

# **Technical Committee**

**AF-AIC-0160.000**

**MPOA Errata**

**November, 2000**

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## E.1. Introduction to MPOA Errata

The Errata are organized into sections corresponding to the text in the MPOA v1.1 specification which is in error or is vague. The title of each section references the paragraph or diagram under scrutiny in the MPOA v1.1 specification. The body of each section includes the corrected text underlining the difference from the original text, when possible.

## E.2. References

[1] ATM Forum MPOA v1.1 specification, May 1999. af-mpoa-00114.000

## E.3. Clarifications

### E.3.8 Sections 5.3.2.4 (incomplete specification)

#### 5.3.2.4 Extensions

MPOA control messages may have the same extensions as an NHRP packet, such as Route Record, NHRP Authentication and Vendor Private Extensions. When extensions exist, the extensions list is terminated by having the NULL extension at the end as defined in section 5.3 of the NHRP specification (RFC 2332).

### E.3.9 Paragraph 5 of Section 5.3.2.4.1 (clarify that the ELAN ID in the DLL header extension should be set to the ELANID of the egress MPC)

ELAN ID specifies a ~~LANE ELAN ID~~ the ELANID of the appropriate emulated LAN of the egress MPC

### E.3.10 Appendix VII, MPOA 1.1 Tip Sheet (add more entries)

#### VII.3 MTU Negotiation

If an ingress MPC discovers that the MTU size of the egress MPC is greater than its own MTU size, then the ingress MPC may initiate a shortcut to the egress MPC as a higher MTU size indicates that the egress MPC can accept the incoming VCC.

#### VII.4 Revalidating Device Status

An MPOA device should take steps to ensure that its LE Clients maintain the device status for the neighbor MPOA devices with which it is communicating. One way to perform this revalidation would be for the MPOA device to use the LE\_RESOLVE primitive of LANE (Section 3.1.3 of [LANE 2.0]) to re-issue LE\_ARP requests periodically in order to revalidate the MPOA Device Type TLV associated with such neighboring MPSs. Other strategies to perform this revalidation may be used when the LANE and MPOA layers are more tightly integrated.

## E.4 Corrections

### E.4.29 Paragraph 1 of Section 4.6 (replace “and” by “or”)

#### 4.6 Keep-Alive Protocol

MPCs need to know that MPSs that have supplied cache entries are alive and able to maintain those cache entries. As such, the MPS is required to periodically transmit an MPOA Keep-Alive message to all MPCs for which it has supplied ~~and~~ or is maintaining ingress or egress cache entries. These must be sent every MPS-p1 seconds (subject to jitter). The MPOA Keep-Alive may be sent over any

LLC/SNAP VCC between the MPS and the MPC. Specifically, it may be sent over a point-to-multipoint VCC, including one established specifically for the purpose of transmitting the Keep-Alive.

**E.4.30 Paragraph 5 of section 4.8.9.1 ( replace “should” by “shall”)**

When an ingress MPC sends an MPOA Resolution Request, it should add a single ATM Service Category Extension, as specified in Section 4.4.2, to identify the Service Categories it supports. If only UBR is supported the extension should still be added, and will take a zero value. When an egress MPC responds to an MPOA Cache Imposition Request with an MPOA Cache Imposition Reply, it ~~should~~ shall fill in the ATM Service Category Extension to identify the Service Categories it supports, if the extension was included in the request, as specified in Section 4.4.3.

**E.4.31 Paragraph 1 of section 4.8.9.3 (replace “ar\$afn byte” with “ar\$afn field”)**

The only AAL5 parameter that may be negotiated is the CPCS-SDU size. This is the maximum number of octets that may be transferred in an AAL5 frame on that VCC. This includes any Data-Link Layer octets (e.g. MAC and LLC sub-layers). The term “MTU size” refers to the size of the internetwork layer PDU (e.g. NHRP packet starting with ar\$afn byte field, or IP packet starting with the version number field). The MTU size does not include any MAC or LLC octets.

**E.4.32 Last line of paragraph 3 of section 4.8.9.3 (replace “may use choose to use” by “may choose to use”)**

If a remote party negotiates the CPCS-SDU down to a value lower than the default size, an MPOA component may ~~use~~ choose to use the VCC (performing any necessary fragmentation) or to release the VCC.

**E.4.33 MPOA ATM Service Category Extension of section 5.3.2.4.3**

The diagram implies the length of the service category extension field to be 4 bytes when it is actually 2 bytes.

**E.4.38.1 Proposed Diagram**

