

Registry Design Team Discussion and Conclusions

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Background (1 of 2)

- Two registry design proposals presented to IPPM in Berlin, driven by LMAP requirement for a metric registry
 - One registry for active monitoring (IPPM like type of metrics) for which there is a well defined list of fixed parameters
 - One registry common to active and passive, which is open, because the semantic depends on the flow keys

Background (2 of 2)

- Design team convened by IPPM chairs to combine the two registry efforts into one.
 - Amer Akhter (not present), Marcelo Bagnulo, Benoit Claise, Phil Eardley, and Al Morton
 - Met Monday with Bill Cerveney, Brian Trammell (IPPM chairs), Jason Weil (LMAP chair), and Andrea Soppera (LMAP contributor)

Why do we need a registry?

- Reference for implementers of *known operationally useful* performance metrics
 - implementable + deployable
 - understandable + accurate
- Common vocabulary for LMAP tests
- Central reference for performance metrics developed across the IETF (Performance Metrics Directorate).

Conclusion: Three documents to be produced

- **(1) Core registry definition** document that defines an extensible registry of performance metrics, and guidelines for registry entry authors and reviewers.
- Sub-registries of the core registry (additional columns) for **(2) active metrics** and **(3) passive metrics**.
- Identifiers in the core registry will be **unique** across all sub-registries.

Why a “split” registry?

- Difference between columns for active measurements (derived from 2330) and passive measurements hard to reconcile.
 - Active: control over conditions for comparability, question known in advance of measurement. Requires a superset of 6390 columns.
 - Passive: flexibility in definition to conform to available traffic, question can be chosen after measurement.
- 6390 points to a third type of metric: “internal”
 - generated by a protocol implementation at an endpoint (e.g. XRBLOCK)
 - Definition is future work

Core registry definition

- Basic columns taken from subset of 6390 template (identifier, description, others?)
- Sub-registries must contain additional information
- Guidelines to provide reference for expert reviewers in evaluating new registry entries (see 7013 for an IPFIX example)

Open Issues

- Columns: We will optimize for each registry type and if they are not the same, so be it.
- Internal metrics registry:
 - Potentially difficult to distinguish between passive and internal
 - Not clear it needs a different structure than the passive registry
 - Initial idea to include it in the passive registry draft,
 - xrblocks performance metrics could be the initial set,
 - Since it is rfc6390 template compliant,
- Schedules and output types should be considered in the guidelines:
 - i.e. not redefine a scheduling or output type if it already been defined in an existent RFC

Next Steps

- Rework present drafts into new form shortly after Vancouver meeting.
- Single call for adoption of new drafts as WG items on the ippm@ietf.org list thereafter.
- *Many thanks to the design team for all the hard work since Orlando!*