX Multimesseger 3.01.2047	Miranda 0.8.0a25	Miranda 0.8.0a27	original Yahoo client 4.1
GaduGadu 7.7	Google Talk 1.0.0.92	Miranda 0.8.0a27	Pidgin (previously Gaim)	original Yahoo client 5.0
Miranda 0.6.6 - 6.6.8	Google Talk 1.0.0.104	MSNclient 14.0.8050.1202	Trillian/Trillian Pro 3.1.12.0	original Yahoo client 5.5
Miranda 0.7.13 - 0.7.14	Kopete	MSNclient 14.0.8064.206	Trillian/Trillian Pro 3.1.9.0	original Yahoo client 5.6
Miranda 0.7.17	Miranda 0.6.6 - 6.6.8	original MSN client	Web.de Multimesseger	original Yahoo client 6.0
Miranda 0.7.6 - 0.7.7	Miranda 0.7.13 - 0.7.14	Pidgin (previously Gaim)	Qnext	original Yahoo client 6.1
Miranda 0.8.0a25	Miranda 0.7.17	Trillian/Trillian Pro 3.1.12.0	Paltalk	original Yahoo client 7.4
Miranda 0.8.0a27	Miranda 0.7.6 - 0.7.7	Trillian/Trillian Pro 3.1.9.0	Paltalk 17705	original Yahoo client 7.5.0.647
IRC	Miranda 0.8.0a25	Qnext	Paltalk 17710	original Yahoo client 8.0
Aytm 0.4.6	Miranda 0.8.0a27	Web.de Multimesseger	Paltalk 17716	original Yahoo client 8.1.0.421
Miranda 0.6.6 - 6.6.8	Pidgin (previously Gaim) 2.6.2	Oscar	Paltalk 17772	original Yahoo client 9.0.0.2152
Miranda 0.7.13 - 0.7.14	Psi 0.11	AIM 1.2	Web.de Multimesseger	original Yahoo client 9.0.0.2162
Miranda 0.7.17	Psi 0.13	AIM 6.1	Qnext	Pidgin (previously Gaim)
Miranda 0.7.6 - 0.7.7	Trillian/Trillian Pro 3.1	AIM 6.8	Yahoo	Trillian/Trillian Pro 3.1.12.0
Miranda 0.8.0a25	Trillian/Trillian Pro 3.1.12.0	Aytm 0.4.6	Aytm 0.4.6	Trillian/Trillian Pro 3.1.9.0
Miranda 0.8.0a27	Trillian/Trillian Pro 3.1.9.0	Gaim	Gaim	
mIRC 6.3.2	Web.de Multimesseger 3.01.2048	GMX Multimesseger	GMX Multimesseger	
Meebo	Qnext 3.0.4.64beta	ICQ 5.1	Kopete	
PoPo	MSN	ICQ 6	Miranda 6.3.2	
QQ	Aytm 0.4.6	ICQ 6.5	Miranda 0.6.6 - 0.6.8	
QQ 2005	Gaim	Kopete	Miranda 0.7.13 - 0.7.14	
QQ 2007beta3	GMX Multimesseger	Miranda 6.3.2	Miranda 0.7.17	
QQ 2009beta	Kopete	Miranda 0.6.6 - 0.6.8	Miranda 0.7.6 - 0.7.7.	
QQ 2009beta2	Miranda 0.6.6 - 6.6.8	Miranda 0.7.13 - 0.7.14	Miranda 0.8.0a25	

Voice over IP (VoIP)

Fring	MGCP	Skype v3.0.0.154	Skype v3.2.0.152	Skype v3.8.0.139
H.323	ooVoo	Skype v3.0.0.190	Skype v3.2.0.158	Skype v3.8.0.154
Ekiga 3.2.0	RTCP	Skype v3.0.0.198	Skype v3.2.0.163	Skype v3.8.0.180
Ekiga 3.2.6	SIP	Skype v3.0.0.205	Skype v3.2.0.175	Skype v3.8.0.188
NetMeeting 3.01	Ekiga 3.2.0	Skype v3.0.0.209	Skype v3.5.0.107	Skype Beta v4.0.0.176
OpenH.323 1.19.0.1	Ekiga 3.2.6	Skype v3.0.0.214	Skype v3.5.0.158	Skype Beta v4.0.0.226
XMeeting 0.4p2	Gizmo 3.1.2.291	Skype v3.0.0.216	Skype v3.5.0.178	Skype v4.0.0.195
IAX	OpenWengo/	Skype v3.0.0.217	Skype v3.5.0.202	Skype v4.0.0.206
DiAx 0.9.14	QuteCom 2.2rc3	Skype v3.0.0.218	Skype v3.5.0.214	Skype v4.0.0.215
Firefly 3.3.2	SipGate	Skype v3.1.0.112	Skype v3.5.0.229	Skype v4.0.0.216
IAXComm 1.2.0	Twinkle 1.4.2	Skype v3.1.0.144	Skype v3.5.0.234	Skype v4.0.0.224
IAXPhone 2.1beta3	Vonage 0.9.3	Skype v3.1.0.150	Skype v3.5.0.239	Skype v4.0.0.226
ldefisk/Zoiper 2.22	XMeeting 0.4p2	Skype v3.1.0.152	Skype v3.6.0.115	Skype v4.1.0.136
Kiax 2.1beta2	Skinny	Skype v3.2.0.53	Skype v3.6.0.127	Skype v4.1.0.141
LoudHush 1.3.21	Skype	Skype v3.2.0.63	Skype v3.6.0.159	Skype v4.1.0.166
PURtel	Skype v2.6.0.105	Skype v3.2.0.82	Skype v3.6.0.244	
YakaPhone 1.4.2	Skype v3.0.0.106	Skype v3.2.0.115	Skype v3.6.0.248	
ZiaxPhone 0.8	Skype v3.0.0.123	Skype v3.2.0.145	Skype v3.8.0.96	
Iskoot	Skype v3.0.0.137	Skype v3.2.0.148	Skype v3.8.0.115	

Standard Protocols

<p>BGP DHCP DNS EGP FTP HTTP ICMP IGMP IMAP IPP Mapi MulticastDNS NETBIOS NFS NTP OSPF pcAnywhere PPP POP3 RADIUS RADIUS</p>	<p>Syratel Radius RDP RDS SMB/CIFS SMTP SNMP SSDP STUN Syslog TDS Telnet TFTP Usenet VNC Direct Download Link (DDL) 4shared.com badongo.com badongo.net bestsharing.com bigfilez.com chinamofile.com</p>	<p>depositfiles.com easy-share.com filearchiv.ru filecloud.com filefactory.com filefront.com fileho.com filehost.tv filesafe.to filesend.net files.to files-upload.com file-upload.net file-upload.to fileupyours.com ftp2share.com gigasize.com gigeshare.com ifolder.ru keepmyfile.com livedepot.net live-share.com</p>	<p>mediafire.com megashare.com megashares.com megaupload.com mofile.com mofile.net mytempdir.com quicksharing.com rapidshare.com rapidshare.de rapidupload.com savefile.com sendmefile.com sendspace.com sharebee.com sharebig.com sharebigfile.com sharebigflie.com simpleupload.net speedshare.org turboupload.com ultrashare.de</p>	<p>up-file.com uploaded.to uploading.com uploadingit.com uploadpower.com uploadyourfiles.de wiupload.net yourfilehost.com yourfiles.biz zshare.net XDMCP</p>
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Streaming Protocols

<p>AVI Feidian Feidian 1.0.1.32 Feidian 1.3.1 Flash* BBC clipfish.de Coolstream Flash myspace.com myvideo.de yopom.com youtube.com etc. Funshion IPTV T-Home/TV2 1.2.46058.8 Kontiki MMS Windows Media Player 11 Move MPEG Jupster 4.0.0 Screamerradio 0.3.8</p>	<p>Screamerradio 0.4.3 VLC 0.8.6h VLC 1.0.2 Winamp 3.531 Winamp 5.56 OGG Icecast 2.3.2 ORB ORB 1.01.0695 ORB 2.00.0873 ORB 2.00.0885 ORB 2.00.0930 ORB 2.01.0025 ORB 2.01.0026 ORB 2.01.0028 ORB 2.01.0039 ORB 2.01.0042 ORB 2.50.0185 Pandora PPLive Pplive 1.8.7 Pplive 1.9.23 Pplive 2.0.21 Pplive 2.1.0.0011</p>	<p>Pplive 2.2.1 Pplive 2.2.2 Pplive 2.3.4.0024 PPStream PPStream 1.0.18.29 PPStream 1.0.4.641 PPStream 2.2.27.1067 PPStream 2.2.34.1122 PPStream 2.6.84.6000 PPStream 2.6.86.7800 PPStream 2.6.86.8250 PPStream 2.6.86.8800 QQ QQLive QQLive 5.01 QQLive 7.3 QQLive 8.0 QuickTime iTunes 7.6.2.9 iTunes 9.0.1 QuickTime 7.6.4 Real Media RealMediaStream 11 RTP</p>	<p>RTSP SCTP SHOUTcast Fishradio 1.1 Slingbox Slingbox 1.3.0 Slingbox 1.4.0 Slingbox 2.0.2481 Slingbox 2.0.3508 SopCast SopCast 1.1.1 SopCast 2.0.4 SopCast 3.0.3 SopCast 3.2.4 TVAnts TVAnts 1.0.0.59 TVAnts 1.0.0.59.0835 TVUPlayer TVUPlayer 2.3.2 TVUPlayer 2.3.6beta1 TVUPlayer 2.4.1.0 TVUPlayer 2.4.5.1 TVUPlayer 2.4.8.2 UUSee</p>	<p>UUSee 2.0.0.11 UUSee 2007 UUSee 2008 V CAST VeohTV VeohTV 1.1.3beta VeohTV 3.9.6.1048 Windows Media Stream Zattoo Zattoo 3.1.0 Zattoo 3.3.3 - 3.3.4 Zattoo 3.0.5beta Zattoo 3.1.1.11916 Zattoo 3.3.1.18350</p>
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* Website-embedded flash content

Tunnel Protocols

<p>SSL HTTPS IMAPS POP3S SMTPS Stunnel GRE</p>	<p>GTP HamachiVPN HamachiVPN 1.0.3.0 IPsec L2TP L2TP OpenL2TP 1.6</p>	<p>IP in IP ISAKMP OpenVPN Hotspot Shield 1.3 MyFreedom 2.1-rc9 OpenVPN 2.1-rc11 PPTP</p>	<p>SoftEthernet SSH Tor Tor 0.1.10 VoipSwitch VoIP Tunnel VPN-X VTun</p>	<p>VTun 3.0.2-1.1 YourFreedom Socks Socks v4 Socks v5</p>
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Gaming Protocols

<p>CGA Games Battlefield Google Earth Half-Life 2 and Mods Halo Lively Popo Game</p>	<p>Popo Game 2.0.26176.1 Quake QQ Game Second Life Second Life 1.21.6.99587 Sina Game Spellforce</p>	<p>Steam Steam v008 49/770 Vietcong Warcraft 3 World of Warcraft World of Warcraft 1.4.0.228 Xbox</p>
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Buisness Protocols

<p>citrix LDAP MySQL Kerberos PostgreSQL SAP</p>	<p>MSSQL MSSQL 2005 9.00.2047.00</p>
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