

## The TM-2000 IP Platform

### The “Next Generation” ACD for Call Centers

The T-Metrics TM-2000 IP Platform is an innovative single platform system that enhances the capabilities of the telephone switch to offer unlimited flexibility and customization to meet almost any user’s needs. The same platform can be used to provide multiple services to the organization now or in the future. Examples of the type of functions that can be performed by simply adding new hardware and software modules are:

- ACD for Call Centers
- Auto Attendant
- Interactive Voice Response (IVR)

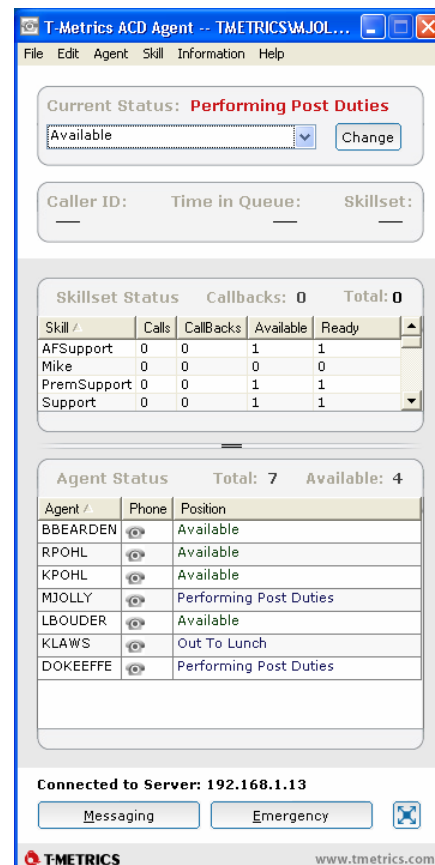
The power of the TM-2000 is not just what we do BUT how we do it. We will use the Organization’s existing wiring and phones—whether analog, digital or IP—and current switch release. The system consists of telephony integration cards and one Windows PC server used as the controller. The base system supports 8 incoming digital or analog lines and can be expanded to 24 lines on a single PC server.

The TM-2000 IP Platform can be modified to create a solution for almost any environment, small or large, and can run multiple applications in a single hardware package or distributed across multiple servers.

### The ACD for Call Centers

The TM-2000 IP ACD / Call Center is designed to be the primary point of contact your organization has with its callers, providing a quick and efficient method to obtain the person in your organization who is most qualified to handle callers’ needs. With the tools provided in the TM-2000 IP ACD / Call Center, your organization will be able to find an ideal balance between staffing priorities and budget controls to deliver your ultimate goal: optimal customer service at the lowest cost.

Its integral parts consist of Agents (representatives who answer the calls), Supervisors (people who manage the personnel and call flow), and hardware and software to distribute calls to the appropriate Agents. The Agents use a PC to make themselves available, make inquiries and look up information for the caller.



## ACD / Call Center Benefits

- Delivers caller satisfaction through prompt, professional call handling by routing calls to the appropriate Agent to handle the caller's needs
- Supports Agents in different buildings in a campus environment
- Measures the performance of the group and each Agent in the group with both historical and real-time reports
- Controls costs and increases profitability by using facilities and personnel more efficiently
- Works with existing phones and existing wiring
- Supports work-at-home Agents
- Combines ACD IVR and Voice Mail features all into a single server

## ACD / Call Center Features

- Uses digital or analog integration to the switch
- PC-based, user-friendly interface with 8 to 24 ports on a server
- Remote administrative maintenance and control
- Assigns calls to Agents based on skill sets, caller ID, call reasoning and/or DTMF options
- Allows settable holiday routing and workday hour routing
- Provides management with call detail reports and vital call traffic statistics
- Ability for callers to obtain an Agent callback, thus allowing callers to speak with the Agent they have spoken with previously without having to wait in queue again
- Ability for a caller to leave a message (in WAV file format) requesting a callback that is queued and presented to an Agent
- Agents can handle queued callback messages when the Agents become available or mixed in with queued calls in the order the messages were received in the queue
- Full time Call Recording (*with optional Agent TAP, SoftPhone or Console*)
- Supervisor call monitoring of Agents (*with optional Agent TAP, SoftPhone or Console and the TM-2000 IP Listen & View HASP*)
- Computer Telephony Integration with caller ID screen pops and auto dialing (*with optional Agent SoftPhone or Console*)
- Agent empowerment with knowledge base lookups from the Information Directory and Database Directories (*with optional Agent Console*)

## Database Comments

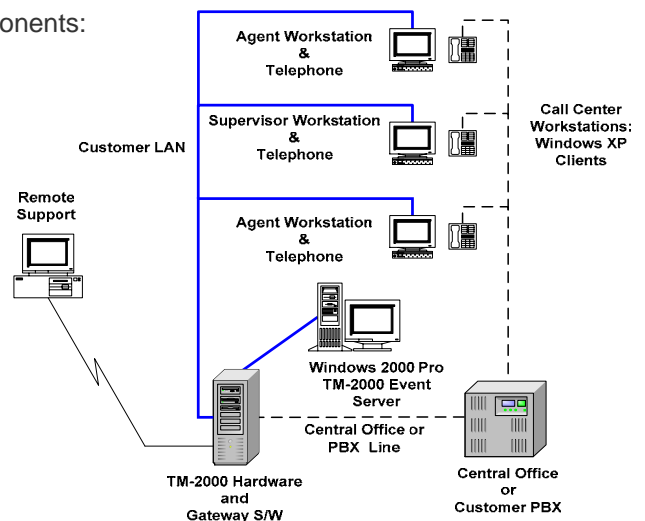
- Data is maintained in a Microsoft Access database (and can link to other sources of data).
- Data can reside on a server "down the hall" or "halfway around the world".
- Simple changes to data tables provide user control of the application.
- Existing data can be enhanced to add new functionality in the future.
- Compacting and backups are automated and performed nightly at the customer site.
- The customer has the option of having T-Metrics keep weekly automated backups of vital information at its off site location to support an emergency disaster recovery situation.

# Components of the ACD / Call Center

The TM-2000 IP ACD / Call Center's technology is a high performance, integrated, open system. It is client-server oriented to allow for scalability and flexibility. The system Server connects to a TCP/IP network using a 1000 or 100 base T Network Interface Card (NIC). Software clients can reside on your LAN, your WAN, your Intranet or if desired, even over the Internet. The TM-2000 IP Call Center architecture is fully distributable, allowing it to spread computing tasks among available processors to make the best use of all the resources within a call center. Because all client applications can run on one PC or on many PCs, the TM-2000 IP Call Center is extremely scalable. By distributing the client applications across many computers, there is a significant increase in computing performance, which results in greatly enhanced performance. The Event Server component, along with the ACD controller client and the Hardware Gateway clients, normally reside on one or more PCs in a central location. It is the responsibilities of these components to perform the functions such as the logic for call processing, call treatment, and sending real-time events to management screens.

The TM-2000 IP ACD / Call Center consist of five key components:

- The existing telephone hardware at each Agent's and Supervisor's desk
- A Windows PC application on each Agent's and Supervisor's PC
- A Network Event Server that handles all communications between software clients
- An ACD Controller client module
- One or more Hardware Gateway clients that provide connectivity to the central office or PBX switch



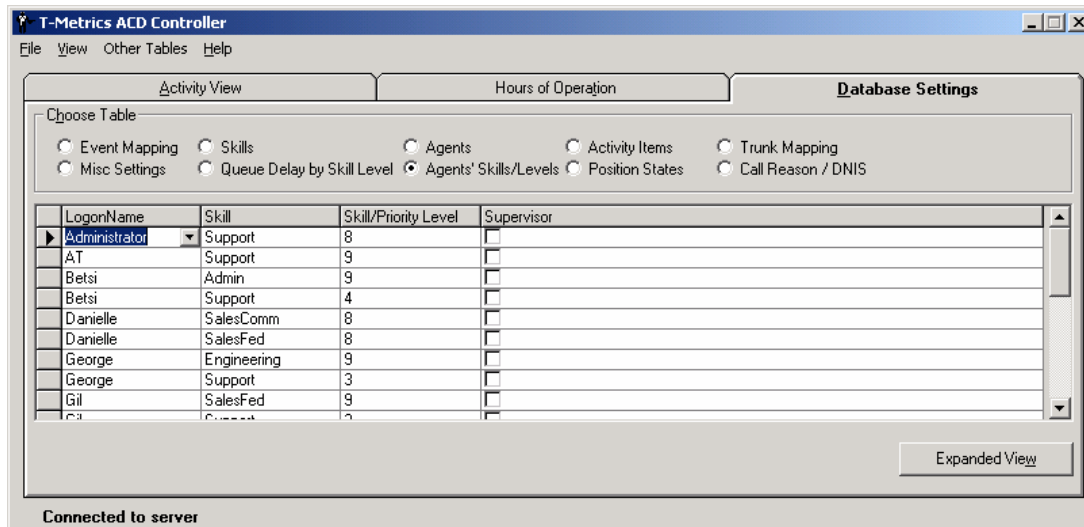
The telephone at each Agent's or Supervisor's desk can be a T-Metrics SoftPhone, a digital phone or an analog phone connected to the central office or PBX switch. The T-Metrics SoftPhone is the T-Metrics "**Premium**" offering and provides the greatest feature set and automation for the Agent. The digital phone is the "**Plus**" offering that provides an enhanced feature terminal for the Agent but does not provide automation features. The analog phone is the "**Standard**" offering providing support for the standard ACD features. The "**Plus**" or "**Standard**" offering becomes the "**Enhanced**" offering by adding the T-Metrics Agent TAP to the telephone. The TAP allows for full time recording of agent/customer telephone calls, as well as monitoring and agent greetings. A Supervisor position will require the T-Metrics Agent SoftPhone or a digital phone to be able to perform monitoring of the Agents' phones if using the "Busy Call Override" feature of the central office or switch service. For optimum performance, each Agent/Supervisor can use the optional T-Metrics PhoneGroups Agent Console as the telephone solution to aid in directory lookups and processing calls. (Contact T-Metrics for detailed information on the PhoneGroups Agent Consoles.)

One or more Hardware Gateway cards are required to make connection to incoming lines that are used as the telephone numbers being called by the callers and answered and transferred by the ACD Controller to an Agent's position.

The TM-2000 IP ACD / Call Center is Voice over IP ready, allowing Voice over IP phones to be used as the Agent's answering device as they become an available option at the user's site. A system used over the Internet supports remote Agent phones. All the remote Agent requires is a PC with an internet connection, a POTS phone and the T-Metrics remote office software and hardware package.

# Skill Set and Call Requirements

A skill set is a label applied to a collection of abilities or the knowledge of something, such as a product, language, or department, which may be required of an Agent to process a given call. Agents are assigned to skill sets.



## Controller Screen: The Skill Set Setting of an Agent

- Each Agent can be assigned to as many as 99 skill sets.
- Each Agent is given a rating that represents the Agent's preference level within their assigned skill set. This allows Agents with greater skill-set experience to be presented with calls before Agents with a lesser preference level.
- Skill set priorities range from 9 being the highest preference level to 1 being the lowest. A level of 0 means the person is not available to work this skill set.
- If two or more available Agents have the same skill set level, then the Agent waiting the longest will be assigned the call.

For example, an Agent assigned a level of 9 in a "SUPPORT" skill set is considered to be highly proficient in servicing callers to that skill set, while an Agent assigned a priority of 1 is a new employee learning how to service callers to that "SUPPORT" skill set.

Call assignment is the matching of available Agents with incoming calls. Assignment is performed based on the requirements of a call and the skills or abilities of Agents as defined by their skill sets. The requirements of callers are determined by database settings that then determine the most appropriate skill set(s) to which the call should be directed. Callers' skill-set requirements can be based on the following criteria:

- Who the caller is – calling party information (CLID)
- What the caller dialed – called party information (DNIS) or call reasoning
- When the caller calls – date or time of the call
- Call center conditions – system information (Agent status or skill-set status)

# Agent Queuing

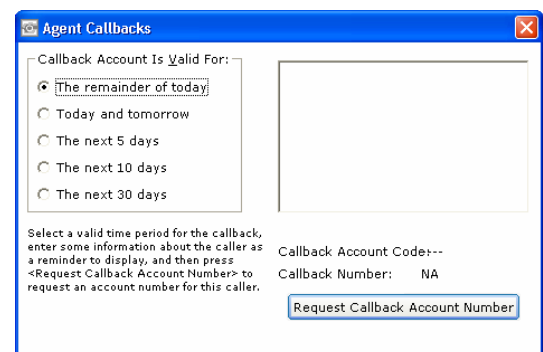
There are two sets of priorities that will affect queuing and call assignment. They are:

- **The priority level (rating) with which an Agent is assigned to a skill set and**
- **The database treatment of the line the call is coming in on, which is used to queue a call to the skill set.**

The TM-2000 IP ACD / Call Center's selection of an Agent to receive a call is based on Agent availability, the Agent's skill and preference level, and the amount of time the Agent's phone has been idle. When Agents become available to take calls (by logging in and selecting "Available"), they are marked as an "Available" Agent for each of their skill-set assignments.

The TM-2000 IP ACD / Call Center is capable of supporting multiple call types. This is accomplished using skills-based routing, which offers the ability to request Agents based on ability (skill set) and availability. Each Agent can be assigned multiple skill sets according to their abilities and can thus service many different types of calls. Assigning the same skill set to another Agent, but at a lower level, will result in a skill-set overflow to the Agent of a lower level setting when all of the higher levels are busy. This lower level skill set can be in the same location or a remote location. In addition when a call is placed in a queue, a timer keeps track of how long it has been there. When the timer reaches a predefined amount of time, the call in that skill set will transfer to a new directory number or be played a recorded message. Calls can also be transferred out of a skill set when a maximum number of calls are reached. When that number is reached, the call that is the newest is transferred to the new directory number or recording. This number can be a Supervisor's desk or even another ACD queue that has a high priority designed to handle callers during this overflow period.

When the need arises for a caller to speak with an Agent he/she has spoken to before, the Agent Callback option is used to allow a caller to call the original Agent back directly without going into the skill-set queue, thus increasing efficiency and perhaps reducing frustration on the part of the caller. When the Agent presses the Request Callback Account Number button on the Callbacks Tab screen, the TM-2000 IP ACD / Call Center system will retrieve an account number for the Agent to give to the caller along with a trunk telephone number to call back on. The Agent sets how long a call back account number will be available and writes a reminder note which will be displayed when the call comes back to the Agent's position. The call information is recorded by the system and when the caller calls back, the system will route the call to the original, registering Agent.



The screenshot shows a window titled "Agent Callbacks". It contains a section "Callback Account Is Valid For:" with five radio button options: "The remainder of today" (selected), "Today and tomorrow", "The next 5 days", "The next 10 days", and "The next 30 days". Below this is a text box for "Select a valid time period for the callback, enter some information about the caller as a reminder to display, and then press <Request Callback Account Number> to request an account number for this caller." To the right of the text box is a field for "Callback Account Code:---" and a field for "Callback Number: NA". At the bottom right is a button labeled "Request Callback Account Number".

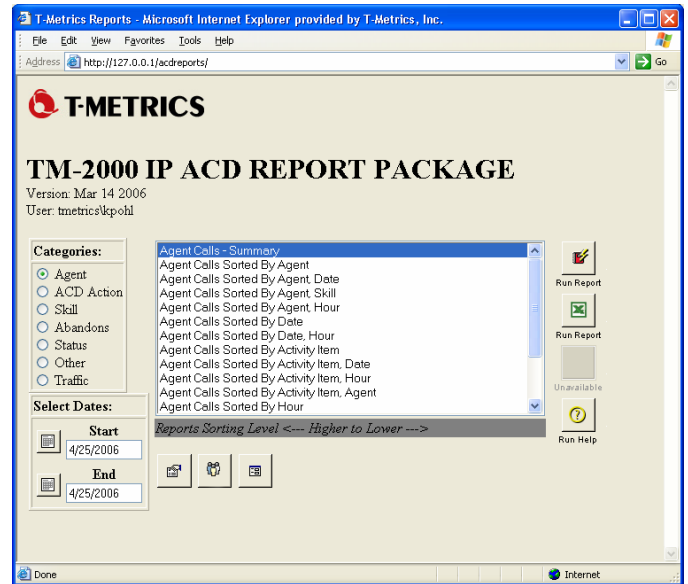
## Administrative Controls

The T-Metrics TM-2000 IP ACD / Call Center offers call center managers and supervisors with comprehensive administrative control and reporting capabilities necessary to support a dynamic call center environment. The management capabilities of the TM-2000 IP ACD / Call Center are easy to use because the interface is a Microsoft Windows graphical user interface based on the Windows Server 2003 R2 Standard operating system. The Supervisor moves through tabs on each application to view and change data with a point and click of the mouse. On-line documentation and help screens are available to assist with completing tasks. The Supervisor can, on an ongoing basis, administer changes to the Agent group members including functions such as modifying call routing, skills and setting priority levels. The system supports the flexibility in defining call routing to skill sets on a line-by-line basis. Agents can be assigned to one or all of the available skill sets with a weighting system based on their expertise for each specific skill. Agent call center performance can be monitored by Supervisors on a real-time basis or reviewed with historical information.

# Administrative Reporting

The TM-2000 IP ACD / Call Center creates call records for every call that is handled. Fixed historical reports are available, as well as the ability to generate custom reports using Microsoft Access or any standard report writer that conforms to the industry standards of Open Database Connectivity (ODBC) and Structured Query Language (SQL). This allows flexibility for call center management and supervisors to create reports with information imperative to the success of their center. The TM-2000 IP ACD / Call Center provides a set of standard reports detailing various statistics such as call-handling performance and Agent productivity. The wealth of information from these reports offers call center Supervisors the expertise to enhance the call centers' efficiency.

The TM-2000 IP ACD / Call Center reports can be set up to be automatically sent out on a periodic basis.



## Available Service and Support

- Turnkey on-site installation of T-Metrics products
- On-site agent, supervisor and key person training
- Application consulting and development
- Coordination of related work efforts with staff, consultants and vendors throughout the design and implementation
- Annual Extended-Hours Software Subscription Service (SSS) providing unlimited access to the T-Metrics support team during the hours of 8 am to 10 pm ET, software updates, extension of hardware warranty, ongoing agent training via the Web, a 24/7 emergency number for T-Metrics-defined emergencies and changes to menus and trees.
- One-year warranty on T-Metrics-provided hardware, which is extended annually through the SSS program.

## About T-Metrics

Since 1989, T-Metrics, a Nortel Developer Partner, has been a leading provider of high quality, innovative products and services for the telecommunications industry. Our worldwide customer base, in both public and private sector organizations, covers a range of applications from single product installations to call center operator services.

## For More Information Contact:

T-Metrics, Inc.  
4430 Stuart Andrew Boulevard  
Charlotte, North Carolina, USA 28217  
Phone: (+1) 704-525-5551; Fax: (+1) 704-525-4886  
E-Mail : [sales@tmetrics.com](mailto:sales@tmetrics.com)  
[www.tmetrics.com](http://www.tmetrics.com)