



Stoneware™ Inc.

Global Search and Replace

Stoneware, Inc.

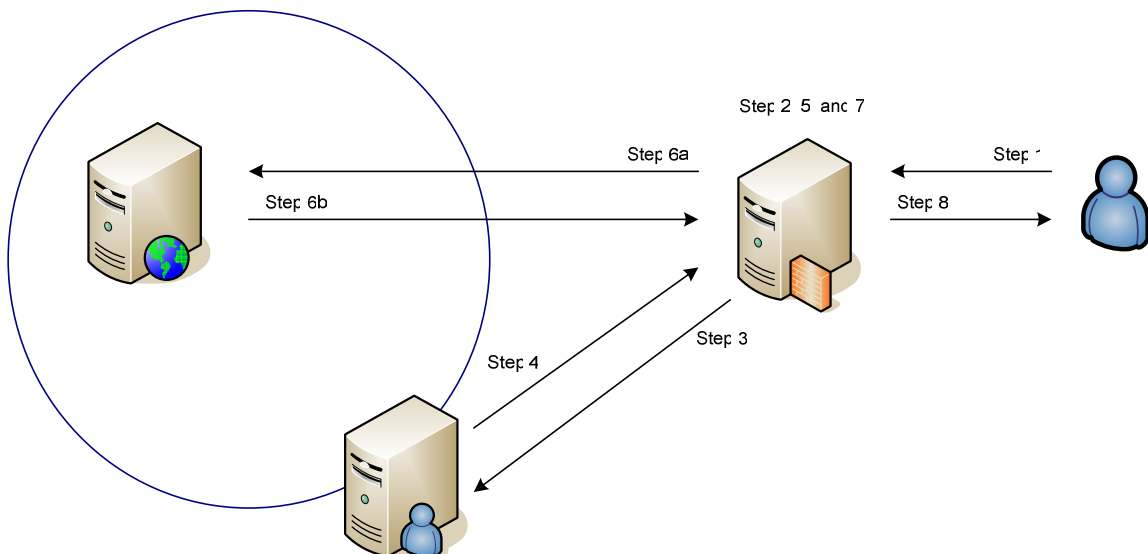
Configuration Sheet

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Introduction

This document provides the information necessary to create a [Global Search and Replace rules](#) for web applications and servers that have HARD-CODED internal IP addresses and/or DNS names in the URLs of their web application/servers. When the incorrect URLs are hard-coded in browser pages web applications will fail to authentication, retrieve graphics, load stylesheets, and access script files. This is due to the fact that the URL in the web page(s) is referencing an IP address or DNS name that is not available from the outside world. The best fix for this problem is to have the web application modified so that all URLs are "relative" and will not reference a name or IP address. This can typically be done through a web server setting or a configuration file. Sometimes, however, it is not possible to modify the backend web application and changes must be made "In the Flow". Global Search and Replace rules allow webNetwork administrators to modify hard-coded IP addresses and DNS names in web pages as they pass through the webNetwork Relay. This feature allows the webNetwork administrator to modify the contents of web pages before they are delivered to the end users. This feature can be used in many ways (i.e. - changing images, stylesheets, scripts, etc), however, this document will focus on using Global Search and Replace rules to fix hard-coded IP Addresses and DNS names.

Diagram 1 – Overview of Search and Replace



The diagram above outlines a user request for a page from an internal web server when a Search and Replace rule is being applied.

Step 1: User requests relay to retrieve index.html from the Intranet server.

Step 2: Stoneware Relay receives request.

Step 3: webNetwork Relay checks with Server to validate the user's request.

Step 4: webNetwork Server responds with an Allow or Deny.

Step 5: Relay checks to see if page should have a rule applied to the content stream.

Step 6: Relay requests web page from internal server

Step 7: Relay checks rules to see if it can find a "match". If it does it will replace the content in the stream.

Step 8. Relay sends response page back to webNetwork user with changes.

* i.e. - Any instance of "http://jupiter.stone-ware.com" inside of index.html has been replaced with "https://server1.stone-ware.com".

* Stoneware will replace content as it streams through the relay.

* Multiple rules can be applied to content.

Objectives

- Create two Global Search and Replace rules to change hard-coded IP Addresses and/or DNS names that are embedded into a web application's pages.
- This example will search for <http://jupiter.stone-ware.com> and replace with <https://server1.stone-ware.com>

Requirements

- webNetwork 4.0e (HotFix 3e)
 - HTTP(S) Virtual Server or Dedicated Port web application (configured and running)
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Steps for creating a TEXT RULE

This section will step through the process of creating a Text rule. The Search and Replace rule will search and replace specific text within a web page. The rule will search for a hard-coded DNS name and replace it with a new DNS name selected by the webNetwork administrator. The attributes within a given tag will be modified if it matches the rule.

1. Login to the webNetwork as administrator
 2. Start webAdmin
 - a. Select the Admin Programs menu.
 - b. Select the webAdmin link.
 3. Browse and select the DefaultRelay object.
 4. Select the CREATE OBJECT button from the upper left-hand corner of the console.
 5. Select a RULE object
 6. Select the OK button.
 7. Enter an object name
 - a. Enter "DNS-Text"
 8. Select the OK button to create the rule.
 9. Enter the properties for the DNS-Text rule
 - a. Description - a descriptive name for the rule.
 - b. Tag Name - **leave blank**
 - c. Attribute - **leave blank**
 - d. Search - enter "http://jupiter.stone-ware.com" (string that will be searched for)
 - e. Replace - enter "https://server1.stone-ware.com" (string that will replace every instance of http://jupiter.stone-ware.com)
 10. Select OK to save changes.
 11. Assign the rule to the Web Application that represents the web server.
 12. Select the OK button to save changes to the map.
 13. Wait for the webNetwork Relay to load the changes (approx 1 min.)
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Steps for Creating an ATTRIBUTE Rule

This section will step through the process of creating an Attribute rule. The Search and Replace rule will search and replace specific HTML tag attributes within a web page. The rule will search for a hard-coded DNS name and replace it with a new DNS name selected by the webNetwork administrator.

1. Login to the webNetwork as administrator
2. Start webAdmin
 - a. Select the Admin Programs menu.
 - b. Select the webAdmin link.
3. Browse and select the DefaultRelay object.
4. Select the CREATE OBJECT button from the upper left-hand corner of the console.
5. Select a RULE object
6. Select the OK button.
7. Enter an object name
 - a. Enter "DNS-Attribute"
8. Select the OK button to create the rule.
9. Enter the properties for the DNS-Text rule
 - a. Description - a descriptive name for the rule.
 - b. Tag Name - *
 - c. Attribute - *
 - d. Search - enter "http://jupiter.stone-ware.com" (string that will be searched for)
 - e. Replace - enter "https://server1.stone-ware.com" (string that will replace every instance of http://jupiter.stone-ware.com)
10. Select OK to save changes.
11. Assign the rule to the Web Application that represents the web server.
12. Select the OK button to save changes to the map.
13. Wait for the webNetwork Relay to load the changes (approx 1 min.)
14. Test the rules.
 - a. Login as a user with access to the web application.
 - b. Access the web application and verify that the content has been changed.