Registry Meets LMAP

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Looking at UDP RT Latency

```
3.3.1.  Definition of ma-instruction-obj
     object {
         ma-task-obj          ma-instruction-tasks<0..*>;
            name:UDP_RT_Metrics_001;
         ma-channel-obj       ma-report-channels<0..*>;
         ma-schedule-obj      ma-instruction-schedules<0..*>;
         ma-suppression-obj   ma-suppression;
     } ma-instruction-obj;
```

(note there is no instruction “name”)

UDP RT Latency: Task

```
3.9.1.  Definition of ma-task-obj
     object {
         string                ma-task-name;
           task-name: UDP_RT_Metrics_001;
         uri                   ma-task-registry-entries<1..*>;
           Prefix: Act_IP_UDP_Round-trip_Delay_95th-percentile_Poisson;
           Prefix: Act_IP_UDP_Round-trip_Delay_Mean_Poisson;
         ma-option-obj         ma-task-options<0..*>];
           option-role: Src;  option-meas_point: mp100;
           option-measurement_protocol: TWAMP;
           option-meas_protocol_roles: Control-Client; Session-Sender;
           option-Src_IP: xxx.xxx.xxx;
           option-Dst_IP: xxx.xxx.xxx;
           option-T0:  0;  option-lambda: 1 second;
           option-Tf:  15 min; option-truncate: 30 seconds;
        [boolean               ma-task-suppress-by-default;]
           suppress: true;
        [string                ma-task-cycle-id;]
           cycle-id: Cycle_001;
     } ma-task-obj;

Prefix = urn:ietf:params:performance:metric
```

Options (Run-time Params) apply to all Registry URIs (must be =)

UDP RT Latency: Report

3.6.1. Definition of ma-report-obj

```
object {
    datetime            ma-report-date;
   [uuid                ma-report-agent-id;]
   [string              ma-report-group-id;]
   [ma-report-task-obj  ma-report-tasks<0..*>];
       name:UDP_RT_Metrics_REPORT_001;
} ma-report-obj;
```

UDP RT Latency: Report Task

```
3.6.2.  Definition of ma-report-task-obj
     object {
         string                ma-report-task-name;
            task-name: UDP_RT_Metrics_REPORT_001;
        [uri                   ma-report-task-registry-entries<1..*>;]
           Prefix: Act_IP_UDP_Round-trip_Delay_95th-percentile_Poisson;
           Prefix: Act_IP_UDP_Round-trip_Delay_Mean_Poisson;
        [ma-option-obj         ma-report-task-options<0..*>];
           option-role: Src;  option-meas_point: mp100;
           option-measurement_protocol: TWAMP;
           option-meas_protocol_roles: Control-Client; Session-Sender;
           option-Src_IP: xxx.xxx.xxx;
           option-Dst_IP: xxx.xxx.xxx;
           option-T0:  0;
           option-Tf:  15 minutes;
        [ma-option-obj         ma-report-task-action-options<0..*>];
        [string                ma-report-task-cycle-id;]
           cycle-id: Cycle_001;
        [string                ma-report-task-column-labels<0..*>;]
           label: Mean; label: 95%-tile;
        [ma-report-row-obj     ma-report-task-rows<0..*>;]
           row(0): 0.25; 0.34;
     } ma-report-task-obj;
```

Measurement Task Capabilities

```
Example:
Measurement Capability [
   Measurement Protocol [
       Protocol Roles [ ]
   ]
   Registry URI  [
       Method Roles [ ]
   ]
]
so, an example would be

Measurement Capability [
    TWAMP [
       Control-Client; Session-Sender; Server; Session-Reflector;
       ]
    Prefix:Act_IP_UDP_Round-trip_Delay_95th-percentile_Poisson [
       Src; Dst;
    ... more URIs and Roles ...
       ]
]
for a fully-capable MA.
```

Next Steps and Questions:

- Need to complete the delivery of a Report through a Schedule->Event->Action
- Need to communicate ma-task-status (or log?) with the Report (only if abnormal?)
- Others?

Section

Example Registry Entry Names: