FRCA Configuration Guide

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	DESIGNATION	

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1 Overview

The purpose of this document is to provide information to the HTTP Server users about how to implement FRCA (Fast Response Cache Accelerator).

FRCA is a web cache architecture that enhances the performance of HTTP servers when caching texts and images. The files are cached in TCP/IP and hence, TCP/IP serves the files when caching.

> **Note**:
>
> The HTTP server serves the files that are served for the first time when caching.

1.1 Benefits

The following are the benefits of implementing FRCA:

- Enhances the speed and performance of the HTTP services.
- The files are automatically loaded into the cache making the process streamlined and efficient.
- The data is not cached in the following cases enhancing data security and protection:
    - Dynamic and protected pages.
    - Dynamically generated content.
    - Files containing meta-information.
    - Pages generated using Server Side Includes.
    - Objects served from proxy requests.
    - Objects served over an SSL connection.
    - URLs specified on the FRCANoCaching directive.

1.2 Limitation

The limitation of FRCA is that the caching of files happens only when the connection is not secure.

The following explains the importance of the FRCA directives and how to enable and configure FRCA:

- FRCA Directives
- Enable and Configure FRCA

1.3 FRCA Directives

The files loaded into FRCA are always accessible and the users do not require further authentication to access the files. This makes it easier for any user to access the cached data. The FRCA directives allow the user to prevent this by explicitly configuring the HTTP server based on whether a page must be cached.

The following directives are used for data caching:

- **EnableFRCA** – This directive allows the user to enable dynamic caching using FRCA.
  For example: EnableFRCA On

- **FRCANoCaching** – This directive allows the user to prevent specific URIs from caching. The user can specify the set of URIs using the appropriate FRCA directive.
  For example: FRCANoCaching /usergroup/*.html, FRCANoCaching /Docs/*.pdf

> **Note**:
>
> The HTTP Server ignores the FRCANoCaching setting if the **EnableFRCA** directive is set to OFF. The default file setting is OFF.

1.3.1 FRCA Scenarios

The user must configure the appropriate FRCA directive to restrict other users from accessing the cached data without authentication. The following flow diagrams represent the scenarios when User 1 and User 2 try to access the homepage of a website that is eligible for caching:

Example 1: User 1 tries to access the homepage of the website ABC. The UserID directive for the website ABC is set to %%CLIENT%% and the FRCA is enabled.

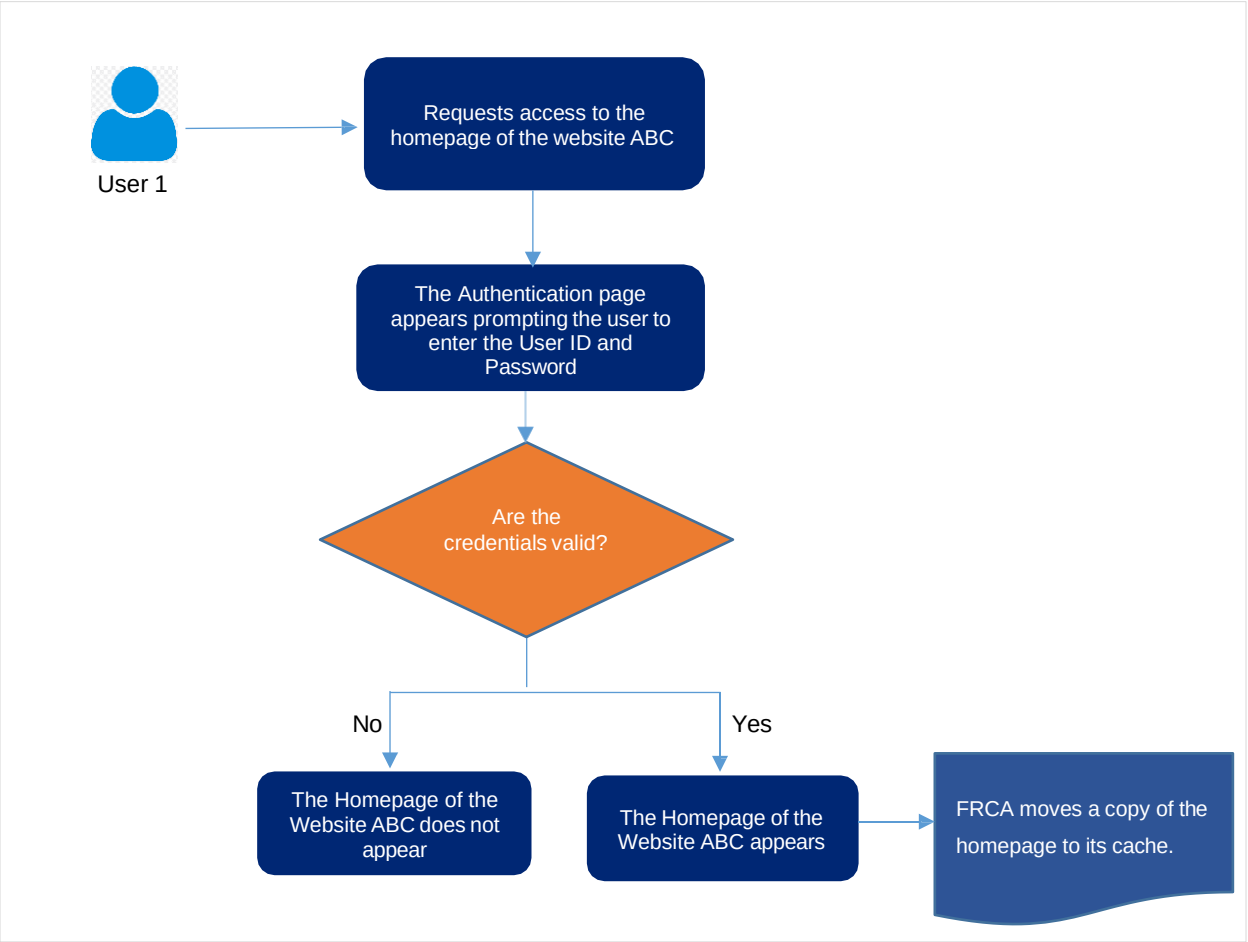

Figure 1: Example 1

Example 2: User 2 tries to access the homepage of the website ABC after User 1. The UserID directive for the website ABC is set to %%CLIENT%% and the FRCA is enabled.

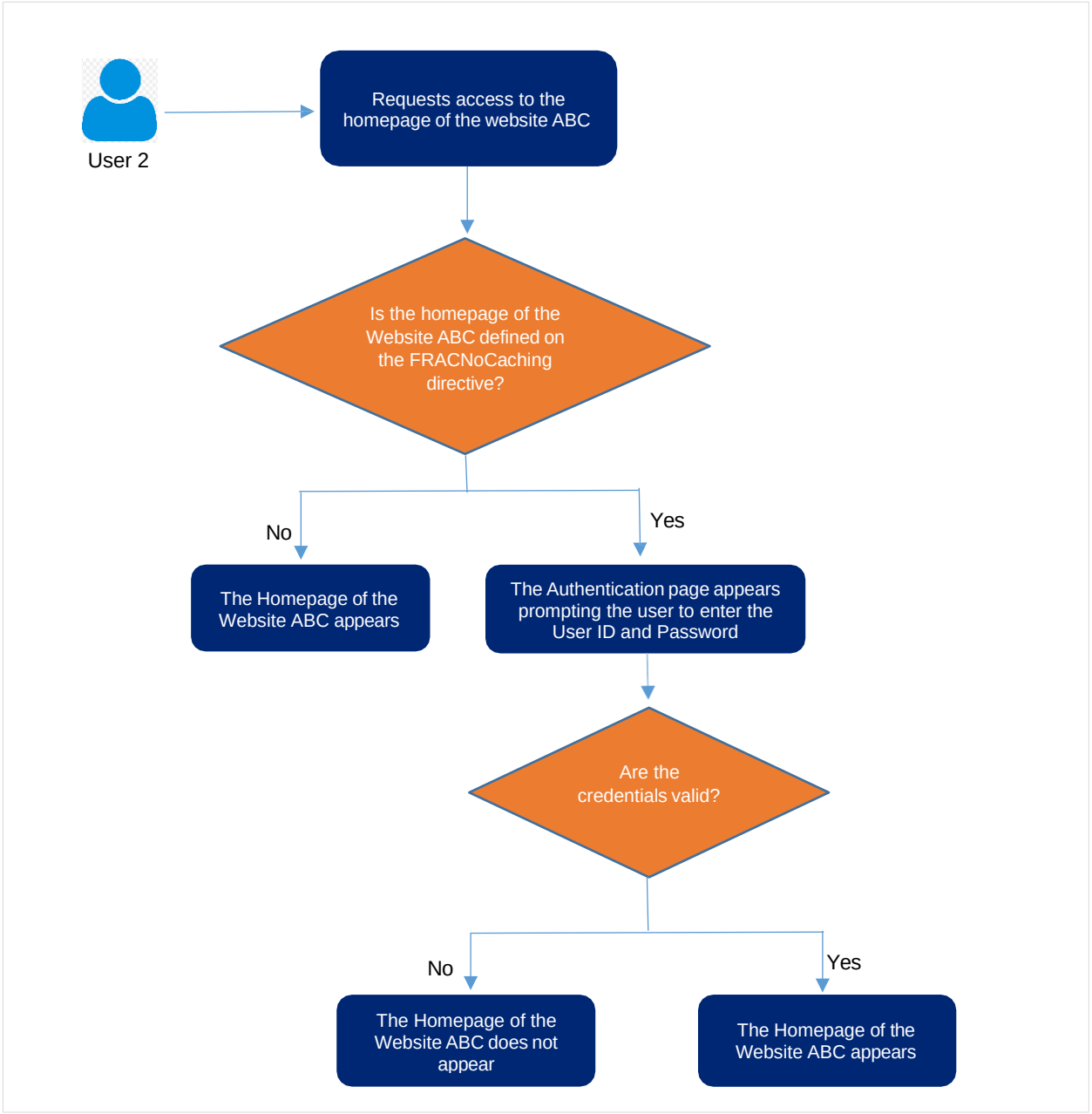

Figure 2: Example 2

1.4 Enable and Configure FRCA

The user can enable and configure FRCA in two ways:

- Using the configuration file
- Using the Administration and Configuration forms

1.4.1 Using the Configuration File

To enable and configure FRCA using the configuration file, perform the following steps:

1. Open the http.conf configuration file.
2. Turn on the **EnableFRCA** directive. By default, the **EnableFRCA** is turned off.
3. Specify the FRCA directives as per the requirement. For more information, see FRCA Directives.

1.4.2 Using the Administration and Configuration Forms

To enable and configure FRCA using the Administration and Configuration forms, perform the following steps:

1. Go to the HTTP server home page.
2. Click **Administration and Configuration Forms**.
3. Click **Enable Fast Response Cache Accelerator** to enable dynamic caching. By default, **Enable Fast Response Cache Accelerator** is disabled.
4. Specify the required URIs on the appropriate FRCA directives. For more information, see FRCA Directives.
5. Restart the HTTP server.