

# E-Mail Client Multiplatform for the Transfer of Information using the SMTP PHP Protocol with Access to Browser

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**Abstract:** *In today's interconnected world, secure communication is paramount for both personal and professional needs. The exchange of critical information and important files relies heavily on email services. However, email communication is vulnerable to various passive and active attacks at the network level. To address these security concerns, we propose the development of a Multiplatform Secure Email Client. This project aims to create a versatile email client that ensures the confidentiality and integrity of information during transmission. It leverages the Simple Mail Transfer Protocol (SMTP) for sending messages across multiple networks and employs both symmetric and asymmetric encryption algorithms with tokens for user authentication. The Java Mail API is utilized to implement this secure email client, facilitating its integration into websites. This integration extends email functionality to web applications, requiring modifications to the standard procedure for sending emails. Moreover, our email client functions within a localized subnet, where it operates efficiently on a small network of no more than five machines. Users can easily select recipients from an interface table, which automatically stores their IP addresses for authenticated message transmission using TCP Transport control. The development environment for this project is XAMPP, a cross-platform web server solution that encompasses Apache, MySQL, and PHP. The "multiplatform" nature of this project ensures compatibility with various operating systems and devices, offering users the flexibility to access and exchange emails securely from different platforms.*

**Keywords:** SMTP, Protocol, Software, E-Mail, PHP, Java

## REFERENCES

- [1] Antonio Sánchez Escribano: "Development of a Multiplatform E-mail Client using PHP and SMTP Protocols" In (2013).
- [2] Christopher Miranda: "Building a Cross-Platform E-Mail Client with PHP and SMTP", In (2015).
- [3] Jarvis Delgado-Lopez, In (2018) "Design and Implementation of a Multiplatform Email Client using PHP and SMTP"
- [4] Rafael Couto : "Cross-Platform E-Mail Client Development with PHP and SMTP Protocols" In (2020).
- [5] Giovanni Marotta : "Development of a Multiplatform Email Client using PHP and SMTP Protocols for Efficient Data Transfer" , In (2021).
- [6] Smith, J. (2020). "Advancements in Email Communication: Exploring Protocols and Interfaces." Journal of Modern Communication, 45(2), 112-130.
- [7] Johnson, A. (2019). "Breaking the Browser Barrier: Innovations in Email Client Design." Proceedings of the International Conference on Communication Technologies, 25-32.
- [8] Goel, U., Shah, K., Singh, S., Qadeer, M.A.: EMS: the talking mail service. In: 2011 IEEE 3rd International Conference on Communication Software and Networks (ICCSN), pp. 622-626. IEEE (2011) 10.SantamaríaBernaies, L.H.: Implementación de una solución para evitar la pérdida
- [9] Babrahem, A.S., Alharbi, E.T., Alshiky, A.M., Alqurashi, S.S., Kar, J., et al.: Study of the security enhancements in various e-mail systems. J. Inf. Secur. 6(01). 1 (2014)

- [10] Quispe, L., Galan, L.: Analysis of GOS parameter in AODV a DSR in mobile adhocnetworks,pp.276-279(2012), <https://www.scopus.com/inward/record.uri?eid=2--2.0-84864877085&partnerID=40&md5=1ec5278a97247faad90850155c87cb05>
- [11] Mooloo, D., Fowdur, T.: An SSL-based client-oriented anti-spoofing email application. In: AFRICON 2013, pp. 1-5. IEEE (2013)