

IETF 84 – MILE GRC Exchange

Proposed GRC Exchange Message Changes

Presenter: David Waltermire <david.waltermire@nist.gov>

Contributor: Terry Brugger <Brugger_Terry@bah.com>

Current Concerns

- Ambiguity in message types
 - Request vs Query
 - Request – Retrieves a specific report for the date/time requested.
 - Query – Retrieves information about one or more reports.
 - Report vs Result
 - Report – Provides request results.
 - Result – Provides query results.
- Requests are not easily traceable.
- Retrieving status for in-progress activities is not possible.
- Current draft lacks a method to establish data collection for future reporting.

Proposed Changes

- Rename Request message to ReportRequest.
 - Represents a request for a specific report instance.
- Rename Query message to QueryRequest.
 - Represents a request for information based on the embedded query data
- Remove Result type
 - Use more specific response messages
- Add StatusRequest message
 - Retrieves the current status of a previous request
- Add ActionRequest message
 - Requests that an action to be taken based on embedded action data
- Add ActionResult message
 - Provides information on the disposition of a previously requested action
- Keep Acknowledgement and Report types
- Add a requestId to all request messages
 - Enables status tracking of requests using StatusRequest
 - Targets Acknowledgement messages to specific requests
- Update RequestStatus class to include "Queued", "Running", and "Complete" statuses.

Message Types

Message	Properties
ReportRequest	<i>GRCPolicy</i> , Request ID, and the Report ID for the report being requested.
QueryRequest	<i>GRCPolicy</i> , Request ID, and an embedded (xs:any) query definition.
ActionRequest	<i>GRCPolicy</i> , Request ID, and an embedded (xs:any) action command
StatusRequest	<i>GRCPolicy</i> , Request ID, and the Request ID for the original request for which the status is being requested
Report	<i>GRCPolicy</i> , originating Request ID, <i>Report ID</i> , and embedded (xs:any) report details.
Acknowledgement	<i>GRCPolicy</i> , originating Request ID, a RequestStatus, and <i>an embedded (xs:any) block of status information</i>
ActionResult	<i>GRCPolicy</i> , originating Request ID, and an embedded (xs:any) result detail

Request/Response Messages

Request	Response	Use
ReportRequest	Report or Acknowledgement	Allows requesting a specific report by date/time and report ID
QueryRequest	Report or Acknowledgement	Enables dynamic querying of data
ActionRequest	ActionResult or Acknowledgement	Allows the exchange of instructions (e.g. data collection, analysis tasks)
StatusRequest	Acknowledgement	Retrieves the current status of a previous request

Next Steps

- Post updated draft based on email proposal and feedback from this discussion.
 - Document new message types
 - Document action and request status message flows
 - Adjust optional and required message properties
- Develop consensus within the WG on the overall approach.