



# Interactive Intelligence, Inc. Server Hardware Validation Testing Results

## **General Information:**

Tester: Scott Brewer

Testing start date: 4/19/2005

Testing end date: 1/13/2006

## **Server Information:**

Server Manufacturer: Alliance Systems [www.alliancesystems.com](http://www.alliancesystems.com)

Server Model: Q-10000

Serial Number: E122104-3

Server Configuration: 10U chassis, Quad Xeon MP 2.0GHz processors, 2048MB DDR SDRAM, Intel SRCU42X RAID adapter w/128MB of RAM, RAID 10 (OS/App/Records) RAID0 (logs), six Seagate 336607LC U320,10K SCSI drives, ATI Rage XL VGA PCI w/ 4MB RAM, three 140CFM cooling fans in the PCI expansion chassis, Intel 10/100 Ethernet NIC and Intel 10/100/1000 Ethernet NIC, three 430W PSUs in Host Chassis & four 300W PSUs(N+1) 900W total in PCI Expansion Chassis, 16 PCI slots usable for telephony boards.

## **Platforms Tested:**

- Aculab + AudioCodes
- Dialogic Springware, DM3 A + AudioCodes
- Dialogic Springware, DM3 A & B+ AudioCodes

---

## ***Aculab + AudioCodes Testing Results***

Software Configuration: Windows Server 2003 Standard Edition, CIC 2.3.1GA+SRA, Aculab 5.11.2

Board Configuration: PCI slots 1-10 Aculab Prosody v1.5, PCI slots 11 & 12 AudioCodes IPM260A (120-port & 240-port)

General Observations: This is the biggest system certified by I3 for use with Interaction Center. The system has excellent cooling capabilities considering 12 telephony boards were installed and loaded to capacity. The server is a very stout design that will handle all the power requirements of the 12 boards installed without significant signs of loading.

## **Testing Information:**

Call volume tested: 5.33 calls/sec, 320 calls/minute

Number of agents: 359 ACD agents via SIP(AudioCodes)

Number of trunks: 40 ISDN NI2 (loop-back)

+5VDC value at idle: +5.05VDC

+5VDC value under full load: +5.01VDC

Ambient lab temperature: 71.9° F

Maximum internal chassis temperature observed: 101.3° F

Average CPU Utilization with Default tracing: 34.5%

Average CPU Utilization with Field<sup>1</sup> tracing: 52.6%

---

## ***Dialogic Springware, DM3 A + AudioCodes Testing Results***

Software Configuration: Windows Server 2003 Standard Edition, CIC 2.4GA, Dialogic SR6-SU70

Board Configuration: PCI slots 1-6 Dialogic D/480JCT-2T1, Dialogic 7 – 9 Dialogic DM/V960A-4T1 PCI, PCI slots 10 & 11 Dialogic DM/V1200BTEP, PCI slot 12 Dialogic DM/V3600BP, PCI slot 13 AudioCodes IPM260A (240-port)

General Observations: This is the biggest system certified by I3 for use with Interaction Center. This particular configuration was requested to verify that nearly all of Dialogic's product line is compatible with this server. The system has excellent cooling capabilities considering 13 telephony boards were installed and loaded to capacity. The server is a very stout design that will handle all the power requirements of the 13 boards installed without significant signs of loading.

### **Testing Information:**

Call volume tested: 4 calls/second, 240 calls/minute

Number of agents: 239 ACD agents via SIP (AudioCodes)

Number of trunks: 32 ISDN NI2 (loop-back)

+5VDC value at idle: +5.10VDC                      +5VDC value under full load: +5.07VDC

Ambient lab temperature: 72.9° F      Maximum internal chassis temperature observed: 104.2° F

Average CPU Utilization with Default tracing: 23.34%

Average CPU Utilization with Field<sup>1</sup> tracing: 38.67%

---

## ***Dialogic Springware, DM3 A & B + AudioCodes Testing Results***

Software Configuration: Software Configuration: Windows Server 2003 Standard Edition, CIC 2.3.1GA+SRA, Dialogic SR5.1.1+SU63

Board Configuration: PCI slots 1–4 Dialogic D/480JCT-2T1, PCI slots 5-10 Dialogic DM/V960A-4T1 PCI, PCI slot 11 Dialogic HDSI/1200 PCI, PCI slot 12 Dialogic DM/V2400A-PCI, PCI slot 13 & 14 AudioCodes IPM260A (dual 120-ports)

General Observations: This is the biggest system certified by I3 for use with Interaction Center. This particular configuration was requested to verify that nearly all of Dialogic's product line is compatible with this server. The system has excellent cooling capabilities considering 14

telephony boards were installed and loaded to capacity. The server is a very stout design that will handle all the power requirements of the 14 boards installed without significant signs of loading.

### **Testing Information:**

Call volume tested: 4 calls/second, 240 calls/minute

Number of agents: 360 ACD agents - 120 via HDSI and 240 via SIP (AudioCodes)

Number of trunks: 32 ISDN NI2 (loop-back)

+5VDC value at idle: +5.054VDC

+5VDC value under full load: +5.035VDC

Ambient lab temperature: 71.9° F     Maximum internal chassis temperature observed: 101.1° F

Average CPU Utilization with Default tracing: 22.76%

Average CPU Utilization with Field<sup>1</sup> tracing: 31.64%

---

### **Conclusions:**

The server was configured with a RAID-10 array for the operating system, applications and recordings. This server also utilized a secondary RAID-0 array for the trace logging storage. Each RAID array was configured on it's own SCSI channel using the Intel SRCU42X. Four drives were used for the RAID10 array and were located in the host chassis. Two drives were used for the RAID0 array and were located in the expansion chassis.

**1-** Field tracing is an increase of key Topic values under the IP, Notifier and TsServer subsystems in the Trace Configuration utility. These specific Topic values are increased to the highest Notes-level value of 80. This provides a much higher load on the storage subsystem to allow proper evaluation of hard drive and hard drive controller performance.