Critical Content of Internet Mail

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Roadmap

- Changes from –02: 1 Minute
- Other Options: 5 Minutes
- Plans for –04: 1 Minute
- Next Steps: 1 Minute

Changes From –02

- Changed All of the “Converting MTA/UA” Language to “Content Gateway”
- Reorganized Chapters to be More Readable
- Cosmetic Changes, e.g.,
  - Uniform Reference Style to RFC’s
  - Sensible Notes

Roadmap

- Changes from –02
- **Other Options**
- Plans for –04
- Next Steps

Content-Type (RFC 2045)

- Pro: Every IMAP Server Returns Content-Type With Parameters Using BODYSTRUCTURE Method
- Con
  - Totally Breaks Content-Type Semantics
  - Would Be a “Global” Modifier; Violates Concept of a Parameter as a Modifier to a Given Content-Type

Content-Criticality

- Pro
  - Close to a Year of Research and Discussion
  - Criticality Is a Top-Level Concept
- Con
  - Not Part of BODYSTRUCTURE Method for IMAP

Content-Disposition (RFC 2183)

- Pro: Every IMAP Server Returns Content-Disposition With Parameters Using BODYSTRUCTURE Method
- Parameter to Content-Disposition Fits With Content Disposition Semantics, e.g.

```
Content-Disposition: attachment;
  criticality=CRITICAL
```

Content-Disposition Con

- Content-Disposition, as Currently Interpreted, Is *How* Content Gets Displayed, Not *If* Content Gets Displayed
- Do We Care?
- No

Roadmap

- Changes from –02
- Other Options
- **Plans for –04**
- Next Steps

Plans for –04

- Use Content-Disposition, not Content-Criticiality
- Clean-Up Poorly Cut-and-Pasted IMPORTANT Text in Section 4.4
- Reaffirm That Critical-Content Affects DSN/MDN Generation Rules in Section 9.1
- Include Greg White's Last Name In Attribution Section ☺
- Any Changes from Today

Next Steps

- Publish –04
- Write MDN Notification-Option Extension Draft

Thanks!

More Discussion?

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Appendix

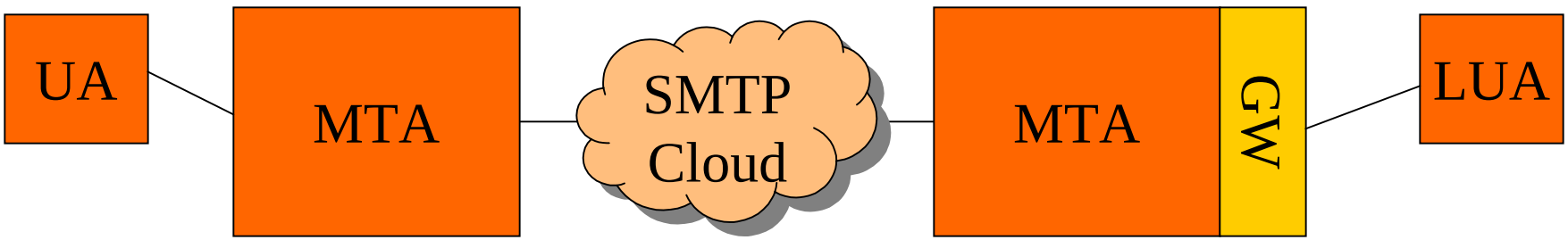
- Action Matrix
- Content Gateway Pictures from 49th IETF
- MDN Notification Option

Action Summary

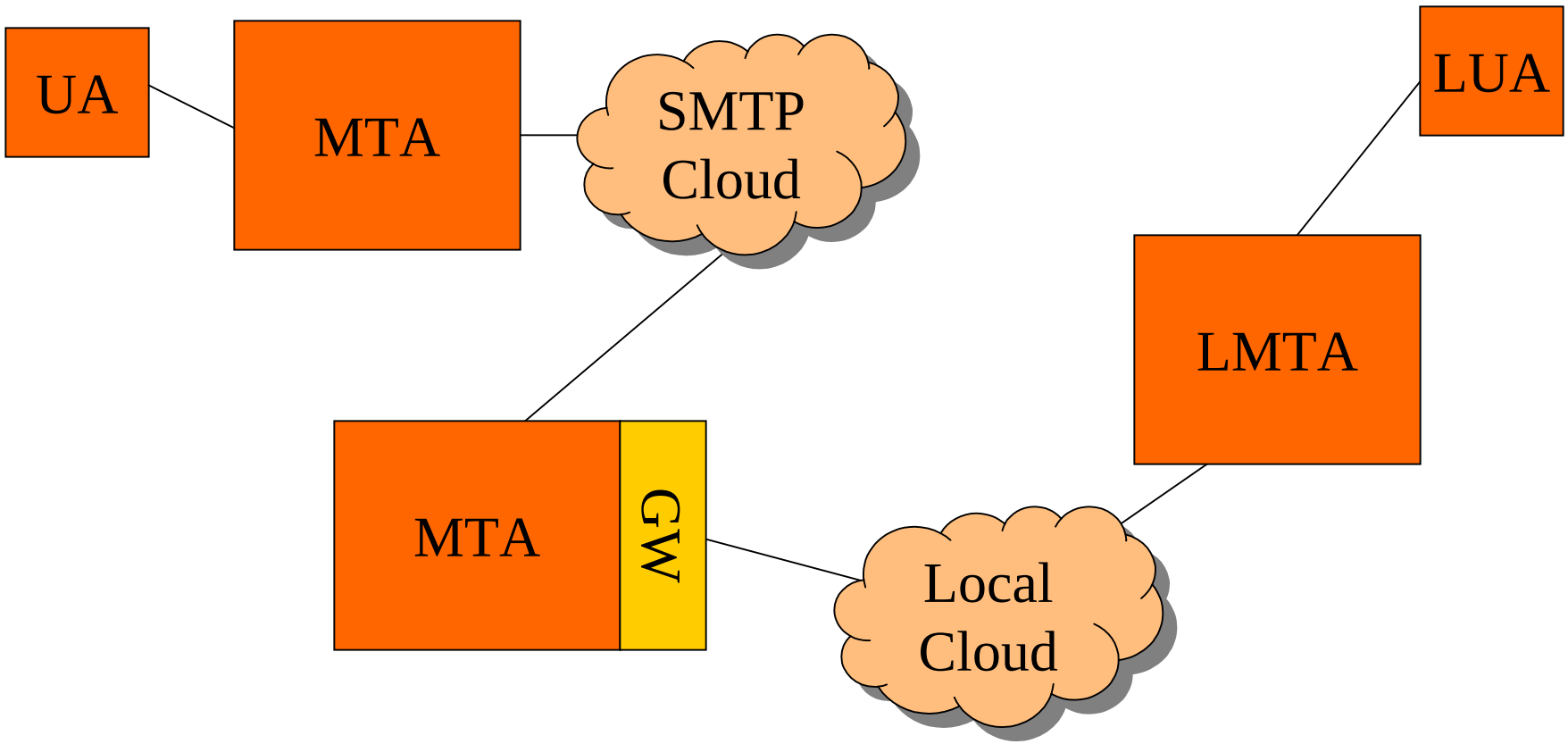
	Sending UA Has Marked Body Part	
	CRITICAL	IGNORE
Body Part is Deliverable / Read	Appropriate Action	Ignore
Body Part is Undeliverable / Unreadable	Fail Entire Message	Ignore

Integrated Content Gateway

- By Definition, Gateway Knows Capabilities of Lesser-Capability User Agent (LUA)
- Gateway Can Directly Inform MTA to Send DSN With “Media Not Supported” If Critical-Content Undeliverable

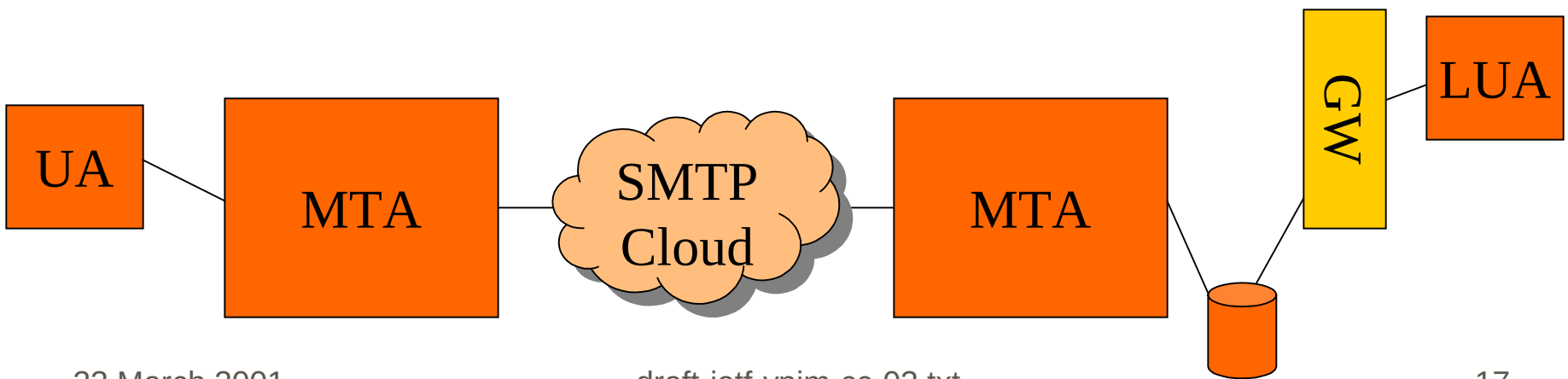


Content Gateway Can Be Anywhere In Network



Hacked Content Gateway

- MTA Delivers Message to GW
  - From MTA's Point of View, Delivery Successful
- Gateway
  - Can't Send DSN – Message Already Delivered
  - Sends "Non-Delivery" MDN With "Media Not Supported" If Critical-Content Undeliverable
- The Gateway is a User Agent Proxy



Benefits of This Conceptual Approach

- Works For Any Network Topology
  - Integrated Gateway/User Agents
  - True Content Gateway – At Any Hop
  - “Post-Delivery” Gateway
  - DSN Semantics Works, Even Across Non-ESMTP MTA’s
    - “Works,” In That Sender Will Know No Report Coming

MDN Optional

- Ask For Critical-Content Failure Notice, As Opposed to “Tell Me Everything”
  - `Disposition-Notification-Options: notify = optional, critical-content`
  - `Disposition-Notification-Options: notify = optional, disposition, critical-content`
  - `Disposition-Notification-Options: notify = optional, disposition`
- Rationale
  - “Optional”, So It Doesn’t Break Old Implementations
  - User May Not Care About Delivery Notification