Reporting Status of Vulnerability-related Information about Software Products and Websites

- 2nd Quarter of 2008 (April – June) -

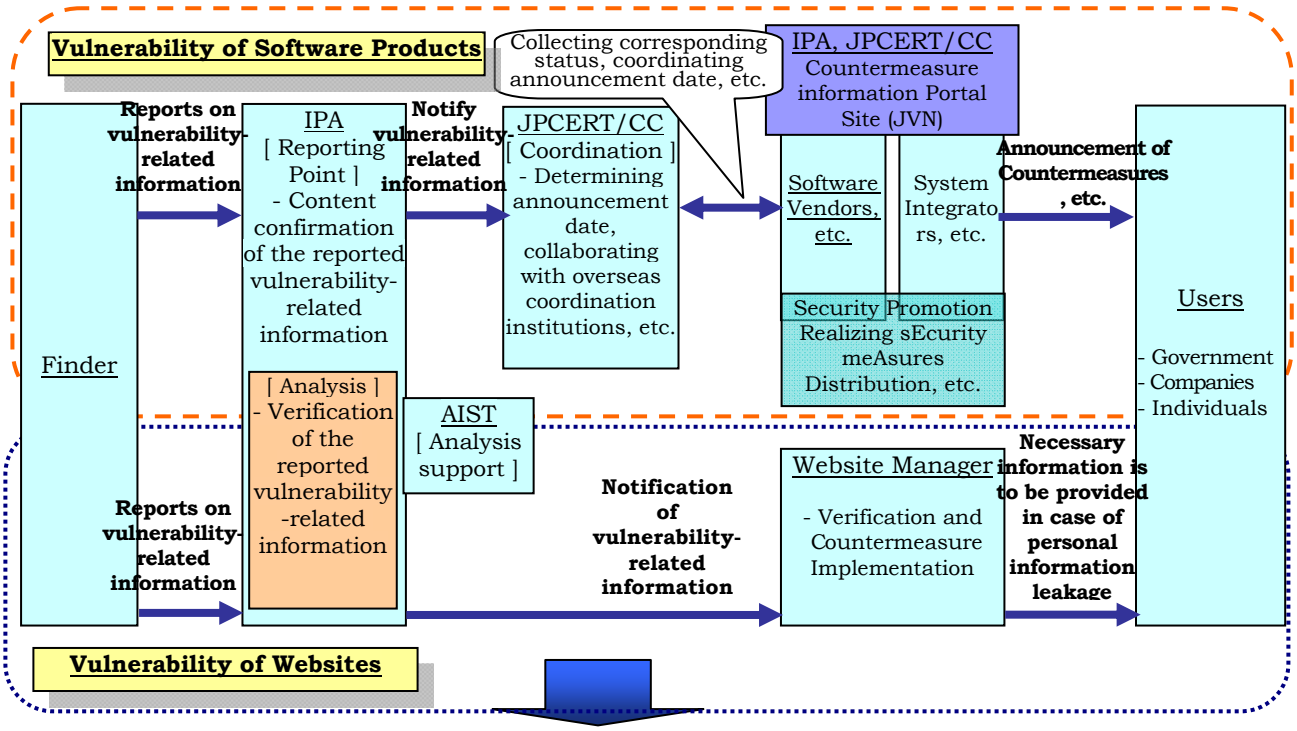
Information-Technology Promotion Agency, Japan (IPA) and JPCERT Coordination Center (JPCERT/CC), a limited intermediate corporation, initiated to handle vulnerability-related information in July, 2004, pursuant to the Standards for Handling Software Vulnerability Information and Others (Directive #235, 2004) by the Ministry of Economy, Trade and Industry (METI).
With the authority given by the Directive, IPA has been accepting reports on the following vulnerability-related information:

1: Vulnerability-related Information about Software Products:

Vulnerabilities against client software such as OS and browser, server software such as Web server, software embedded in hardware such as IC card, and so on. Other than vulnerability itself, information on verification methods, attacking methods and workarounds are also accepted. IPA will notify these vulnerability-related information to JPCERT/CC and it will communicate those information to concerned organizations such as domestic vendors.

2: Vulnerability-related Information about Websites (Web Applications):

Vulnerabilities against web systems which provide services to the public through the Internet. IPA will notify such vulnerability-related information to Web site managers to prompt modification.



Effect Expected:

1. Encourage vendors and Web site managers to implement countermeasures against vulnerabilities.
2. Prevent vulnerabilities from being carelessly publicized or left unsolved.
3. Prevent important information, such as personal information, from being disclosed and/or critical systems from being shut down.

"Information Security Early Warning Partnership"
(Framework for Handling Vulnerability-related Information)

Source: Handouts from explanatory session on handling vulnerability-related information (General introduction to the standards for handling software vulnerability-related information and its guidelines) by the Ministry of Economy, Trade and Industry

The statistics for the 2nd Quarter of 2008 (April – June) derived from the data collected based on the framework is summarized as follows.

1. Reported Number and Handling Status of Reports:

The total number of vulnerability-related information reported to IPA from April 1 to June 30, 2008 was 277: of 69 were on software products and the rest of 208 were on Website. The cumulative number of reports made to IPA since the framework started (July 8, 2004) was 2323: of 748 were on software products and the rest of 1575 were on Website. The Chart 1-1 shows the reporting status for respective quarters.

Reported Number/Business Day							
1Q/2005	1Q/2006	1Q/2007	2Q/2007	3Q/2007	4Q/2007	1Q/2008	2Q/2008
1.45	1.61	1.95	1.98	2.03	2.05	2.24	2.38

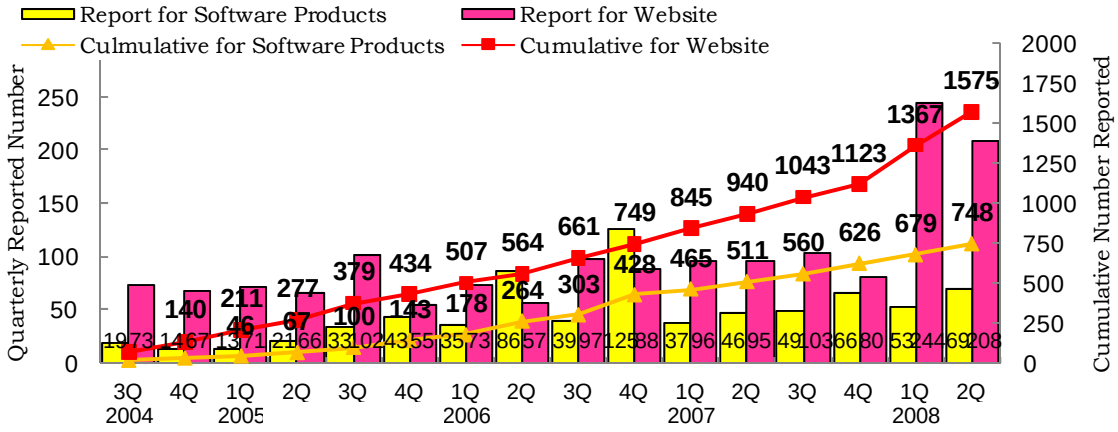
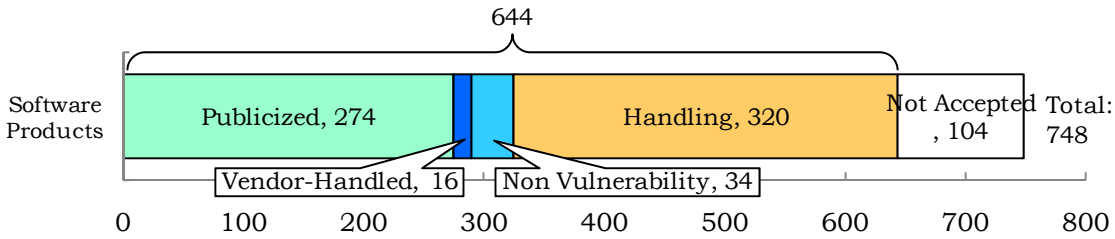
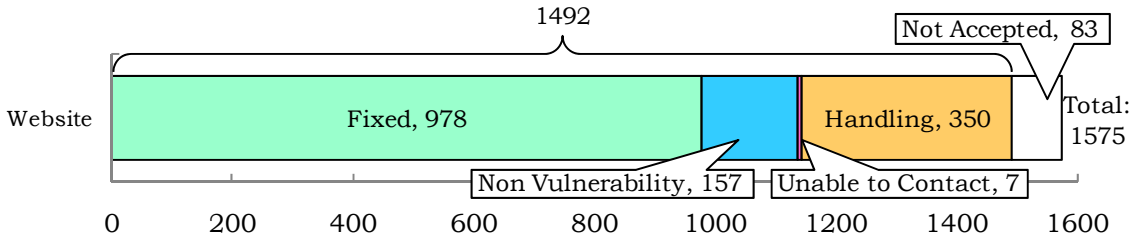


Chart 1-1: Quarterly Number of Vulnerability-related Information

The Chart 1-2 shows the processing status of reports on the vulnerability-related information as of the end of June, 2008. As for software products, 43% (274) of the reports being accepted as vulnerability (644) are modified and publicized. As for Website, 66% (978) of the reports being accepted as vulnerability (1492) are fixed.



Publicized	: Vulnerability which has been publicized with vendor's responding status on JVN
Vendor-Handled	: Vulnerability which has been informed to each user by vender individually
Non Vulnerability	: Vulnerability which has been determined not to be vulnerability by vendor
Handling	: Vulnerability which is being studied/handled by vendor
Not Accepted	: Vulnerability which is outside the scope defined by the Directive of METI



Fixed	: Vulnerability fixed by Website manager
Non Vulnerability	: Vulnerability which has been determined not to be vulnerability by Website manager
Unable to Contact	: It is not possible to contact the Website manager
Handling	: Vulnerability which is being studied/handled by Website manager
Not Accepted	: Vulnerability which is outside the scope defined by the Directive of METI

Chart 1-2: Processing Status of Reporting for Vulnerability-related Information (As of the end of June, 2008)

2. Handling of Vulnerability-related Information on Software Products and its Coordination:

The total number of information related to vulnerabilities in Software Products reported to IPA since the framework started in July 8, 2004, was 748. The Chart 2-1 shows the breakdown for 274 of publicized vulnerabilities, and the Chart 2-2 shows the breakdown for 644 reports related to the vulnerabilities in software products.

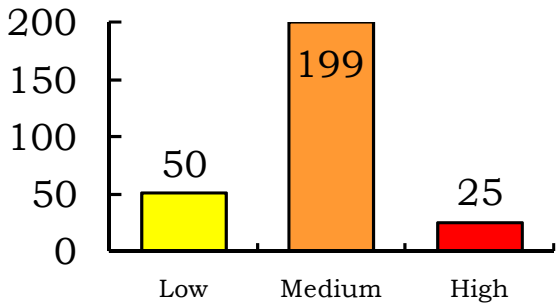
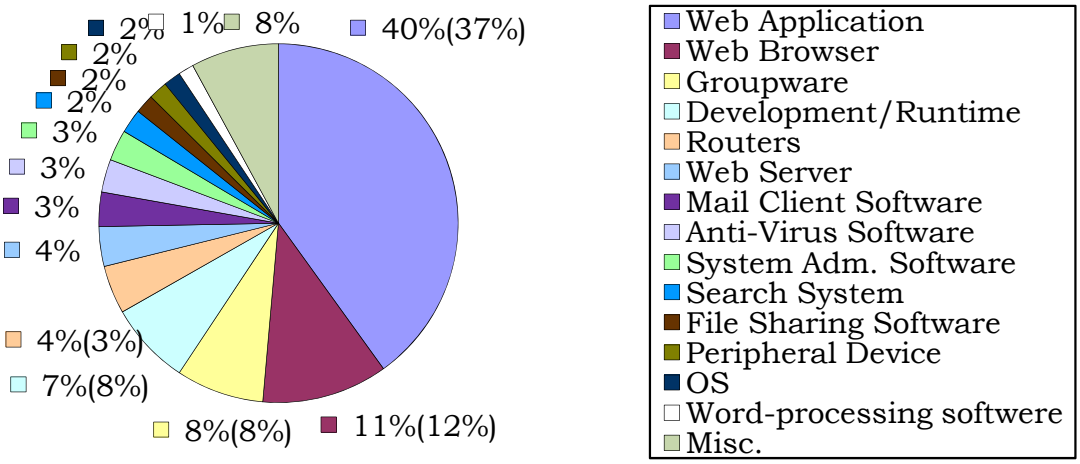


Chart 2-1 : Severity of Vulnerabilities in Software Products
(from Initial Acceptance to the End of June, 2008)

The vulnerabilities are organized according to severity, determined by the Common Vulnerability Scoring System (CVSS v2) standard. The scale of low, medium, and high severity corresponds to the following scores:

Low - Vulnerabilities will be labeled the Low severity if they have a CVSS base score of 0.0 - 3.9 .
Medium - Vulnerabilities will be labeled the Medium severity if they have a CVSS base score of 4.0 - 6.9 .
High - Vulnerabilities will be labeled the High severity if they have a CVSS base score of 7.0 - 10.0 .

The most reported was Web application and Web Browser subsequently followed.



Misc. in this graph includes software for database, Proxy, etc.
(Breakdown of 644: Numbers in parenthesis are for previous Quarter)

Chart 2-2: Breakdown for the Vulnerabilities in Software Products (from July 8, 2004 to the end of June, 2008)

The Chart 2-3 shows the time required for the announcement of vulnerabilities in software products. 32% of reports was addressed within 45days from its initial reporting and announcement.

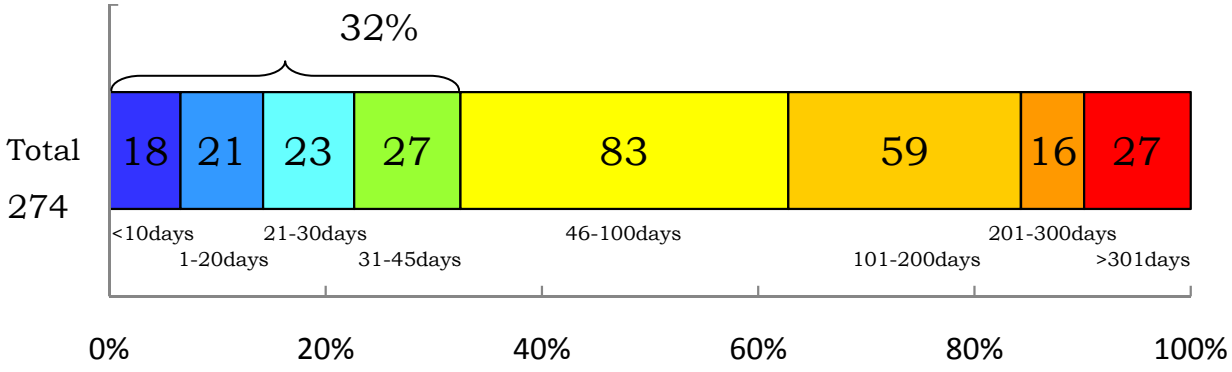
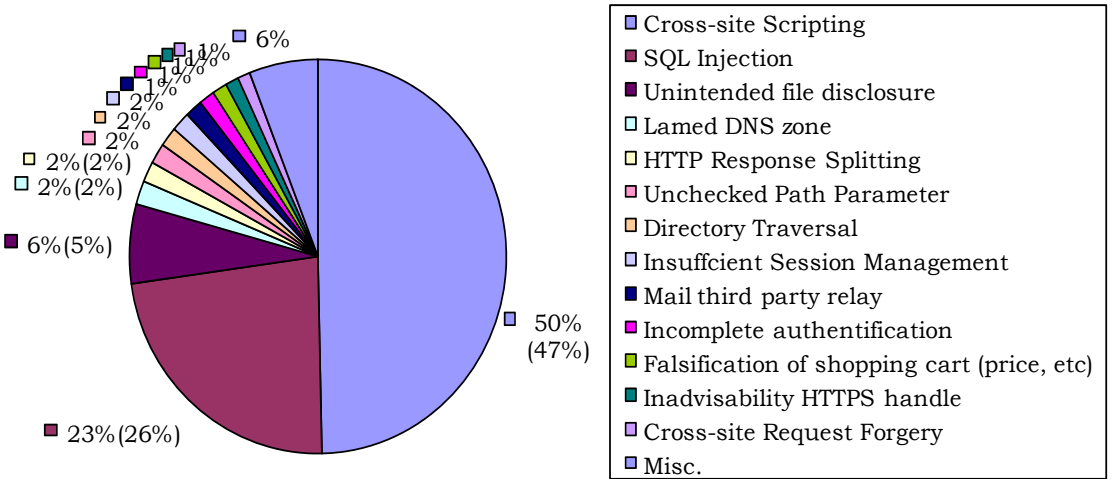


Chart 2-3: Time Required for the Announcement of Vulnerabilities in Software Products

In this Quarter, 13 vulnerabilities were being publicized.

3. Handling of Vulnerability-related Information for Website:

The total number of information related to vulnerabilities in Websites reported to IPA since the framework started in July 8, 2004, was 1575: excluding those being determined not to be vulnerability, the breakdowns for 1492 information reported are shown in the Chart 3-1 and 3-2.



- Breakdown of 1492: Numbers in the parenthesis are for the previous Quarter

Chart 3-1: Breakdown of Vulnerabilities in Websites by Type (from July 8 2004, to the end of June, 2008)

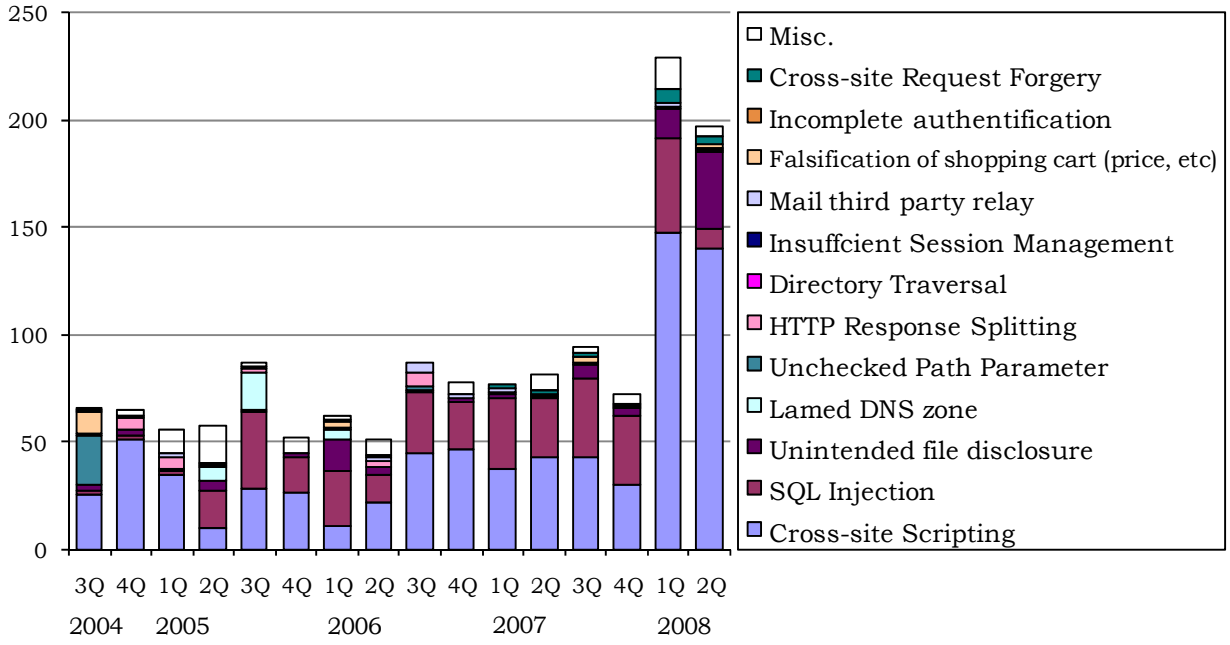


Chart 3-2: Shift in Number of Vulnerabilities in Websites by Type (from July 8 2004, to the End of June, 2008)

As for the type of vulnerabilities, “Cross-site scripting” and “SQL injection” account for 70% of the entire vulnerabilities.

The Chart 3-3 and 3-4 show the time required to modify vulnerabilities by type after notification of detailed information of the vulnerabilities to Website managers. 81% of vulnerabilities reported was fixed within 90 days.

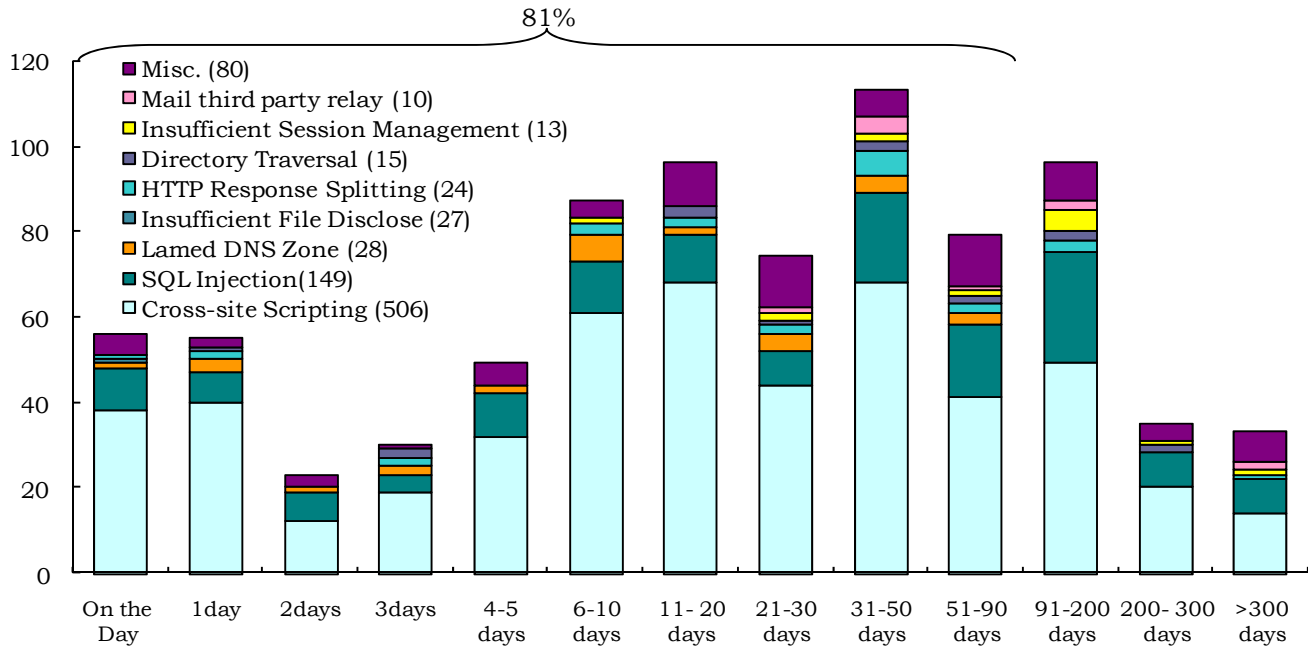


Chart 3-3: Time Required to Fix Vulnerabilities in Websites

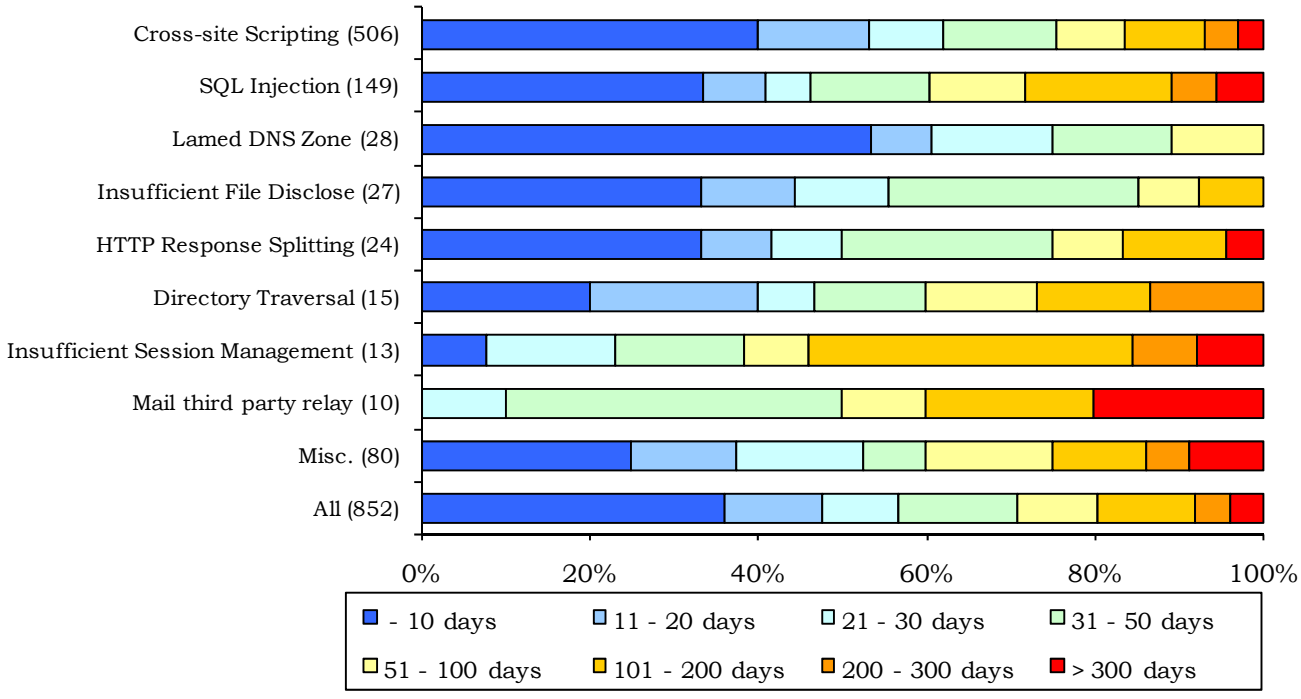


Chart 3-4: Time Required to Fix Vulnerabilities in Websites by Type

Contact

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