

[] P2P(Peer-to-Peer)

P2P(Peer-to-Peer) 1969 ARPANET

ARPANET 4 가 가 P2P . P2P

, 1999 (Napster)

/ , .

P2P Usenet, DNS .

P2P 1969 IETF(Internet Engineering Task Force) Host Software

(RFC : Request For Comment 1) 가 .

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, P2P

. / , N:M

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P2P 가 ,

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가

P2P

P2P

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4

(a), (b), (c) Unstructured



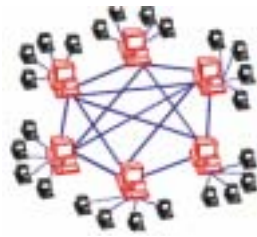
(a) Centralized P2P

가 Structured Unstructured

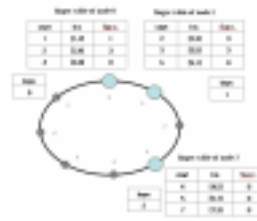
(d) Structured



(b) Pure P2P



(c) Hybrid P2P



(d) DHT-based P2P

< 1> Peer-to-Peer

- Centralized Peer-to-Peer networks

P2P
가 Peer
 ,

- Pure (distributed) Peer-to-Peer networks

P2P 가 ,
(flooding)
P2P ,
TTL(Time-to-Live)

- Hybrid Peer-to-Peer networks

P2P
가 ,

- DHT(Distributed Hash Table)-based Peer-to-Peer networks

Structured P2P DHT 가 가
Kad, Bitorrent가 . Unstructured
Unstructured
Structured

P2P

P2P IETF, IRTF, ITU-T 3GPP
, IETF SIMPLE(SIP for Instant Messaging and Presence
Leveraging Extensions), P2P-SIP(Peer-to-Peer Session Initiation Protocol) WG
, IRTF P2PRG IETF
. ITU-T P2P
IETF, ITU-T

1. IETF

P2P-SIP WG(Peer-to-Peer Session Initiation Protocol Working Group) 65
BoF(Birds-of-a-Feather)

P2P 가
가
SIP
P2P SIP
3 “ (Autonomous) P2P
가?” 가
P2P
가 (, ,
, ID Spoofing , DDOS ,
) 가
.

2. ITU-T

ITU-T Q.9/SG17 . 4
가 (Consent) ,
, X.1161, X.1162
. P2P (X.p2p-1) P2P
. P2P
(X.p2p-2) P2P
가
P2P
P2P , P2P Operation
,

P2P 가 ,

P2P . P2P

Instant Message, File Sharing, Game, (Collaborative Processing), ,

IPTV(Joost), , VoIP(Skype), e-Learning, ,

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가 .

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, P2P

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(F/W, IDS, IPS)

, Peek-a-Booty, TOR(The Onion Routing)

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IT , , ,

가

IT 가 .

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