# **Electronic Support Ticket Management System**

Mr. G.Naveen Kumar (1) Student

CSE Department BVRIT, Vishnupur, Narsapur. Mrs. C.R.Shruthi Reddy <sup>(2)</sup>
Assistant Professor
CSE Department
BVRIT, Vishnupur, Narsapur.

#### Abstract

Electronic Support Ticket Management System is an issue tracking system for monitoring the support tickets on the web portal. Electronic Support Tickets are used for an organization or an educational institution to create, to update, to track, to troubleshoot and to fix the technical problems that customers or clients have experienced. Electronic support Ticket is a PHP or ASP based electronic support ticket system that can receive tickets electronically on the network on a web portal through the e-mails (POP3/SMTP/IMAP) or as a web form. Electronic Ticket Support System appearance or user interface can be skinned to update the look and feel of the electronic ticket support system portal.

Electronic support ticket system that integrates seamlessly with queries or inquiries created through the electronic mail and web-forms etc. The service is easy to use and electronic support ticket system has the multi-user web interface on inter-network. With the ticket support system administrators can manage, archive and organize the support requests in the form of tickets posted via web-form on the website.

#### 1. Introduction

Electronic Support Ticket Management System is an enterprise grade issue tracking system for organizations and institutions. It allows the institutions or organizations to keep track of the issues which is submitted on the portal, it can trace who is working on which task etc.

It Uses the CGI script on the web portal or website for everything from ticket tracking and customer support to the project management tasks. By creating a trouble ticket, it is now as easy as like submitting a web-based form. The electronic ticket system will care about assigning the unique number by auto generating the unique numbers or code to the each service request and it will save in to the database. Ticket system is truly scalable solution for any organization. It runs on powerful databases servers like MySQL or Microsoft SQL Server engine.

It is a software suite or a package for website that enables the customer support by assigning the agents to receive, request, process and respond to service requests on the website. By creating the powerful ticket management system or platform that allows you to centralize all your customer's or client's conversations. One can quickly and easily increase the productivity by automating the rules of business via automations, triggers and also by creating the predetermined responses, also known as macros in terms of the frequently asked questions on a web site. Clients will appreciate for having a single point of contact to get the help from the support system for their issues on the portal. It also enables the conversations via web, email, social networking, online chat, forums, knowledge bases etc. Electronic ticket support system is ready to use as you create an account in the support system portal.

Ticket support system is designed to give the support to your department in a broader way with the user centred experience. One can easily configure the ticket support system and you can choose your custom support portal URL for a

web site and can easily configure your email address which matches with the website domain.

## 2. Requirements

- Standalone Linux Webserver or Windows Webserver
- PHP Support
- Webserver with PHP Sendmail() function enabled
- Webhosting account with the CGI scripting enabled.
- Full access to the sendmail or SMTP relay or POP3.
- Personal Email Account
- Administrator Level access to the ticket supporting system control panel

## 3. Inside the e-Ticket System

**Table: 1 Inside the Ticket Support System** 

Dashboard	Displays the summary of the home page. View home page information and statistics of the users.
Getting Started with support system	The task list for configuring the eticket support system and is followed step-by-step checklist of the listed items to configure and running.
Ticket Views	Ticket groupings can be created here. The views define the collection of support tickets based on priority mode. One can create and view the group of support tickets.
Admin Area	Administrators can manage and configure the pages. Administrators and

	moderators can browse the user profiles, no. of views, generated reports, macros and tags etc.
Reports	By Analytics of the support performance it automatically generates the report of client and support team.
Knowledge Base	KB displays the information and answers to the customer's queries.

Electronic ticket support system offers the centralized solution for organization and it also organizes and tracks all the incoming client's support requests.

# 4. Working with Ticketing System

## 4.1 Creating Support Ticket

The Clients or customers can create a new Support Ticket by filling the web form on the web portal and by clicking the Submit ticket button, ticket will be posted on the website, the support request will be carried out by the webserver and ticket will be stored in the database server.

Whenever the support request is received at the Electronic Support Ticket System web site, it means a ticket is created. Support ticket requests can also be created through the different channels like social media, email, chat, phone etc. Regardless, wherever the conversations are started that they all will become the support tickets.

## 4.2 Responding to e-Ticket: Agent

Support Team or Administrator can view existing tickets by logging into the e-Support Ticket portal.

When a client sends a support request ticket through email or any other ticket channel, it becomes a ticket and are organized into views in ticket portal system. Views of ticket defines a collection of tickets based on ticket status such as open status and unassigned status, pending status, unsolved status and closed status. Ticket views are essential for managing the ticket flow because they can create the groupings of the support tickets. Newly submitted support tickets appear to be as unassigned tickets in the view section or tab.

## 4.3 Responding to e-Ticket: Client

When administrator updates a ticket, support ticket system notifies the client. Go back to the email account to submit the email support request to see the notification emails.

In client's email account you will see the two replies:

- Email confirmation from the support system that the ticket support request was received
- Another Email notifies that the support ticket was updated.

All these replies were automatically sent out by the ticket support system webserver by something called as a trigger.

### 4.4 Solving a Client's Ticket

Now that the client has responded with the more information on an electronic support ticket.

#### Steps for solving a client's support ticket:

- 1. Enter into the Views section of the admin page and then select the Pending tickets which is listed in the views.
- 2. Click on the support ticket, which is mentioned with subject title and then open it.
- 3. Review the client's Query in the current ticket.
- 4. Enter the comment reply to the open query.
- And then submit the comment with reply, now the ticket is solved.

Now, the ticket status shows as Solved. The ticket status will automatically update to the closed status after posting the comment. Client can re-open the existing ticket or closed ticket.

#### 4.5 Reviewing a Support Ticket

Electronic Support Ticket Management portal or web site keeps a history of all the ticket activity including the automatic actions done by server mail automations and triggers, it will be recorded in the ticket history. All the tickets can be reviewed by administrator by logging into the ticket support system administrator Control Panel.

## 4. Process of e-Ticket Support System

Electronic Support Ticket Management System









1 Customers create tickets, via the web, email, phone, fax, or API

 Incoming tickets are saved and assigned to agents.

Agents help your customers resolve their issues.

you track requests.

Figure: 1 Electronic Support Ticket Management System – Process View

#### 5. Features

- Work from anywhere in the inter-network, whether you are at the desk or working from office, electronic support ticket management system has the latest tools that you need to access the client service database. All the support ticket system features that can be accessed via web browser on virtually on any OS or platform.
- Every support ticket is displayed in a sequence or list of messages. Support ticket system status attribute shows whether the support ticket is new or support ticket is open or support ticket is resolved or support ticket is waiting for more inputs.
- New and follow up messages will be displayed as Email alerts.
- Custom fields can be added virtually unlimited number of fields to the ticket support mail form.
- In a support ticket system ticket browser layout is customizable. You can choose that what information to be viewed while browsing the support ticket list.
- Support ticket can be monitored. Clients and operators will be able to see the support ticket status and the support ticket information.
- It supports the unlimited operators and operator logins, admin can create as many as operators required according to the business needs.
- It also enables the Group Mode. Allows administrator to assign operators to one or more groups in the support ticketing system.

- Inventory Tracking is enabled by allowing the list of items such as servers, workstations, bug tracking and projects etc.
- Electronic support ticket management system is highly customizable.
- It supports the multiple inquiry web-forms.
- MySQL database is optional and it allows using MySQL database to store the support ticket data into the database server.
- It also supports File attachments in the web-form.
- Allows to organize the questions and answers with quick access.
- Mode of form submission is Email based submission. This Allows submitting new support tickets and support ticket follow-up messages via email messages. Both clients and operators may use this email.
- Email piping feature is enabled and integrated in the mail Modules.
- Electronic Support Ticket Management System may translate the user interface elements (such as email messages, mail labels, mailing list values) on the fly using loadable CSV file format.
- CAPTCHA is enabled to prevent the ticket submissions by spambots & robots.
- It also enables the internal communications with action logging feature.
- Tags to enhance the messages using the font styles and functions like bold, italic, underline and other attributes as well as the hyperlinks.
- Reporting system is used to monitor the support tickets workload and operator's efficiency.
- Data exporting is enabled to build the custom reports using the spreadsheet programs.
- Made easy to do the data backup and restore.
- Source code is available to the developers and packages is written in Perl with only standard libraries is used.

#### 6. Conclusion

The Electronic support ticket management system is a simple and excellent web application that has the two major functions: Support ticket tracking and operator assignments. It's a CGI-written script written in Perl language and PHP Language and is also has customizable mail webforms. Organization's clients or customers will have knowledgebase access on the support ticket web site. It is an excellent customer or client help support system.

We hereby conclude that electronic support ticket management system mainly useful for the

organizations and educational institutions. This web application package can be installed on any webserver supporting with Perl and PHP Languages. Finally, it is a client or customer friendly support management system.

## References

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