IBM HTTP Server Multiple Instances from a Single Install

I recently setup a server to run multiple instance of IBM HTTP Server from a Single IHS Install on Windows.

Originally the servers looked like this,

IHS mod_jk connection to Apache Tomcat using context root /my-app/ using SSL certificate https://test1.acme.com/

The customer wanted to leverage the existing system to create a secondary test environment.

Virtual hosting was not an option, because the team was willing to change the domain name, but not the context root. The customer was able to provide a second IP for the server.

Instructions

The instructions are well documented on two different articles,

- 1. IBM Website Article Running multiple instances of IBM HTTP Server from a single install
- 2. Creating multiple instances of IBM HTTP Server on Windows operating systems

Recorded here is the abridged version with the added assurance that the steps used work and has been running in a Bank production environment since March 2012.

Initial IHS Setup

Version of IHS used,

- IBM HTTPServer 7.0.0.0 / Apache 2.2.8 for Windows (32bit) 2009-05-15 from the IBM HTTP Server website
- ihs.7000.windows.ia32.zip

Installation options as follows,

Product installation location = C:\opt\IBMIHS\

HTTP Port = 80 (default) HTTP Administration Port = 8008 (default)

Run IBM HTTP Server as a Windows Service = Check (default) Run IBM HTTP Administration as a Windows Service = **Uncheck** Log on as a local system account = **Select** Startup type = **Automatic** (default)

Create a user ID for IBM HTTP Server administration server authentication = Uncheck

Creating Secondary Instance

Remove FRCA

Determine if FRCA (Fast Response Cache Accelerator) is enabled by searching for the directives AfpaEnable, AfpaCache and AfpaLogFile in the IHS configuration files. The configuration file C:\opt\IBMIHS\conf\httpd.conf is the starting point. It may include other files.

Restart the service after the change and ensure IHS is running properly.

Copy Configuration Folder

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Setup the New Instance

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```
cd \opt\apache2\
bin\apache.exe -f conf-c\httpd.conf -k install -n "IBM HTTP Server 7.0-b"
Installing the IBM HTTP Server 7.0-b service
The IBM HTTP Server 7.0-b service is successfully installed.
Testing httpd.conf....
Errors reported here must be corrected before the service can be started.
```

Uninstall an Instance

In some cases you will want to uninstall the instance. As far as I can tell this does not remove any files. It simply removes the service item from Windows,

```
cd \opt\apache2\
bin\apache.exe -k install -n "IBM HTTP Server 7.0-b"
```