What are Reasonable Performance Metrics? DB Layer

Reasonable performance metrics

- Round-trip ping time from all app servers of 300us (not ms!) or less, average
- Round-trip 1k data block commit time of 9ms or less, average
- Round-trip 4k data block commit time of 17ms or less, average
- Round-trip 8k data block commit time of 20ms or less, average
 - See plot of data for more details (*coming later in presentation)

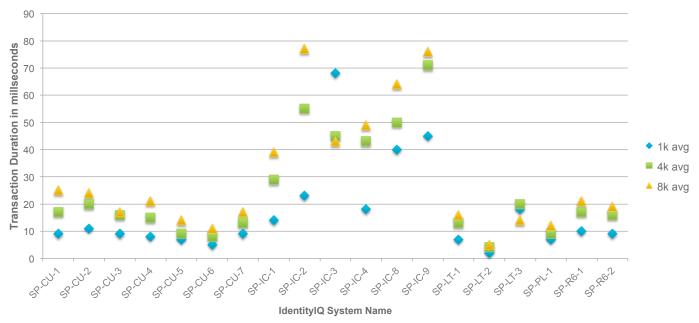
• IdentityIQ must be co-located with its database server

- Same building
- Same LAN segment preferred
- No intervening firewalls
- No remotely hosted DB "services"

Tying it together

The data doesn't lie; database proximity and performance is key

Database Transaction Processing Times

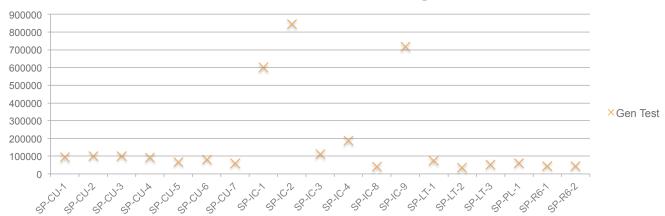


-CU = normal IdentityIQ installation, -IC = performance issue IdentityIQ installation -LT = modern laptop, -R6 = performance lab hardware

Tying it together

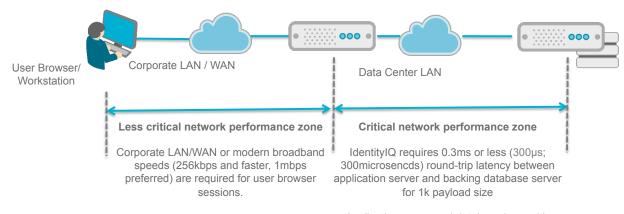
Raw Java performance matters, but DB performance matters more

Data Generation Processing Times



Sys Num	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Code Name	SP-CU-1	SP-CU-2	SP-CU-3	SP-CU-4	SP-CU-5 S	P-CU-6	SP-CU-7	SP-IC-1	SP-IC-2	SP-IC-3	SP-IC-4	SP-IC-8	SP-IC-9	SP-LT-1	SP-LT-2	SP-LT-3	SP-PL-1 S	P-R6-1 S	SP-R6-2
1k avg	9	11	9	8	7	5	9	14	23	68	18	40	45	7	2	18	7	10	9
4k avg	17	20	16	15	9	8	13	29	55	45	43	50	71	13	4	20	9	17	16
8k avg	25	24	17	21	14	11	17	39	77	43	49	64	76	16	5	14	12	21	19
Gen Test	93505	102029	101766	92454	66089	81774	60191	601575	844358	111578	186500	40206	717196	73778	34572	52775	60568	44936	45268

Tying it together **An Appropriate Infrastructure**



- Application server and database housed in same the data
- · Application server and database on the same GigE or 10-GigE network
- No firewall or Deep-Packet-Inspection (DPI) between application database
- No WAN traversal