



RFC 3942 Status Update (Reclassifying DHCP Options)

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Update bootp-dhcp-parameters

128	PXE - undefined (vendor specific)	[RFC4578]
128	Etherboot signature. 6 bytes: E4:45:74:68:00:00	
128	DOCSIS "full security" server IP address	
128	TFTP Server IP address (for IP Phone software load)	
129	PXE - undefined (vendor specific)	[RFC4578]
129	Etherboot kernel options. Variable length string	
129	Call Server IP address	
130	PXE - undefined (vendor specific)	[RFC4578]
130	Ethernet interface. Variable length string.	
130	Discrimination string (to identify vendor)	
131	PXE - undefined (vendor specific)	[RFC4578]
131	Remote statistics server IP address	
132	PXE - undefined (vendor specific)	[RFC4578]
132	IEEE 802.1Q VLAN ID	
133	PXE - undefined (vendor specific)	[RFC4578]
133	IEEE 802.1D/p Layer 2 Priority	
134	PXE - undefined (vendor specific)	[RFC4578]
134	Diffserv Code Point (DSCP) for VoIP signalling and media streams	
135	PXE - undefined (vendor specific)	[RFC4578]
135	HTTP Proxy for phone-specific applications	

Actions:

- Red items are dropped (no draft or expired w/conflict)

Update bootp-dhcp-parameters

```
136      OPTION_PANA_AGENT                               [RFC-ietf-dhc-paa-option-05.txt]
137-149 Unassigned                                     [RFC3942]
150      TFTP server address (Tentatively Assigned - 23 Jun 2005)
150      Etherboot
150      GRUB configuration path name
151-174 Unassigned                                     [RFC3942]
175      Etherboot (Tentatively Assigned - 23 Jun 2005)
176      IP Telephone (Tentatively Assigned - 23 Jun 2005)
177      Etherboot (Tentatively Assigned - 23 Jun 2005)
177      PacketCable and CableHome (replaced by 122)
178-207 Unassigned                                     [RFC3942]
208-211 PXELINUX                                       [RFCXXXX]
212-219 Unassigned
220      Subnet Allocation Option (Tentatively Assigned - 23 Jun 2005)
221      Virtual Subnet Selection Option (Tentatively Assigned - 23 Jun 2005)
222-223 Unassigned                                     [RFC3942]
```

Actions:

1. Red items are dropped (no draft or expired w/conflict)
2. Richard Johnson to submit updated DRAFT-RAJ-DHC-TFTP-ADDR-OPTION (150)
3. Richard Johnson to submit updated DRAFT-IETF-DHC-VPN-OPTION (221)

New bootp-dhcp-parameters

128	PXE - undefined (vendor specific)	[RFC4578]
129	PXE - undefined (vendor specific)	[RFC4578]
130	PXE - undefined (vendor specific)	[RFC4578]
131	PXE - undefined (vendor specific)	[RFC4578]
132	PXE - undefined (vendor specific)	[RFC4578]
133	PXE - undefined (vendor specific)	[RFC4578]
134	PXE - undefined (vendor specific)	[RFC4578]
135	PXE - undefined (vendor specific)	[RFC4578]
136	OPTION_PANA_AGENT	[RFCXXXX]
137-149	Unassigned	[RFC3942]
150	TFTP server address (Tentatively Assigned - 23 Jun 2005 - DRAFT-RAJ-DHC-TFTP-ADDR-OPTION-xx.TXT)	
151-174	Unassigned	[RFC3942]
178-207	Unassigned	[RFC3942]
208	pxelinux.magic (string) = F1:00:74:7E (241.0.116.126)	[RFCXXXX]
209	pxelinux.configfile (text)	[RFCXXXX]
210	pxelinux.pathprefix (text)	[RFCXXXX]
211	pxelinux.reboottime (unsigned integer 32 bits)	[RFCXXXX]
212-219	Unassigned	
220	Subnet Allocation Option (Tentatively Assigned - 23 Jun 2005 - DRAFT-IETF-DHC-SUBNET-ALLOC-xx.TXT)	
221	Virtual Subnet Selection Option (Tentatively Assigned - 23 Jun 2005 - DRAFT-IETF-DHC-VPN-OPTION-xx.TXT)	
222-223	Unassigned	[RFC3942]

Issues with Etherboot

Email on November 30th to DHC WG Mailing List:

128 Etherboot signature. 6 bytes: E4:45:74:68:00:00

129 Etherboot – passing kernel options

150 Etherboot – encapsulate options for Etherboot
bootloader

175 Etherboot

177 Etherboot (usage less clear)

Claim “wide” usage of 128 and 150.

Next Steps - Etherboot

- It is deployed, though not clear how widely
- Conflicts on option 128, 129, and 150 (pending)
- Possible Actions:
 1. Per RFC 3942, say sorry, give them up and require assignments via IETF process
 2. Allow their “claim”
 - 175 and 177 are OK
 - 128, 129, and 150 will conflict with other uses
 3. My suggestion (some of both)
 - Document historical usage of 128, 129, 150 and assign 175 and 177 (as no conflict)
 - Require assignment via IETF process for 128, 129, and 150 replacements

Next Steps

- How do we get IANA to remove stale tentatively assigned reservations?
 - Publish as WG I-D and go for RFC?
 - Publish revised ID and get WG and AD approval?
 - Full RFC?

RFC 3942 Procedure

1. The reclassified options (128 to 223) will be placed in the "Unavailable" state by IANA. These options are not yet available for assignment to publicly defined options.
2. Vendors that currently use one or more of the reclassified options have 6 months following this RFC's publication date to notify the DHC WG and IANA that they are using particular options numbers and agree to document that usage in an RFC. IANA will move these options from the "Unavailable" to "Tentatively Assigned" state.

Vendors have 18 months from this RFC's publication date to start the documentation process by submitting an Internet-Draft.

NOTE: If multiple vendors of an option number come forward and can demonstrate that their usage is in reasonably wide use, none of the vendors will be allowed to keep the current option number, and they **MUST** go through the normal process of getting a publicly assigned option [RFC2939].

3. Any options still classified as "Unavailable" 6 months after the RFC publication date will be moved to the "Unassigned" state by IANA. These options may then be assigned to any new publicly defined options in accordance with [RFC2939].
4. For those options in the "Tentatively Assigned" state, vendors have 18 months following this RFC's publication date to submit an Internet-Draft documenting the option. The documented usage **MUST** be consistent with the existing usage. When the option usage is published as an RFC, IANA will move the option to the "Assigned" state.

If no Internet-Draft is published within the 18 months or should one of these Internet-Drafts expire after the 18 months, IANA will move the option to the "Unassigned" state, and the option may then be assigned to any new publicly defined options in accordance with [RFC2939].

Publication Date	November 2004
+6 months Date	May 2005
+18 months Date	May 2006