Operating Procedure Guideline for Website Broken Link Scanning on the National Chung Hsing University

June 9, 2014 - Approved by the Campus Network Management Committee

1. Purpose

The broken link scanning service is designed to detect non-functional or syntactically erroneous links on web pages. This service automatically checks the validity of website links using a program, generating reports that serve as the basis for webpage fixes. This guideline was established to effectively implement the broken link scanning service at our university, and to assist the website administrator in improving non-functional or syntactically erroneous links, thereby enhancing the accuracy of website information.

2. Broken Link Scanning

(1) Intended Scanning Targets

    a. Official websites of university units and websites with registered domain names that contain 'www', such as www.cc.nchu.edu.tw.

    b. Non-unit websites within the university that proactively request scanning services.

(2) Scanning Schedule

    a. Regular Scanning

    Each website will be scanned once per semester. The website administrator will be notified via email one week before the scan to ensure necessary cooperation.

    b. Fix Confirmation Scanning

    After the scanning results are delivered to the administrator, follow-up scans will be conducted periodically based on fixing progress.

(3) Scanning Implementation and fix Tracking

    a.The Computer and Information Network Center (CINC) is responsible for full-site Scanning of each unit's website, generating broken link scanning reports, and tracking the fixing progress of these websites.

    b.The reports will be sent to the website administrators, along with notifications to fix broken links.

        (a) For the first time scan or non-unit websites, the scan report is archived as a reference for the next scan.

        (b) For campus unit websites that are not scanned for the first time, according to the last scan result on the website,the rate of fixing broken links is calculated as follows

The rate of fixing broken links = (Total number of broken links in the last time scan - Total number of broken links in this scan) / Total number of broken links in the last time scan x 100 %

i.The rate of fixing exceeds 50%
The scan report is archived as a reference for the next scan.

ii.The rate of fixing is 50% or less
We will send the website broken link improvement notification letter to the unit's contact person. After obtaining the supervisor's signature, the notification letter should be returned to the CINC. We will compile the documents, and after obtaining the signature of the Chief Information Security Officer, it will be made public.

3. Workflow Diagram and Forms

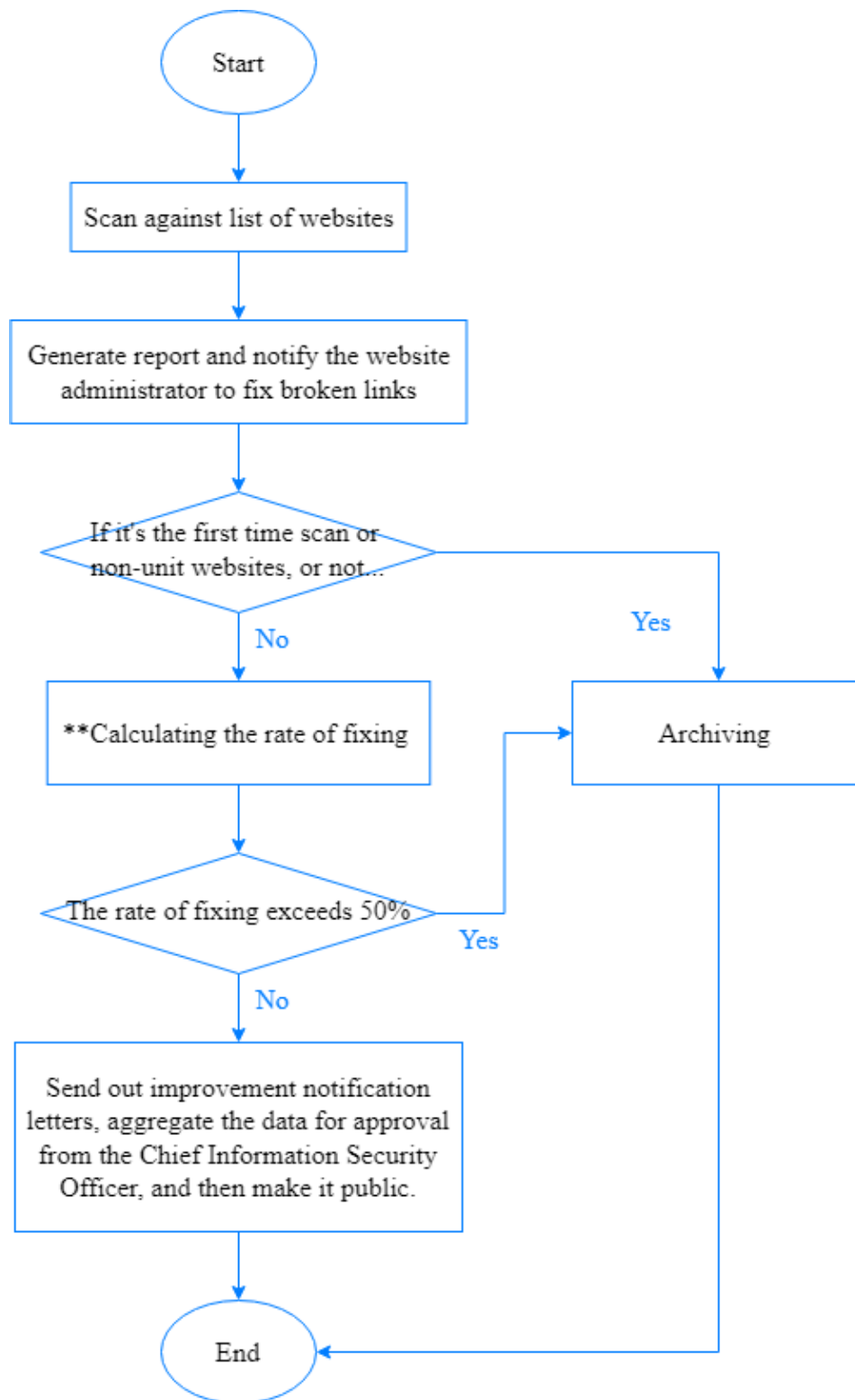(1) Broken Link Scanning Workflow Diagram(as in Attachment 1)

(2) Website Broken Link Scanning Service Survey Form (as in Attachment 2)

(3) Website Broken Link Improvement Notification Letter (as in Attachment 3)

4. These guidelines will be implemented after approval by the Campus Network Management Committee, and the same applies to any amendments.

Broken Link Scanning Workflow Diagram   (Attachment 1)

```
                    ┌─────────┐
                    │  Start  │
                    └─────────┘
                         │
                         ▼
          ┌──────────────────────────────┐
          │   Scan against list of websites   │
          └──────────────────────────────┘
                         │
                         ▼
          ┌──────────────────────────────┐
          │  Generate report and notify the website │
          │  administrator to fix broken links │
          └──────────────────────────────┘
                         │
                         ▼
                ◇ If it's the first time scan or
                  non-unit websites, or not...    ──── Yes ───┐
                         │                                     │
                         │ No                                  ▼
                         ▼                              ┌──────────────┐
          ┌──────────────────────────────┐   ┌────────▶│  Archiving   │
          │  **Calculating the rate of fixing │──┘       └──────────────┘
          └──────────────────────────────┘                   │
                         │                                     │
                         ▼                                     │
                ◇ The rate of fixing exceeds 50% ── Yes ──┐   │
                         │                                 │   │
                         │ No                              │   │
                         ▼                                 │   │
          ┌──────────────────────────────┐                │   │
          │  Send out improvement notification │            │   │
          │  letters, aggregate the data for approval │     │   │
          │  from the Chief Information Security │          │   │
          │  Officer, and then make it public. │           │   │
          └──────────────────────────────┘                │   │
                         │                                 │   │
                         ▼                                 │   │
                    ┌─────────┐                            │   │
                    │   End   │◀───────────────────────────┴───┘
                    └─────────┘
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** The rate of fixing broken links = (Total number of broken links in the last time - Total number of broken links in this scan) / Total number of broken links in the last time x 100 %

National Chung Hsing University

Computer and Information Network Center

Website Broken Link Scanning Service Survey Form

No：

Apply Date (Y/M/D)：			
Name		Department	
Contact phone		Email	
Submit the website domain name			
ex. www.nchu.edu.tw			
Note			
Applicant signature		Supervisor signature	

Recipient：   Receive Date：

Note：

1. Websites with domain names containing 'www' do not need to submit the form; we will proactively include them in the scanning list. (Ex : www.nchu.edu.tw)

National Chung Hsing University (NCHU)

Website Broken Link Improvement Notification Letter

The website unit：   Notification Date：

Host IP	The total number of broken links in the last scan	The total number of broken links in this scan	The rate of fixing broken links

**The rate of fixing broken links on your website is less than 50%. To ensure the accuracy of website information, please make sure to effectively address the relevant broken links.Fix and fill out the results on the receipt and send it back to the Information and Network Division at the CINC.

NCHU Website Broken Link Improvement Reply slip

Department		Name	
Contact phone		Email	
Supervisor signature			
(NCHU Website Broken Link Improvement Instructions)			