Group Percentiles Report

This document describes an example to create a custom CSV report for percentiles on aggregated interface metrics at group level.

Use Case

A CSV report for a set of groups should list the maximum, the 95th percentile and the 98th percentile of the summarized BitsPerSecond interface metrics for each group. The report should run for the previous month on the as-polled data.

Example

(formatted in Excel)

Group	Ports	Max-In	Max-Out	95%-In	95%-Out	98%-In	98%-Out
CustA-Sample1	5	438.587	148.800	420.800	135.840	428.987	140.720

Approach

- OpenAPI query to calculate group aggregate sum of BitsPerSecondIn and BitsPerSecondOut
- Perl script to calculate the max, pct95 and pct98 values

Prerequisites

- CA PM 3.1 and above
- Perl 5.x (as provided with RHEL 6.x, no additional module required)
- Script host with Perl and access to CA PM Data Aggregator port 8581
- Relevant groups have interface items as direct members (not indirectly through devices)
- The report should be run during first two weeks of a month to ensure full coverage of as-polled data for the previous month (with standard retention definition of 45 days)

Elements

- groupPctReport.sh   main bash shell script.
  Parameters: filename with group names, report filename
- groupList.csv   list with group names
- groupCalcPct.pl   Perl script for percentile calculation

Installation

1. unpack archive on the script host, any directory
2. edit runGroupPctReport.sh and set key parameters

Usage

1. create file groupList.csv with the relevant group names
2. execute
   ./groupPctReport.sh groupList.csv report.csv