



August 5, 2021

To: OPRA Multicast Data Feed Subscribers

Subject: OPRA Pillar Capacity Testing - Reminder

OPRA Participants have updated their traffic projections based on messages per 100-millisecond (MPHM) intervals. The use of a 10-millisecond interval reflects system utilization during bursts of traffic. The bandwidth required to receive data from the new OPRA Pillar platform via your OPRA connections is reflected in Gigabits.

Please note that the traffic projections are for one stream only. For fault tolerance purposes, two redundant streams of data are available from SIAC. For those Multicast Data Subscribers who elect to receive both streams of data, the bandwidth requirements would be double.

SIAC is providing Saturday capacity testing opportunities to allow direct Multicast Data Subscribers to validate processing OPRA projected maximum output traffic rates.

OPRA Multicast Data Subscribers are invited to participate in the remaining 2021 OPRA Pillar capacity tests occurring on the same dates as the SIP Failover testing as follows:

- 8/21/2021 - from approximately 12:00pm - 1:00pm ET
- 12/4/2021 - from approximately 12:00pm - 1:00pm ET

The maximum output traffic rates for OPRA Pillar data services will be as follows:

**Capacity Projections**

Effective Date	100-Milliseconds			10-Milliseconds			Total Messages Per Day (billions)	Maximum Output Rate per Output Line MPHMM (Thousands Msg / 100ms)
	Maximum Output Traffic Rates (Million Msg /100ms)	Bandwidth (Gigabits /100ms)	Peak Packets (Thousand packets / 100ms)	Maximum Output Traffic Rates (millions)	Bandwidth (Gigabits /10ms)	Peak Packets (Thousand packets / 10ms)		
7/2021	9.609	2.67	497	1.087	0.300	52	111	400
1/2022	10.093	2.80	522	1.141	0.313	54	115	400
7/2022	10.574	2.93	546	1.196	0.328	56	117	400
1/2023	11.081	3.07	573	1.253	0.344	58	122	400

**Retransmissions**

The required bandwidth should be increased by 10% to account for retransmissions.

**Latency**

The median latency for OPRA Pillar is under 20 microseconds. Message latency is measured beginning with the time-stamp taken as an inbound Participant message arrives at the network entrance to the OPRA environment, through processing by the system into a consolidated message for Multicast Data Subscribers, to the time-stamp taken as the

outbound message arrives at the network exit from the environment. These time-stamps are taken and correlated by a process external to the data processing applications. If the external process cannot correlate an inbound message to its corresponding outbound message or measures negative latency for a message, the message is excluded from broader latency calculations such as median message latency.

### **Test Registration**

Each OPRA Data Subscriber participating in the test should register at [CTA-OPRA-Support@siac.com](mailto:CTA-OPRA-Support@siac.com).

***Data Subscribers who receive OPRA from connectivity service providers other than ICE Global Network (IGN) must contact their connectivity service providers to coordinate testing.***

*Please note that if no Multicast Data Subscribers register for capacity testing, capacity testing **will not** take place.*

### **Questions**

Questions regarding the bandwidth requirements should be addressed to: [CTA-OPRA-Support@siac.com](mailto:CTA-OPRA-Support@siac.com). Multicast Data Subscribers can also contact the SIAC NMS Product Management Desk at 212-656-8177, Option 2. If support team members are engaged with other customers, please leave a detailed voice message of the purpose of your call, which will produce an email of your message to the support team.