MAIL SERVER COMMUNICATION: PHP

Arpit Gandhi

Abstract: Mail Server Communication is a server side script developed under PHP language. In this paper, we present a communication server name Mail Communication Server written in PHP which is one of the leading languages used for server side script development. Mail server provides mail id to two individual in the same organisation or different organisation to communicate in safe and secure manner. The mail server is efficient as it will not share the user details with anyone neither the user will receive any advertisements related to his mails. The mail server has all the features like other mail servers such as Gmail.

INTRODUCTION

Websites contain some of the most important data in the world. From credit card numbers to medical records, cybersecurity is one of the main areas of dissemination test today. To maximize the quality of a web-based penetration test, some scripting functions are almost always required. [1] Indicates whether the data should be intercepted XSS vulnerability or adding features to a website, scripting is a critical element. Piece of toolbox of a penetration tester. PHP is one of the first languages learned by many web programmers. A Google search for "PHP and MySQL" will yield more than 4 million results. While these tutorials are great for new programmers and intrusion testers. [2] The cross section between websites about learning PHP and backing up PHP is very small, which makes many new PHP applications vulnerable attack. In this chapter we will focus on the basics of PHP for intruder testers and then explore the benefits of PHP in two ways: remote file inclusion and data collection. [3] The PHP programming language has long been considered a serious language for the big web Application development. We knew it was popular and maybe good for small projects, but most appreciation was reserved for the aristocratic elite like Spring, Ruby on Rails or Django. Recently only the situation has changed considerably[4]. It's become clear that PHP does not have one, but three web frameworks expand the language capabilities: Symfony, CakePHP and Zend Framework. The pace of development was faststand stable. [5] The object-oriented source code written in PHP5 was elegant and easy to manage. Always more recent projects have started using PHP frameworks, and their successful realization has even made PHP frameworks known. [6] The most popular programming languages for website development are PHP, Ruby, Python and Java to select PHP has been selected for the analysis of the structure and development of websites since its opening source scripting language with many benefits: support for different types of databases, many language structure were derived from C and Perl languages.[7]

LITERATURE REVIEW:

A set of scripts can interact to perform specific tasks functions. For example one Word Press platform connects is probably to contain one collection from the scripts. Yet our system focussed on discover if it is one single scenario is maliciously independently from other scripts it may to interact with these do that the discovery system more Agnostic platform there it is it not need platform knowledge to aggregate relevant PHP scripts in one "Great Scenario." [8] For review plesome Plug-in functions from the WordPress platform become Glue scripts in one connect with especially for WordPress Apis. Yet us agree these accumulation script by screenplay generality is probably to available differently distributions from functionality values it may poisnferely result in higher discovery the prices. However our design to preference from higher generality is it not invalidate the effectiveness from our system the has summer demonstrated by experience with real world benin and maliciously PHP the scripts us Lawyer the potential from filling our system by accumulation scripts and it would fall in our future job. De-obfuscation is not one commonplace task PHP is one dynamic language.[9]

The development of software projects based on scripting languages such as PHP has received little attention despite the fact PHP is the foundation on which a variety of web applications are developed. Due to the widespread but undocumented claim that scripting languages are not suitable for regularly updated software projects, we conducted an empirical analysis. Study on the development of 30 PHP web applications.[11] The main objective was to test the validity of the eight laws development of the software, as Mr. M. Lehman said. These laws have has been extensively studied in the context of software development projects developed in compiled languages such as C and C ++ and in a context that is not related to the Web. The results confirm the validity of continuous growth and development of the development of PHP applications. [12] However, we have not yet done so for the projects reviewed confirmed the 2nd law of increasing complexity and the 8th law on the rapid decline in the growth rate. Although the causes as further research is required for this trend, it can be assumed that this phenomenon is due either to the programming language or to web application development practices.[13]
We are from simple PHP to creating one work bowl. Exploring form management, conditions, order during execution and loops, we created file downloaders and scripts to list the server information. You should now have the PHP background able to take on these tasks, like exploit scripting and apply these techniques to real penetration test scenarios. While we just scratch the surface of all PHP functions, you know now reason enough to work the rest of your time. Learn more PHP features can be found on the PHP website at www.php.net. From there you can explore and find the PHP features we’ve already studied online PHP language documentation.[14]

PHP stands for PHP: Hypertext Processor and is an open source scripting language developed primarily for web development. PHP pages are usually HTML pages (HyperText Markup Language) with PHP code in mixed order merging site features with HTML code. Common uses for PHP includes database applications and applications that manage forms PHP facilitates form analysis and data manipulation, which is part of forms-based applications. PHP is also used as the framework for many Web 2.0 applications because it easily manages databases and responds through shared databases. Web 2.0 protocols such as Extensible Markup Language (XML) and JavaScript Object notation .[15]

PHP BASICS

To run our PHP scripts, we need to make sure that our web server is running. To do this we start Apache on Kali 2 by issuing the command serviceApache2 begins. Then we will go to the web directory, which is / var / www /html. This directory is the root web site of the Apache server and the files we have create can be accessed through our website at http://localhost. After our site is set up, we’ll create a simple PHP page. Base64 is a encryption method that is often used on the Internet to encrypt the data to be transferred.

When we come across Base64 encoded data, the gift is a text string that ends with one or more 5 characters. When we come across this kind of data, this is the simplest the best way to decode it is to use a script. Let's create one for our first PHP page.[16]

VARIABLES

Much like in other languages we have looked at, variables in PHP are loosely typed. We don't typically have to define what type of variable something is when it's created. The primary types we will run into are strings, integers. PHP variables are preceded by a dollar sign ($) to indicate that this must be the case interpreted as variables. [17]

The output method, printf, enables the formatting capabilities that we have seen in other languages. This is worth noting for the output of the file, but printf is rarely used when you go to a website. Printf takes a number of arguments where the first argument is the format string and each subsequent argument is a value to be printed in the format string. This is best illustrated by an example.[18]

CONTROL STATEMENTS

We now have some basic concepts for handling PHP pages. So, let's work through certain conditions and loops, so that we can create more interesting code. We’ll cover three different types of loops: for loop, for each Loop and the while loop. These three loop designs should be enough feature to bring us through just about every block of code. [19]

SIGN UP PAGE

- Sign up page helps the user to Login to their gmail account provided they have entered the correct email id and password , as we login we are connect to gmail through gmail SMTP services which have been made available to all by google itself.

- But for this login to work there are certain settings that need to be altered in your gmail account for the first time which will allow other parties like ourselves to access our gmail account , they include [20]
  - 2 Step Verification should be turned OFF
  - Allow less secure apps turned ON (as shown in screenshot1)
Inbox page:

View Mails:

Inbox page helps the user to view all the mails received till the recent date, in a framework which is similar to Gmail. (as shown in screenshot 2)

Sent Mails Page:

View mails:

- Sent page helps the user to view all the mails sent by the user which is logged in, with a framework which is similar to Gmail. All the mails that are being retrieved through the IMAP search function from the Gmail server.

- Even if the mail is sent from our mailing server it still will be displayed once we sync it again after we have sent the mail. (as shown in screenshot 3)
Draft Page :

View mails:

- Draft page helps the user to view all the mails saved by the user, in a framework which is similar to that of a Gmail. The screenshot 4 shows all the mails that are being retrieved through the IMAP search function from the Gmail server.

![Screenshot 4: Draft Page](image)

Compose :

View compose box:

- In order to send emails, we created a compose mail page. This page uses SMTP connection to send mails. To be able to do that, we added a library called PHPMailer. This library needs to be configured for use, once configured we use its phpmailerAutoload.php file which contains the class MAIL and has all the attributes of default mail like to, subject, body. [21]

- For every mail sent it creates an object from MAIL class which will form a framework for the receiving end such that it can be easily interpreted by its server.

- This page in general asks for inputs like receiver's email address, subject, and content body, while subject and body can be left empty receiver's email address will display a message requesting the user to fill it if in case left blank. [22]

![Screenshot 5: Compose Mail](image)

Log out :

This section is focused on terminating the session, which helps the person to log out from the mail and deletes the user's mail id and password as we delete the session, this makes sure that the users account is not used by anyone without their permission, so that next time it does not gets logged on its own and the security isn't put on stake.
Additional Features:

- This is the feature used to update new incoming mails. If there are more mails after the previous update. But if there is no update after the previous updates, then a message will be displayed on your screen.

SCREENSHOT 6: additional feature of compose mail

CONCLUSION

Two hundred years of breathtaking innovation since the dawn of the industrial age have produced rising living standards for ordinary people in much of the world, with no sharply rising trend for unemployment. Technology is taking over our world, we live in an age where most, if not all of us use technological devices every day. From mobile phones, to iPads, to laptops and TVs, we're constantly using technology. There are even forms of technology that we use during our sleep, fitness watches that track our sleep and the likes. Yes, there have been many problems, notably bouts of staggering inequality and increasingly horrific wars. On balance, however, throughout much of the world, people live longer, work much fewer hours, and lead generally healthier lives. But there is no denying that technological change nowadays has accelerated, potentially leading to deeper and more profound dislocations. Everyone uses technology, from children and teenagers, to adults and elders. Technology has influenced people and their daily lives, some better than others. Walk into almost any business, big or small, and you'll quickly see how technology has transformed the way we work. Whether you're an entrepreneur, a bike courier, or a criminal lawyer, one thing is clear: our lives are surrounded by technology that just a handful of years ago would have seemed unfathomable. Technology has made us more responsive, more able to gain access to information over a broader spectrum. It has taken our information and, instead of putting it into little cubby holes of the company, made it broadly accessible.

References:


