Critical Content of Internet Mail

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Background

- Gateway Situations Between Full Internet Mail Systems and Systems of Lesser Capability
  - Some Body Types Not Renderable / Storable
- Internet Mail: Either Whole Message Delivered or Not
- Lesser Capability: Parts of Message Delivered or Not

What Means Delivered?

- Some Parts Critical to Sender
    - Recipient Must Receive Body Part to Satisfy Sender's Expectations
- Other Parts Not Important
    - Lotus Notes' Stationery Icons
    - Microsoft Outlook's TNEF Attachemnts
    - Sender Wouldn't Want Receiving System to Reject Message Because of Parts He Didn't Know He Sent!

Need

- Method for Sending User Agent (or Sender) to Indicate Body Parts That The Sender Deems Critical

- Based on Inability to Store / Render Critical Part

  - Safely Ignore Unimportant Parts (cf. IVM)

  - Reject Message if Critical Part Undeliverable

  - Notify Sender of Unimportant Part Disposition (cf. PNDN / PMDN)

Approach

- Mark Critical Parts on a Part-By-Part Basis
- Following RFC 2045, Introduce Body Part Entity
- New Entity Indicates Whether Body Part is
  - Critical to the Sender
  - Important to the Sender
  - Unimportant to the Sender
- Proposal: `Content-Criticality` Entity

Content-Criticality: CRITICAL

- Body Part is Critical to Sender

- If Receiving System Cannot Render *Any* Critical Body Part, *Entire* Message Rejected

- If Receiving System Delivers *All* Critical Body Parts, Message Succeeds, Irrespectively of Deliverablility / Rendering of Non-Critical Body Parts

Content-Criticality: IMPORTANT

- Body Part is Important to Sender
- Sender Probably Wants Notification of the Deliverability / Rendering of Important Body Parts
  - Following Notification Rules
- Failure of Important Body Parts Does Not Cause Reject of Message

Content-Criticality: IGNORE

- Sender Doesn't Care About Body Part
  - Sender *Does Not Want Notifications of Any Kind* About Ignored Body Part

Action Summary

	Sending UA Has Marked Body Part		
	CRITICAL	IMPORTANT	IGNORE
Body Part is Deliverable / Read	Appropriate Action	Appropriate Action	Ignore
Body Part is Undeliverable / Unreadable	Fail Entire Message	Appropriate Action	Ignore

Backward Compatibility

- ## No Content-Criticality Entities
  - ### All Body Parts Are CRITICAL
- ## One or More Content-Criticality Entities
  - ### Default Value IGNORE
- ## Need More Discussion on VPIMv2 Compatibility?

Discussion: Unrecognized Value

CRITICAL? This is current state of Internet mail. However, if one or more Content-Criticality entities present, user probably intends something different.

IMPORTANT? This captures more of the spirit of Internet mail. Generate a report if something the sender wants a DSN or MDN, otherwise be quiet.

IGNORE? Again, if one or more Content-Criticality entities present, IGNORE is reasonable, too.

Thanks!

More Discussion?

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