

Next-Generation Measurement Architecture Standardization and Outreach Group (NMASOG) Architecture Standards and Specifications

Description of Scope:

- ⤴ Protocols, data structures, and best practices supporting administrative functions for measurement, data collection, and reference server nodes communication, authentication, registration and reporting with Collection/Control/Administration (CCA) server nodes;
- ⤴ Protocols, data structures, and best practices defining how potential measurement subscriber devices' demographic and broadband performance characteristics are described, identified, and matched (recruited) to a proposed testing plan based on key measurement and demographic characteristics;
 - Identifying and recruiting of measurement subscriber nodes;
 - Matching of given testing plans to set of subscriber nodes to achieve statistically meaningful survey;
 - Protocols providing mandatory and optional test features that enable and enforce client configured opt-out of certain proposed test plans;
 - Data structures defining schedules sensitive to carrier, subscriber or other concerns for data cap policies, time of day or other temporal restrictions, and content and traffic management concerns.

Description of Elements:

- ⤴ Measurement-enabled edge devices (MEED)
 - Initiates test traffic to INMS;
 - Collect on-going active performance measurements, and other tertiary information such as network availability (outage) data.
- ⤴ In-network Measurement Server (INMS)
 - Receives and generates test traffic between MEED;
 - Provides echo functionality for round-trip latency measurements.
- ⤴ Collection Control Administration server (CCAS)
 - Provides MEED with a schedule of tests to perform;
 - Furnishes MEED with a server where the MEED can deposit the measurement results (measurement log);
 - MEED may authenticate to the CCAS;
 - In-network measurement servers report availability to the CCAS.
- ⤴ Measurement Data Collection Server (MDCS)
 - Receives uploaded data logs from the MEED;
 - Makes available to the entity managing the data collection effort.

- ✦ Customer Network Information Server (CNIS)
 - Look up of customer subscription data.

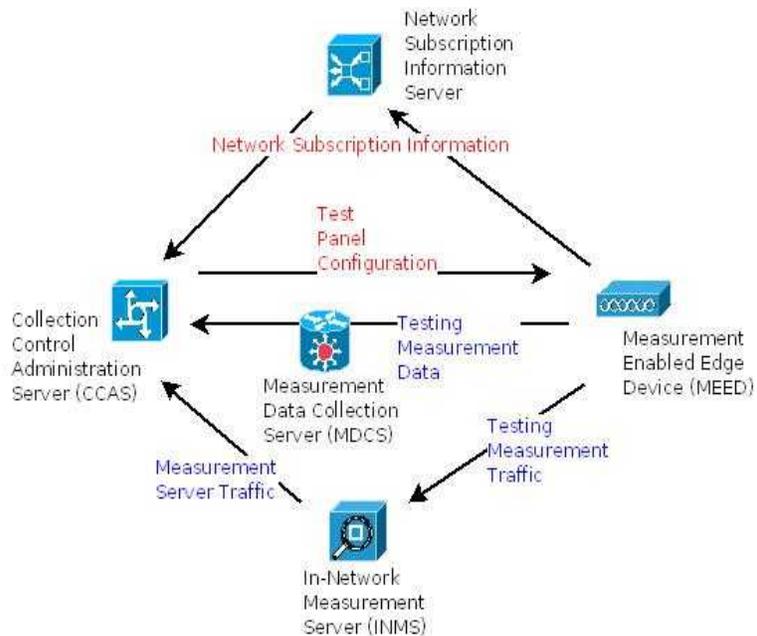


Figure 1

Outside of Scope:

- ✦ Measurement Context
 - Use by ISP and third-parties;
- ✦ Post-Collection Processing
 - Analysis, reporting or elements that anonymize, filter or aggregate data are post data collection elements.