



T-Cubed

Version 2.00

User's Manual

A product from

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Document version 02a
Dated 02-06-2009

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T-Cubed User's Manual

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What Is T-Cubed?

T-Cubed is a trouble ticket manager for logging and reporting trouble tickets for a wide variety of installations, T-Cubed was originally designed for IT support and call centers, but is generic and flexible enough that it can be used in a wide variety of other environments, such as software development teams or operations management of multiple remote properties.

T-Cubed's primary feature that makes it a unique and powerful application is its ability to have its trouble ticket data shared across multiple machines and multiple users. It does this using a companion application called the **T-Cubed DSA (Database Synchronization Agent)**. This application is installed on a computer that all T-Cubed applications (referred to in this context as "clients") can access via a TCP/IP network connection. The DSA holds a copy of the entire trouble ticket database. With the DSA, T-Cubed users from anywhere around the world can share their ticket data and download data sent from other users.

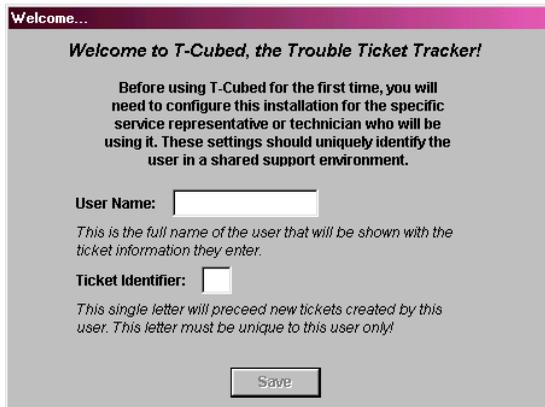
Additional Features

- Simple GUI interface and open-ended design allow for a wide variety of uses
- Small footprint – requires less than 4 MB on a fresh installation
- Support for over a million source properties for tickets
- Three levels of ticket severity help to divide and prioritize ticket handling
- Multi-user support – up to 25 users can share the trouble ticket database
- Permissions for specific ticket actions can be individually configured, allowing for different "grades" of users in a multi-user environment.

Running T-Cubed For The First Time

T-Cubed must be configured for a specific user (a service representative, technician, or other staff). This will help distinguish that user in a multi-user environment.

The first time T-Cubed is run the following window will be displayed:



The screenshot shows a dialog box titled "Welcome..." with a pink header bar. The main text reads: "Welcome to T-Cubed, the Trouble Ticket Tracker!". Below this, it states: "Before using T-Cubed for the first time, you will need to configure this installation for the specific service representative or technician who will be using it. These settings should uniquely identify the user in a shared support environment." There are two input fields: "User Name:" followed by a text box, and "Ticket Identifier:" followed by a small square box. Below the "User Name" field, there is a note: "This is the full name of the user that will be shown with the ticket information they enter." Below the "Ticket Identifier" field, there is a note: "This single letter will precede new tickets created by this user. This letter must be unique to this user only!". At the bottom center, there is a "Save" button.

All data entered by the user is logged and stamped with the current date and time and the user's Ticket Identifier.

These settings, once entered, cannot be changed. T-Cubed must be un-installed and re-installed for new settings to be used.

Once a user name and ticket identifier have been entered, T-Cubed will configure itself for that user and the main window will be displayed.

Properties

If T-Cubed is being installed for the first time, before any new tickets can be entered one or more properties will need to be set up. A **Property** is a physical address where trouble tickets can originate.

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These can be corporate and branch offices, retail outlets in a chain store, individual departments within the same company, or other type of configuration. T-Cubed identifies each property with a Property ID. This can be any mix of letters and numbers up to 4 characters long (0001, 0002, DW35, MCL1, HQ).

See “*Configuring T-Cubed*” for information on how to add a property.

If property information has already been set up by other T-Cubed users in a multi-user environment, that property information will automatically be downloaded the first time a new T-Cubed installation connects to the DSA.

Devices

In addition to properties, one or more devices will need to be configured for each T-Cubed installation. A **Device** is the source of problem for a trouble ticket. It can be a piece of hardware, a software application, a customer incident, an operational task, or other source. Each T-Cubed installation requires and maintains its own private list of devices. Keeping private device lists for each install allows for the option of different users being able to enter tickets for only specific devices.

See “*Configuring T-Cubed*” for information on how to add a device.

Using T-Cubed

T-Cubed's operations are organized into three main tabs at the top of the main window: “View / Edit Tickets”, “Reports”, and “Config”. The contents of each of these tabs is explained below.

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The View / Edit Tickets Tab

When T-Cubed is started it will display the **View/Edit Tickets** tab by default. Below is a sample window displaying some sample ticket data

The screenshot shows the T-Cubed: Trouble Ticket Tracker application window. The title bar indicates the user is 'Fox'. The main window has tabs for 'View / Edit Tickets', 'Reports', and 'Config'. Below the tabs are buttons for 'Send / Receive' and 'New Ticket'. A 'Browse Tickets' section contains a table with columns for Ticket #, Created, Prop., and Device. The first row is highlighted. To the right of the table is a 'Ticket # F0000003' label and a 'Print' button. Below the table is a 'Property Information' section with fields for Property, Address, Name, and Phone #. To the right of these fields are 'Add To Ticket', 'Escalate', and 'Close' buttons. Below the property information is a 'Problem:' section with the text 'Spilled coke on the keyboard' and a 'Diagnosis / Recommended Action:' section with the text 'Needs a new keyboard'. At the bottom is a 'Ticket History' section with a table showing entry, date, time, service rep., and level. To the right of the history table is a text box containing the message: 'Sent new keyboard. Should be there tomorrow. Fed-Ex Tracking #052-344-7184.'

Ticket #	Created	Prop.	Device
F0000003	1/16/09	SD01	Keyboard
M0000001	1/16/09	HQ	Computer
F0000002	1/16/09	MNO1	Monitor

Property Information

Property: SD01 Address: 300 Highway 97
Name: Someplace in South Dakota Someplace, SD 56023
Phone #: 520-555-1398

Problem: Spilled coke on the keyboard
Diagnosis / Recommended Action: Needs a new keyboard

Entry	Date	Time	Service Rep.	Level
2	1/16/09	14:16:57	Fox	2
1	1/16/09	14:14:51	Fox	2

Sent new keyboard. Should be there tomorrow. Fed-Ex Tracking #052-344-7184.

On the View/Edit Tickets tab the user can scroll through existing tickets at the current level by scrolling through the **Browse Tickets** grid. As tickets are browsed, the related fields on the screen are updated to reflect the information for the highlighted ticket.

The bottom portion of the screen displays the entry history for each ticket. The history can be browsed by scrolling through the **Ticket History** grid.

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T-Cubed utilizes the concept of *Levels* to group trouble tickets into different severity states. There are four levels: **Level 1**, indicating a newly opened ticket, and tickets of least critical nature, **Level 2** and **Level 3**, indicating tickets requiring more significant levels of attention to resolve the issue, and **Closed**, for tickets that have been resolved (fixed). Selecting any of the Level 1, Level 2, Level 3 or Closed sub-tabs will allow browsing of tickets currently assigned to that level.

To create a new ticket, click the **New Ticket** button. All fields except "Call Back Number" require a value. Creating a new ticket requires at least one property and device to have been configured.

The **Add To Ticket** button allows a user to add a new entry to an existing ticket.

The **Escalate** button, available for Level 1 and Level 2 tickets, raises a ticket's level of severity to the next highest level.

The **Close** button, available for Level 1, 2, and 3 tickets, closes the ticket.

The **Re-Open** button, available for closed tickets, re-opens the ticket and places the ticket back at Level 1. The ticket can then be escalated to a higher level if necessary.

The **Print** button will produce a printed report on the currently selected ticket, showing its complete entry history. The report is identical to the "Report on Individual Ticket" report discussed below.

Reports

The second tab in T-Cubed is the **Reports** tab. From this tab various ticket reports can be generated and printed. There are currently three reports available, with each report's parameters in its own selection box:

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T-Cubed: Trouble Ticket Tracker User = Fox

View / Edit Tickets Reports Config

Report on Individual Ticket

Ticket #

Report By Property

Property:

Opened From: To:

Report By Level

Level:

Opened From: To:

All of the reports will automatically print to whichever printer has been set as the default Windows printer.

Report on Individual Ticket

This report is identical to clicking the “Print” button on the **View / Edit Tickets** tab, except that a specific ticket # can be entered and reported on without having to scroll through the **Browse Tickets** grid to find the one to report on.

Report By Property

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This report prints the header ticket information for all tickets created for a specific property between a given date range. The tickets will be sorted by level and date they were opened, with the most recently opened tickets first.

Report By Level

This report prints all tickets currently at a specific level, created between a given date range. The tickets will be sorted by the date they were opened, with the most recently opened tickets first.

Configuring T-Cubed

The third tab of T-Cubed is for configuring various program settings that affect how the T-Cubed application operates.

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User Settings:

User Name: Fox

Ticket Identifier: F

Ticket Actions: Escalate Close Re-Open

Local databases: C:\Program Files\T-Cubed\

Data Synchronization Agent Settings:

IP Address: 172.16.0.7

Port: 1285

Last Sync.: 01/19/2009 09:48:26

Reset the DSA

Configuration Tab Password:

Device List:

- Device
- Computer
- Monitor
- Keyboard
- Mouse
- Printer
- Other

Property List:

Property	Name	Phone #	Address	City
HQ	Headquarters	800-501-2835	1087 Industrial Ave. S	Minn
MN01	Test Location	800-115-2483	123 South Street	Som
MN02	East Branch Office	800-555-5485	301 53rd Street	Red'
SD01	Foodmart #585	520-555-1398	300 Highway 97	Som

Save Changes Restore Values

T-Cubed incorporates an optional, simple password protection block to keep casual users from accessing and changing their T-Cubed application settings.

The **Save Changes** and **Restore Values** button will update or revert the configuration settings displayed above them.

Property List

The Property List data grid is a raw, editable grid for entering and editing property information. To add a new property, either scroll past the bottom of the list or press the insert key. The row indicator will change to  and a new, blank row will appear to enter new data into. To edit existing data, select the grid square and either just start typing,

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or click once with the mouse on the highlighted grid square. The row indicator will change to **I** to indicate you are editing data.

Remember to move off of the current row after inserting or editing to save the changes you made and change the row indicator back to a triangle.

To delete a property, press the delete key. A pop-up dialog will appear to confirm your action. Note that deleting a property will remove it from that local machine only, not from the DSA or any other T-Cubed users.

Device List

The Device List data grid holds the values a user can pick from when entering a new ticket. The data grid acts identically to the Property List grid. Data in the Device List is NOT included in data synchronization with the DSA.

Data Synchronization Using The DSA

T-Cubed's strongest feature is its ability to share its trouble ticket data across multiple installations using the DSA (Data Synchronization Agent) companion utility. The DSA holds a central copy of the entire T-Cubed trouble ticket database. T-Cubed users connect to the DSA to upload their ticket information updates and download new updates from other users using the **Send / Receive** button on the **View / Edit Tickets** tab

It is important for users to synchronize with the DSA to keep their local copy of the trouble ticket database current and up-to-date, as well as update other users on their work. As a general rule of thumb, a user should synchronize with the DSA 1) Each time they start T-Cubed, 2) Each time they close T-Cubed, and 3) Whenever they have made a significant amount of ticket data updates.

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Please refer to the T-Cubed DSA User's Manual for more information on how the DSA works.

Error Codes

During data synchronization, the DSA may respond with one of several error codes that will display in the communications status window:

- Code 01 – The DSA received a data packet with a bad LRC
- Code 02 – The DSA received a data packet with an invalid length
- Code 03 – The DSA received an unknown data packet
- Code 05 – The DSA rejected the T-Cubed user

Codes 01, 02, and 03 can generally be attributed to sporadic and intermittent communications problems and generally do not occur during normal conditions.

A Code 05 indicates a breach of licensing or uniqueness of a user's ticket identifier within a multi-user environment. The DSA actively enforces the number of users that can connect to it with the assigned T-Cubed software license. If too many users try to connect with the same license, or if there is a common ticket identifier shared by different licenses, this error will be returned and the DSA will not perform any data synchronization with the T-Cubed client.

Registering T-Cubed

T-Cubed is free to try for an unlimited period of time. However, until it is registered, the T-Cubed client software is limited to handling a maximum of 20 trouble tickets and is allowed to have up to 2 users connect to the T-Cubed DSA. Purchasing a software license and registering your copy of T-Cubed will remove these limitations. It will also remove the startup delay and reminder messages.

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Once a copy of T-Cubed is registered it will be assigned a new user record and license # on the DSA, and a full re-download of ticket data will be performed the next time the client connects. Once the new user record is created the old one associated with the trial version of T-Cubed can be removed (see the T-Cubed DSA documentation for more information).

Final Thoughts

We are always looking for ways to improve our software to meet the needs of users. If you have a suggestion for a future improvement to our software, or if you wish to report a bug, please feel free to contact us.

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