draft-ietf-mile-rfc5070-bis-25

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What is IODEFv2?

• An XML format to represent data elements commonly exchanged by CSIRTs:
  – Computer security incident reports
  – Cyber security indicators

• Update to the Incident Object Description Exchange Format (IODEF) (RFC5070)

• Currently in “AD Followup” state; 1 uncleared
  Discuss
Drafts Since IETF 95 (Buenos Aires)

• Nits from WGLC
  -19 (04-21-2016)

• AD Review
  -20 (05-09-2016)
    • https://www.ietf.org/mail-archive/web/mile/current/msg01847.html

• Shepherd Write-up and draft-ietf-mile-iodef-guidance-05 feedback
  -21 (05-10-2016)
    • https://www.ietf.org/mail-archive/web/mile/current/msg01851.html
  -22 (05-27-2016)
    • https://www.ietf.org/mail-archive/web/mile/current/msg01867.html

• IETF LC, Security Review and IESG Review
  -23 (06-20-2016)
    • https://www.ietf.org/mail-archive/web/mile/current/msg01932.html
  -24 (06-20-2016)
    • https://www.ietf.org/mail-archive/web/mile/current/msg01944.html
  -25 (06-24-2016)
    • https://www.ietf.org/mail-archive/web/mile/current/msg01961.html
Incompatibilities with v1

- The IODEF-Document@version attribute is set to "2.0".
- Attributes with enumerated values can now also be extended with IANA registries.
- All iodef:MLStringType classes use xml:lang. IODEF-Document also uses xml:lang.
- The Service@ip_protocol attribute was renamed to @ip-protocol.
- The Node/NodeName class was removed in favor of representing domain names with Node/DomainData/Name class. The Node/DataTime class was also removed so that the Node/DomainData/DateDomainWasChecked class can represent the time at which the name to address resolution occurred.
- The Node/NodeRole class was moved to System/NodeRole.
- The Reference class is now defined by [RFC-ENUM].
- The data previously represented in the Impact class is now in the SystemImpact and IncidentCategory classes. The Impact class has been removed.
- The semantics of Counter@type are now represented in Counter@unit.
- The IODEF-Document@formatid attribute has been renamed to @format-id.
- Incident/ReportTime is no longer mandatory. However, GenerationTime is.
- The Fax class was removed and is now represented by a generic Telephone class.
- The Telephone, Email and PostalAddress classes were redefined from improved internationalization.
Obsoleting and Expert Review

• Explicitly deprecate RFC5070 and RFC6685
• Require expert review on IANA registered namespaces containing the string “iodef” per RFC6685
Processing IODEF Documents

• Parsers s/MUST/SHOULD/ reject syntax errors
• Parsers s/SHOULD NOT/MUST NOT/ download schemas at runtime
• IODEF implementations MUST periodically update their schema and MAY need to update their parsing algorithms to incorporate newly registered values
Security Considerations

• Discuss privacy implications of IODEF
• Clarify where executable content exists in the data model
• Clarify out-of-band negotiation of field semantics
• Clarify the interpretation of confidence values
Added new attribute/classes

- `System@observable-id` and `Observable/System` per use cases in Section 4 of draft-ietf-mile-iodef-guidance-05
- `Address@type={ipv4-net-masked, ipv6-net-masked}`
- `IndicatorExpression/Confidence`
Discussion