

1. **Sustituya las palabras en negrita para evitar la repetición. Explique qué tipo de sustitución realiza.**
2. **Voz activa o voz pasiva: Elija la opción correcta**

An Introduction to RAID

RAID stands for Redundant Array of Inexpensive Disks. **RAID-It** (*sust. Nominal*) is the organization of multiple disks into a large, high performance logical disk.

Disk arrays stripe data across multiple disks and access **them** (*sust. Nominal*) in parallel to achieve: Higher data transfer rates on large data accesses and Higher I/O rates on small data accesses.

Data striping also results in uniform load balancing across all of the disks, eliminating hot spots that otherwise **saturate** a small number of disks, while the majority of **them** (*sust. Nominal*) sit idle.

The most important terms which **should be defined** in order to avoid misinterpretations are reliability and availability.

Reliability is how well a system can work without any failures in its components. If there is a failure, the system was not reliable.

Availability is how well a system can work in times of a failure. If a system is able to work even in the presence of a failure of one or more system components, the system **is said** to be available.

Redundancy improves the availability of a system, but **it** (*Sust. nominal*) cannot improve the reliability. Reliability **can only be increased** by improving manufacturing technologies or using lesser individual components in a system.

Disadvantages due to Redundancy

Every time there is a write operation, there is a change of data. This change also, **has to be reflected** in the disks storing redundant information. In this case, the performance of writes in redundant disk arrays is worse compared to the performance of writes in non-redundant **ones**.

The Need for RAID

The need for RAID **can be summarized** in two points given below. The two keywords are Redundant and Array.

An array of multiple disks accessed in parallel will give greater throughput than a single disk.

Redundant data on multiple disks provides fault tolerance.

If the RAID hardware and software **perform** true parallel accesses on multiple drives, there will be a performance improvement over a single disk.

With multiple disks and a suitable redundancy scheme, your system can stay up and running when a disk fails, and even while the replacement disk **is being installed** and its data restored.

Adapted from: <http://www.ecs.umass.edu/ece/koren/architecture/Raid/intro.html>

<http://www.ecs.umass.edu/ece/koren/architecture/Raid/why.html>

1. **Identifique el tiempo verbal utilizado en la mayor parte del texto. (mayormente presente simple. También hay verbos modales.)**
2. **Complete los espacios en blanco con las siguientes palabras:**

do – it x3 – they – one – them

Identifique el referente de cada una de las sustituciones.

3. **Elija la opción correcta voz activa / voz pasiva**

PHP – Introduction

PHP is a powerful language and the interpreter, whether included in a web server as a module or executed as a separate CGI binary, is able to access files, execute commands and open network connections on the server. These properties **make** anything run on a web server insecure by default. PHP is designed specifically to be a more secure language for writing CGI programs than Perl or C, and with correct selection of compile-time and runtime configuration options, and proper coding practices, _____ **it** _____ can give you exactly the combination of freedom and security you need.

The configuration flexibility of PHP **is equally rivalled** by the code flexibility. PHP can be used to build complete server applications, with all the power of a shell user, or it can be used for simple server-side includes with little risk in a tightly controlled environment. How you build **that environment**, and how secure _____ **it** _____ is, is largely up to the PHP developer.

General considerations

A completely secure system is a virtual impossibility, so an approach often used in the security profession is one of balancing risk and usability. If every variable submitted by a user required two forms of biometric validation (such as a retinal scan and a fingerprint), you would have an extremely high level of accountability. It would also take half an hour to fill out a fairly complex form, which would tend to encourage users to **find** ways of bypassing the security (and many of them will surely _____ **do** _____ so).

A phrase worth remembering: A system is only as good as the weakest link in a chain. If all transactions **are based** on **time, location, transaction type, etc.** but the user **is only verified** based on a single cookie, the validity of tying _____ **them** _____ to the transaction log is severely weakened.

When testing, keep in mind that you will not be able to test all possibilities for even the simplest of pages. The input you may expect will be completely unrelated to the input given by a disgruntled employee, a cracker with months of time on their hands, or a housecat walking across the keyboard. This is why it's best to look at the code from a logical perspective, to discern where **unexpected data** can be introduced, and then follow how _____ **it** _____ is modified, reduced, or amplified.

The Internet is filled with people trying to make a name for themselves by breaking your code, crashing your site, posting inappropriate content, and otherwise making your day interesting. It doesn't matter if you have a small or large site, you are a target by simply being online, by having a server that can be connected to. **Many cracking programs** do not discern by size, _____ **they** _____ simply trawl massive IP blocks looking for **victims**. Try not to become _____ **one** _____.

Adapted from:

<http://php.net/manual/en/security.intro.php><http://www.php.net/manual/en/security.general.php>