

Yesterday, I caused a four-hour outage for anyone trying to access webpages on dombsb.com. This document explains what happened and lessons to be learned.

Technical summary: I deleted a file named .htaccess from dombsb/gsb622/group99/ and when I put it back a few hours later, all was well. (Technically very simple).

Mistakes made in order of “big mistake” to “routine mistake”

1. (Very big mistake) I didn't test <http://www.dombsb.com/gsb622/group99> because all I was doing was deleting a few files from last semester.
2. (Significant mistake) I did this work in the middle of the e-commerce problem instead of in late June.
3. (Routine mistake). I deleted a file that I should not have deleted. This mistake bothers me the least. Technical mistakes will happen. A more serious mistake was doing the work at the wrong time and the biggest mistake was not testing.

Managing the fallout from the mistake. This is all work that would have been avoided had I spent 30 seconds testing the change.

1. Receive a report that attempting to use <http://www.dombsb.com/gsb622/group99> results in a security violation message.
2. Notify the class to stop working. Note: This was probably overkill because Dreamweaver was still able to connect and upload pages. However, this was not obvious at the time.
3. Figure out why group99 stopped working. (See the technical explanation later (optional))
4. Restore the file .htaccess from the Trash on the server.
5. Notify class the work could resume
6. Update Canvas to change the due date on the eCommerce assignment.

Lessons you can learn from this:

1. Test all changes (the obvious lesson).
2. Consider the impact on the business when planning and scheduling changes. (not in the middle of an MIS class or in the middle of student registration)
3. Don't make changes to the live production system.
 - a. Most companies have a test environment and a production environment for major systems like Dominican does for Canvas and MyDU. Developers (like me) should not be allowed to change the production system. Once developers can demonstrate that the changes work in the test environment, an operations team (or person) moves the changes from test to production at a time that is expected to cause the least disruption if something goes wrong.
 - b. Be ready to recover or reverse the changes if something goes wrong. You may notice that web sites tend to be down for maintenance at night or on the weekends. You might also notice that systems at a company could be down on Monday morning while the IT department is still recovering from weekend maintenance changes.

Technical Explanation: (it's OK to stop reading here – but if you read on you will know why I did not want you to name any of your pages “index.html”)

1. If you ask a browser to load a specific page (<http://www.dombsb.com/gsb622/group99/millerhome.html>), the browser will find that page and load it or give you a missing page error message.
2. What if you specify a directory instead of a specific page? (<http://www.dombsb.com/gsb622/group99/>)
 - a. If there is a page named index.html in that directory, it will be loaded and displayed
 - b. If there is no page named index.html, here is what happens
 - i. If there is no file named .htaccess, you will get a security violation message because in general you are not allowed to access a web server at the directory level
 - ii. If there is a file named .htaccess, the web browser will follow the instructions given in that file. In our case, the instructions were to display a list of all the files in the directory and let the user pick one of the files.
 - c. So, if the file .htaccess is deleted, you will receive a security violation message instead of a list of files when you attempt to access at the directory level.
 - d. Since the .htaccess file only controls what happens when you access a specific directory at the directory level, all other functions of the web server continue to operate correctly even if the .htaccess file is removed from a particular directory.

