#20130628_1555 Type: T   TF: RMTF   Clause: 6.5.2.1.1   Page: 51   Line: -   Commenter: Marek Hajduczenia / Bright House Networks

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

IETF RFC 4443 is not included in the list of normative references.

Add "IETF RFC 4443 (March 2006), <i>Internet Control Message Protocol (ICMPv6) for the Internet Protocol Version 6 (IPv6) Specification</i>, A. Conta, S. Deering, M. Gupta" into Clause 2 in the correct location (after IETF RFC 4115)

-

#20130628_1602 Type: T   TF: RMTF   Clause: 7.3.2.2   Page: 111   Line: -   Commenter: Marek Hajduczenia / Bright House Networks

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

In Table 7-30, the content of field Description contains reference to "mode with stripping I-Tag", whereas the Modifier action clearly shows "[mi]: REMOVE (B_TAG)". The text should speak therefore of "stripping B-Tag" instead

Change "I-Tag" to "B-Tag" in the selected text

-

#20130628_1607 Type: T   TF: RMTF   Clause: 7.3.2.2   Page: 111   Line: -   Commenter: Marek Hajduczenia / Bright House Networks

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

In Table 7-30, the text "implements the PBB encapsulation " references PBB, which is never defined.

[1] Add definition of PBB into 3.2 as follows: PBB: Provider Backbone Bridging
[2] Modify the selected text in Table 7-30 to read "implements the Provider Backbone Bridging (PBB) encapsulation "

-

#20130628_1610 Type: T   TF: RMTF   Clause: 7.3.2.3   Page: 111   Line: -   Commenter: Marek Hajduczenia / Bright House Networks

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

In Table 7-30, the text "If provisioned, this set of rules implements the PBB encapsulation mode with stripping B-Tag and I-Tag ." makes reference to "I-Tag" which is not defined anywhere. It should be "I-Header"

Change the selected text to read "If provisioned, this set of rules implements the PBB encapsulation mode with stripping B-Tag and I-Header.

-

#20130628_1630 Type: T   TF: RMTF   Clause: 8.5.1   Page: 166   Line: -   Commenter: Marek Hajduczenia / Bright House Networks

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

"The ONU does not process the collected data in any way. The ONU does not keep performance monitoring data for any earlier performance monitoring period but the last one (within the history bin). All data processing on the collected performance monitoring data is performed at the OLT or Element Management System." - we use NMS (in the meaning of Network Management System) elsewhere in the standard.

Change "Element Management System" to "NMS" for consistency

-

#20130628_1633 Type: T   TF: RMTF   Clause: 8.5.1   Page: 166   Line: -   Commenter: Marek Hajduczenia / Bright House Networks

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

"The ONU does not process the collected data in any way. The ONU does not keep performance monitoring data for any earlier performance monitoring period but the last one (within the history bin). All data processing on the collected performance monitoring data is performed at the OLT or Element Management System." - we use NMS (in the meaning of Network Management System) elsewhere in the standard.

Change "Element Management System" to "NMS" for consistency

-

#20130628_2328 Type: T   TF: RMTF   Clause: 14.4.3.9.1   Page: 642   Line: -   Commenter: Marek Hajduczenia / Bright House Networks

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

IEEE Std 1588v2 is missing in normative references right now. It needs to be fixed.

Insert the following reference into Clause 2: "IEEE Std 1588(tm)-2008, Standard for a Precision Clock Synchronization Protocol for Networked Measurement and Control Systems (also known as IEEE Std 1588v2)"

-

#20130811_1623 Type: T   TF: RMTF   Clause: 4A.2.3   Page: 661   Line: -   Commenter: Marek Hajduczenia / Bright House Networks

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

AU-RF4 is really the OLT requirement and not the ONU requirement. The original text in 8.4.1.2 reads: "The OLT shall not provision a queue threshold size that is less than the maximum frame size. "

Remove AU-RF4 but keep AU-RF5 as it is (do not renumber) Insert AT-RF3 with the description copied from AU-RF4

-

#20130822_1851 Type: T   TF: RMTF   Clause: 2   Page: 6   Line: -   Commenter: Marek Hajduczenia / Bright House Networks

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

MEF 6 and MEF 6.1 are not mentioned in the body of the standard anywhere apart from entries in Clause 2. As such, they do not need to be listed at all.

Remove entries for MEF 6 and MEF 6.1, and move footnote 7 reference to MEF 10.2 (the line following MEF 6.1 entry)

-

#20130822_1900   Type: T   TF: RMTF   Clause: 14.2.2.11   Page: 459   Line: -   Commenter: Marek Hajduczenia / Bright House Networks

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

Attribute aOnuCapabilitiesPwrSav contains sub-attribute sVenSpecFieldSize, defining the size of the sVenSpecField. The value of sVenSpecFieldSize can be derived from the Length field value. The sVenSpecFieldSize sub-attribute is therefore unnecessary.

Implement the following changes:
[1] Remove "sVenSpecFieldSize, " from the list of sub-attributes in paragraph 1 [2] Remove definition of aOnuCapabilitiesPwrSav.sVenSpecFieldSize sub-attribute [3] remove VenSpecFieldSize field in Table 14-19 [4] modify definition of Length field value to read as follows: The size of TLV fields following the Length field, calculated as follows: 3 + N, where N = length of <c>VenSpecField</c> field

designates test in Courier New font

Impact = A change in OAM is needed. This would likely involve a new OAM version (see Table 13-15 - new OAM version 0x11) for Package C.

-

#20130822_1903   Type: T   TF: RMTF   Clause: 13.3.3.6.4   Page: 405   Line: -   Commenter: Marek Hajduczenia / Bright House Networks

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

"Additionally, the ResponseCode field is used to indicate whether ..." - text contains reference to ResponseCode field, which does not exist in Table 13-64. ResponseCode ought to be ErrorStatus.

Change ResponseCode to <c>ErrorStatus</c>
Text in <c></c> needs to be written in Courier New font.

Impact = None, this is document management change

-

#20130827_1921   Type: T   TF: RMTF   Clause: 14.4.3.7.5   Page: 637   Line: -   Commenter: Marek Hajduczenia / Bright House Networks

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

The definition of sub-attribute aQueueColorMarking.sFieldCode points to Table 14-220 for individual values. However, just pointing to Table 14-220 here is not sufficient, because that table provides numerical equivalents for various options, but does not explain what each value means or what exact field it represents.

NOTE: Page reference is valid for D3.4

We have two options available.

Option 1: in the aQueueColorMarking.sFieldCode definition, we need to have here a complete text as in Sub-attribute aRuleSetConfig.sClause.sFieldCode (14.4.3.6.1.1).

Option 2: Just reference the sub-attribute aRuleSetConfig.sClause.sFieldCode (14.4.3.6.1.1).

My personal preference is for Option 2.

Thus the sentence

"Individual values for the FieldCode field are defined in Table 14-220."

should be replaced with

"Individual values for the sFieldCode sub-attribute are as defined for sub-attribute aRuleSetConfig.sClause.sFieldCode (14.4.3.6.1.1)."

Make sure the cross reference is live and proper text style is used.

Impact = None, it is only clarification for textual description.

-

#20130827_1932   Type: T   TF: RMTF   Clause: 14.4.3.3.42   Page: 603   Line: -   Commenter: Marek Hajduczenia / Bright House Networks

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

The object context for aCounterRxFramesL2CP attribute is wrong. It is ONU, whereas it ought to be PON / UNI Port

NOTE: Page reference is valid for D3.4

Change

"The aCounterRxFramesL2CP attribute is associated with the ONU object ... "

to

"The aCounterRxFramesL2CP attribute is associated with the UNI Port or PON Port object ... "

Impact = The existing object context definition is just wrong. A new firmware version will have to be created and pushed to devices.

-

#20130828_2024   Type: T   TF: RMTF   Clause: 14.4.3.9.1   Page: 642   Line: -   Commenter: Marek Hajduczenia / Bright House Networks

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

Currently, in several locations in the draft we have reference to "IEEE Std 1588v2", which is not in the list of normative references included in Clause 2. I assume that we actually mean "IEEE Std 1588-2008", which is the updated version of the original 1588 standard

NOTE: Page and line reference valid for D3.4

1) Add a normative reference to Clause for IEEE Std 1588-2008, with the following text:
"IEEE Std 1588(tm)-2008, IEEE Standard for a Precision Clock Synchronization Protocol for Networked Measurement and Control Systems
2) Add a definition in 3.3 for "IEEE 1588v2" with the following text: "IEEE 1588v2: represents a shortcut notation for IEEE Std 1588(tm)-2008"
3) Replace all 6 instances of "IEEE Std 1588v2" with "IEEE 1588v2"

Impact = None, it is only clarification for existing normative reference

-

#20130924_0355   Type: T   TF: RMTF   Clause: 14.4.3.2.2   Page: 572   Line: -   Commenter: Edwin Mallette / Bright House Networks

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

There are a number of issues with this attribute.

1) The context of the object is ambiguous.   Attribute name aUniDynMacAgeLimit indicates UNI context. The description of this attribute indicates it should be ONU context. DPoEv2.0 OAM specification indicates the ONU context is correct.

2) Description is incorrect for this object. Description indicates that the attribute represents the "maximum size of the MAC address learning table.."

3) The name of the attribute should also be changed in Table 14-150.

1) Change the name of the attribute to aOnuDynMacAgeLimit

2) Change description to "This attribute represents the age limit of the dynamic MAC addresses learned by the ONU."

3) Change the name of this attribute in Table 14-150 to match the name in (1) - aOnuDynMacAgeLimit.

Impact : Removing ambiguity (of whether this attribute is ONU context or UNI context) would actually reduce the risk of interoperability issues for this attribute in future implementations. If interoperability issues are brought to light by this change, the interoperability issues already existed.

-

#20131001_1523   Type: T   TF: RMTF   Clause: 14.4.3.2.2   Page: 572   Line: -   Commenter: Marek Hajduczenia / Bright House Networks

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

The attribute OnuDynMacAgeLimit when set to 0x00-00 is expected to disable the MAC address learning function in the ONU. it is not described in text right now.

Change the value of the field in Table 14-150 from "Value of aUniDynMacAgeLimit attribute" to "Value of aUniDynMacAgeLimit attribute:<cr>
0x00-00: MAC learning function is disabled
0x00-01 - 0xFF-FF: MAC learning function is enabled; the value expresses the MAC aging limit"

Impact = It is expected that backward compatibility with devices not implementing this specific meaning of this attribute might be affected. However, it is not clear how a device would implement really aging time of 0x00-00 and what it would mean. I expect that all devices in field today implement this specific meaning of OnuDynMacAgeLimit attribute anyway

-

#20131028_1808   Type: T   TF: RMTF   Clause: 7.2.2.3.2   Page: 100   Line: -   Commenter: Glen Kramer / Broadcom

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

Footnote after Table 7-26 refers to parameter CVID. This parameter is not used in this table.

Delete table footnote 'b'.

Impact = None

-

#20131029_1956   Type: T   TF: RMTF   Clause: 14.4.3.2.14   Page: 581   Line: -   Commenter: Glen Kramer / Broadcom

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

Attribute aOnuFwFileName (0xD7/0x01-0E) is located in the wrong section. It is located in the "bridging" subclause, while it should be located in the "ONU management" subclause.

Move 14.4.3.2.14 Attribute aOnuFwFileName (0xD7/0x01-0E) to 14.4.3.1.17

Impact = None

-

#20131105_2020   Type: T   TF: RMTF   Clause: 14.4.3.2.11   Page: 578   Line: -   Commenter: Glen Kramer / Broadcom

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

In 1904.1, the attribute aUniFloodUnknown is associated with a UNI port. But the same attribute in DPoE 2.0 is associated with an ONU, i.e., it enables/disables flooding on all UNI ports at once.

Controlling flooding per UNI is more flexible, so perhaps this is the method we should adopt in both standards. Otherwise, use ONU object in SIEPON.

Impact = potential impact on ONU OAM parser

-

#20131107_1410   Type: T   TF: RMTF   Clause: 12.3.3.1.4   Page: 344   Line: 1   Commenter: Glen Kramer / Broadcom

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

In the following sentence, the word "potential" is inappropriate. The message is sent only if actual errors were detected.

"In the case of any errors detected during the process of committing the newly downloaded software image, the ONU sends the eOAM_Software_FileTransferAck eOAMPDU with BlockNumber = 0x00-00 and ResponseCode field that holds any of the values specified in Table 13-101, indicating a potential problem with the software image committing step."

Remove the word "potential"

Impact = None

-

#20131107_1416   Type: T   TF: RMTF   Clause: 12.3.3.2.1   Page: 344   Line: -   Commenter: Glen Kramer / Broadcom

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

Typo in the definition of "retryLimit" variable. In the following sentence, the "retryCountMax" should be replaced with "retryLimit":

"Once the retryCountMax transmission attempts fail, the given device reacts per Figure 12-21 for the ONU and Figure 12-22 for the OLT."

replace "retryCountMax" with "retryLimit"

Impact = None

-

#20131107_1440   Type: T   TF: RMTF   Clause: 12.3.3.2.2   Page: 345   Line: -   Commenter: Glen Kramer / Broadcom

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

"This bit array carries the software image fragment (block) carried in the eOAM_Software_FileTransferData eOAMPDU."

"carries" and "carried" in the same sentence. Generally message carries information, but bit array (as any data types) just contains it.

Replace the sentence to read "This bit array contains the software image fragment (block) carried in the eOAM_Software_FileTransferData eOAMPDU."

Impact = None

-

#20131107_1442   Type: T   TF: RMTF   Clause: 12.3.3.2.4   Page: 347   Line: -   Commenter: Glen Kramer / Broadcom

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

"This function extracts the software image block number block# from the software image pointed to by image and returns in the form of a bit array saved into the blockData variable."

Missing "it" after "returns".

Insert "it" after "returns".

Impact = None

-

#20131107_1448   Type: T   TF: RMTF   Clause: 12.3.3.2.6   Page: 353   Line: -   Commenter: Glen Kramer / Broadcom

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

Two typos in figure 12-22:
"eOAM_FTA_Error" in state TRANSFER_ERROR should be "eOAMI_FTA_Error"
"eOAM_FTA_Error" in state COMMIT_ERROR should be "eOAMI_FTA_ErrorCommit"

In state TRANSFER_ERROR, replace "eOAM_FTA_Error" with "eOAMI_FTA_Error"
In state COMMIT_ERROR, replace "eOAM_FTA_Error" with "eOAMI_FTA_ErrorCommit"

Impact = None

-

#20140807_2103   Type: T   TF: RMTF   Clause: 13.2.3.5   Page: 400   Line: 2   Commenter: Lu Yang / RITT, CATR

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

eOAM_Set_Response eOAMPDU is used by ONU to respond to the eOAM_Set_Request eOAMPDU and contains a series of Variable Containers and Object_ID TLVs.

Change eOAM_Get_Request eOAMPDU in this line to eOAM_Set_Request eOAMPDU.

Impact = None

-

#20140807_2104   Type: T   TF: RMTF   Clause: 14.2.2.29   Page: 518   Line: 18   Commenter: Lu Yang / RITT, CATR

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

When the OLT uses the Fast-Leave Admin Control TLV (0xC9/0x00-48) to configure the ONU IGMP/MLD agent, 'enable' is expressed by 0x00-00-00-02. While in this TLV, the status 'enable' is expressed by 0x00-00-00-00. We should keep the value consistent.

In Table 14-45, change enable: 0x00-00-00-00 to enable: 0x00-00-00-02

Impact = None

-

#20140807_2105   Type: T   TF: RMTF   Clause: 14.2.5.3   Page: 545   Line: 17   Commenter: Lu Yang / RITT, CATR

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

This TLV is used by OLT to configures the fast-leave state function of the ONU, i.e., enable or disable the fast leave function. And it does not relate to the multicast mode. Furthermore, this is an action which means the attribute is write-only, so it can not represent the current state of the multicast mode.
Delete the paragraph: 'The state of the fast-leave mode carried in this TLV represents the current state of enabled multicast mode of the ONU, e.g., IGMP-controlled multicast without authorization control mode or IGMP-controlled multicast with authorization control mode.' Impact = None
-

#20140807_2106   Type: T   TF: RMTF   Clause: 12.3.1.6.2   Page: 353   Line: 2   Commenter: Lu Yang / RITT, CATR

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

The message used by OLT instructing the ONU verify the downloaded software image is eOAM_Software_EndDownloadRequest eOAMPDU.
Change eOAM_Software_EndTransferRequest eOAMPDU to eOAM_Software_EndDownloadRequest eOAMPDU. Impact = None
-

#20140807_2106a Type: T   TF: RMTF   Clause: 12.3.1.6.2   Page: 350   Line: 23   Commenter: Lu Yang / RITT, CATR

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

The message used by OLT instructing the ONU verify the downloaded software image is eOAM_Software_EndDownloadRequest eOAMPDU.
Change eOAM_Software_EndTransferRequest eOAMPDU to eOAM_Software_EndDownloadRequest eOAMPDU. Impact = None
-

#20140807_2107   Type: T   TF: RMTF   Clause: 12.3.1.6.2   Page: 351   Line: 8   Commenter: Lu Yang / RITT, CATR

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

The message used by OLT instructing the ONU verify the downloaded software image is eOAM_Software_EndDownloadRequest eOAMPDU
Change eOAM_Software_EndTransferRequest eOAMPDU to eOAM_Software_EndDownloadRequest eOAMPDU. Impact = None
-

#20131107_1456   Type: T   TF: RMTF   Clause: 13.4.2.10.4   Page: 436   Line: -   Commenter: Glen Kramer / Broadcom

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

Wrong description of the BlockNumber field in Table 13-100. "This field reflects the sequential number of the current ONU software image fragment carried in this eOAMPDU." The eOAM_Software_FileTransferAck eOAMPDU does not carry any software image fragments.
Replace the sentence "This field reflects the sequential number of the current ONU software image fragment carried in this eOAMPDU." with the sentence ""This field carries the sequential number of the software image fragment (block) that the ONU expects to receive next." Impact = None
-

#20131108_2017   Type: T   TF: RMTF   Clause: 7.4.2.1   Page: 118   Line: -   Commenter: Glen Kramer / Broadcom

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

"The OLT handles the IGMP/MLD of the network, and the ONU filters the multicast data stream as instructed by the OLT through eOAM." The sentence is confusing.
Rephrase as follows: "The OLT handles all IGMP/MLD requests form the multicast clients on the given EPON, and the ONU filters the multicast data stream as instructed by the OLT through eOAM." Impact = None
-

#20131108_2025   Type: T   TF: RMTF   Clause: 11.3.4.1.2   Page: 289   Line: -   Commenter: Glen Kramer / Broadcom

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

In table 11-2, the following sentence is poorly worded and is confusing. "This rule is added to all rules that direct to iU referring to LLIDU." It is incorrect to say that a rule is added to another rule.
Rephrase as follows: "This rule is added to precede all rules that direct data traffic to iU associated with the unauthenticated LLIDU." Impact = None
-

#20131108_2037   Type: T   TF: RMTF   Clause: 14.2.2.22   Page: 473   Line: -   Commenter: Glen Kramer / Broadcom

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

The following sentence is confusing.

"The OLT shall place the length of the IPv6 prefix in the lower octet of the sRuleFieldValue sub-attribute and the value of the prefix starting from the higher octet of the sRuleFieldValue sub-attribute."

Rephrase as follows:

"The OLT shall place the length of the IPv6 prefix in the lowest octet of the sRuleFieldValue sub-attribute and it shall place the value of the prefix in the higher octets of the sRuleFieldValue sub-attribute, starting from the highest octet."

Impact = None

-

#20131108_2040   Type: T   TF: RMTF   Clause: 14.2.5.1   Page: 510   Line: -   Commenter: Glen Kramer / Broadcom

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

The following sentence is confusing.

"The ONU may not respond to the eOAM_Set_Request eOAMPDU carrying this TLV with the eOAM_Set_Response eOAMPDU with the appropriate return code."

"may not" can be interpreted as "not allowed". Also not clear: no response from the ONU or a response, but with an incorrect code?

Rephrase as follows:

"The ONU may reboot without generating the eOAM_Set_Response eOAMPDU in response to the eOAM_Set_Request eOAMPDU carrying the ONU Reboot TLV."

Impact = None

-

#20131111_0631   Type: T   TF: RMTF   Clause: 12.2.2.2   Page: 306   Line: 14   Commenter: Motoyuki Takizawa / Fujitsu Telecom Networks

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

A field name in the OAMPDU should be a single word by using "_" (underscore) to avoid confusion to readers.
See also the comment #22206 for IEEE P1904.1/Conformance resolved in the IEEE P1904.1 Working Group.

Change "Vendor Specific Information" and "Vendor Specific Info" to "Vendor_Specific_Information" in 12.2.2.2, Figure 12-7 and Table 12-2.
Impact = None

-

#20140103_1828   Type: T   TF: RMTF   Clause: 12.3.1.6.5   Page: 325   Line: -   Commenter: Marek Hajduczenia / Bright House Networks

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

The value of EventID for eOAMR_ActivationFailure and eOAMR_ActivationSuccess is not correct.
eOAMR_ActivationFailure uses now EventID of 0x00-0E and eOAMR_ActivationSuccess - 0x00-0F. However, the normative Table 9-2 assigns EventID of 0x00-0E to ActivationSuccessEvent and 0x00-0F to ActivationFailureEvent.

Change the value of EventID in definition of eOAMR_ActivationFailure from 0x00-0E to 0x00-0F.
Change the value of EventID in definition of eOAMR_ActivationSuccess from 0x00-0F to 0x00-0E.

Impact = None

-

#20140212_1524   Type: T   TF: RMTF   Clause: 13.4.4   Page: Line: -   Commenter: Marek Hajduczenia / Bright House Networks

Comment Status: New   Response Status: None   Commenter Satisfaction: None   Category: -

AI from comment #23185 called for an MR on Package A OAM definitions, adding text around the requirement to respond within 1 second, as discussed at December 2013 meeting.

See siepon_1402_hajduczenia_1a for details of changes - two new subclauses are added: one in Clause 13, and one in Clause 14.

Impact = None, it is just formal description of already existing behaviour.

-