TantaComm Phone Recording Software Products

AGENT SCREEN RECORDING

Today's busy contact centers dictate that agent quality management include telephone recording software with Agent Screen Recording. Also known as "screen scrape", "screen capture", and "data capture" (actually a misnomer since only an image of the data is captured without any real knowledge of its contents), Agent Screen Recording software is critical when verification of agent performance with regard to Windows knowledge and web navigation is required.

TantaComm Systems uses a number of screen capture and remote control products from Proxy Networks which are fully integrated with the DartQA call center quality assurance package and also DartLogger. These products feature either on-demand, scheduled, or CTI driven control of Agent Screen Recording.

TantaComm Agent Screen Recording software has no perceptible impact on the target workstation and the agent will not be able to detect the monitoring process. The network overhead is very low for many types of desktop activity, particularly text based operations, and this feature minimizes network loading as well. However, rapid screen changes with many images will generate sizable screen recording files. TantaComm agent screen recording software is compatible with most Windows operating systems and has proven itself to be easy to install and maintain.

V5.20 PERFORMANCE AND REQUIREMENTS

Industry-leading Screen Recording/Playback and Remote Display

Over 2,700 contact centers and control rooms worldwide run PROXY/ScreenRecording components for dependable screen recording/playback and remote display everyday. Facilitated by our industry-acclaimed SDK, PROXY/ScreenRecording offers extensive competitive advantages over other screen capture products. The Proxy recording server:

- Handles up to an industry-best 150+ simultaneous record/playback sessions per 2GB, 3-GHz dual processor server – eliminating both 1) the cost of the additional servers necessary to deploy; and 2) the attendant maintenance time for the “extra” servers

Number of Servers Required	
By PROXY:	By competitors:
1	5 – 10
2	10 – 20
3	15 – 30

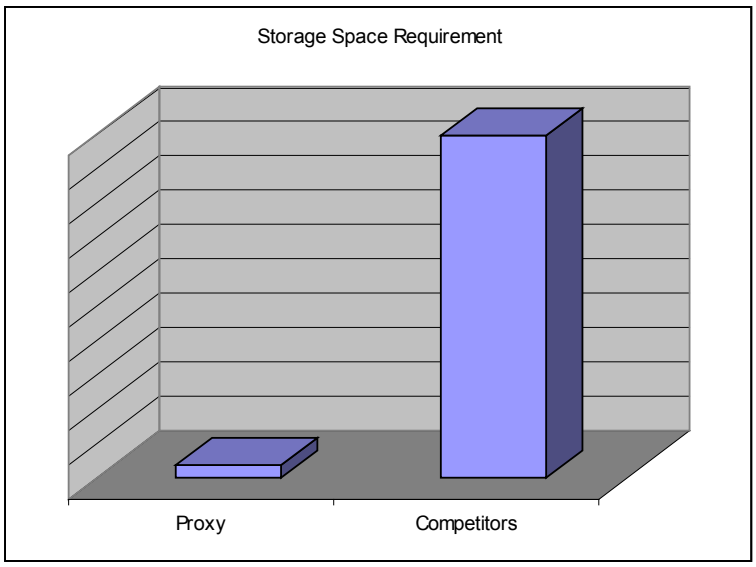
- Reduces the delay between "command to start recording" and the "actual start time" of the recording from 2 seconds to an industry-leading one-quarter of one second – you capture more of what you expect to, which is especially critical in outbound call centers that experience numerous short-duration calls. With competitive products, the recording queue gets backed up under heavy load resulting in canceled and corrupt recordings, one of which could be just the recording you need to settle a claim

Short-Duration Call Slippage	
By PROXY:	By competitors:
0.01%	10%

- Under heavy non-stop 24x7 usage, extends the server maintenance interval to an industry best 3-6 months – which means far less downtime (competitors typically require maintenance at 2-3 week intervals)

Proprietary Format Advantage:

- Proxy's proprietary file format requires just 1/26th the storage space of standard format solutions – saving you storage costs



Features	Benefits
Media Conversion Tool (June 2007)	Allows you to input an audio file and a Proxy.rec file and output a single .wmv file for immediate Windows Media Player playback. Files from older versions of Proxy can be converted as well.
Powerful Throughput Engine – Up to 150+ simultaneous sessions per server (2GB, 3-Ghz)	Requires on average 6-12 kilobytes-per-second per recorded or playback session (moderate desktop activity)
Efficient Storage Format	Requires 1/26th the space of standard file formats such as .asp or .avi – one hour of recording takes up just 6MB
Small Footprint on agent PC	Recordings do not alert the agent

Gateway Server Recommended System Requirements

1. Use Case Scenarios

Capacity planning should take into account the number of concurrent Host connections and the number of concurrent recordings taking place (called a "source") over those connections. A connected Host may have one or more recordings taking place (e.g. one initiated by the CSR rep and another one, perhaps ad hoc, initiated by the Supervisor), but each recording must be counted as a discrete source. In addition, any live viewer connections must also be counted as a source (e.g., a call center with 80 Hosts being recorded, 50% being recorded a second time, and no live viewers, is considered to have 200 sources). As usual, capacity planning should also take into account peak and average load.

For illustrative purposes, we will describe minimum recommended system requirements for three use case scenarios:

a) Large load

For large load, we will consider 100 concurrent connections and up to 200 concurrent sources

b) Medium load

For medium load, we will consider 20 concurrent connections and up to 40 concurrent sources

c) Small load (minimum)

For small load, we will consider 5 concurrent connections and up to 10 concurrent sources

2. Proxy Server Minimum Recommended System Requirements

	Large	Medium	Small
Concurrent Host Connections	100 (encrypted)	20 (encrypted)	5 (encrypted)
Sources	200	40	10
CPU	2 x 2.5 GHz	1.8 GHz	1 GHz
Memory	2 GB	1 GB	512 MB
Network Bandwidth	20 Mbps	4 Mbps	2 Mbps
Disk Performance (for recordings)	2 MB/sec	400 KB/sec	120 KB/sec

a) Concurrent Host Connections

- More concurrent connections can be supported if encryption is turned off

b) CPU

- Recommended CPU power is ~25MHz per source above minimum (1 GHz for 10 sources)
- PROXY/ScreenRecording server scales well with multiple processor/core CPUs (strongly recommended)
- 200 sources requires 5GHz total CPU power (e.g. 2 x 2.5GHz)

c) Gateway Server Memory

- Recommended memory is 1GB per 100 sources
- In addition, system should be configured for equivalent size page file (i.e. 2GB page file for 2GB memory)
- Note that the PROXY/ScreenRecording server will not leverage >2GB physical memory; but if there are other apps/services on system, additional memory (and paging file size) may be configured for their use

d) Network Bandwidth

- The following recommendations assume moderate screen activity averaging 12 Kb/s. Actual requirements may be higher or lower in your environment and for the applications you are recording (e.g. application with lots of screen activity, like a ticker or flashing content will be considerably larger) – calibrate accordingly against this assumption
- Network bandwidth allowance is average data rate times number of sources. For example, 200 sources @ 12Kbyte/sec = 2.4Mbyte/sec = 19.2Mbit/sec. Note that files recorded to the local disk do not count in this source count, but recording files to UNC path or other network drive do
- Note that the PROXY/ScreenRecording server can be impacted by network packet loss transitioning from a faster backbone to a slower segment; if the network has a gigabyte backbone, the PROXY/ScreenRecording server should have a 1Gbit connection to the backbone, and should not be on a 100Mbit segment

e) Server Disk Performance

- Disk space allowance is average data rate times recording elapsed time, a total of approximately 1Gbyte per 24 hrs
- Disk performance allowance is average data rate time multiplied by number of recording sources. In the large load example with 80 connected Hosts, 80 recordings and 40 additional recordings, the disk bandwidth required is 12Kbyte/sec * 120 active recordings = 1.440Mbyte/sec
- Recordings should be placed on separate logical drive letter/volume, for disk space management purposes, and ideally on a separate physical drive to minimize interaction with operating system and paging files
- High volume environments may require high-performance disk subsystems (e.g. RAID with striping, SAN, etc.) to ensure "real-time" performance and minimize interference between recordings and playback/storage activities

3. Proxy Viewer and Host Minimum Requirements

	RAM	Hard Disk Space	Processor
Viewer	256MB	10MB	Pentium lll
Host	128MB	10MB	Pentium lll

For more information, please contact sales at 800-444-8522.