# Hot Deploy

**To:** all-users@internet.com
**From:** admin@google.com
**Subject:** Google.com - Will Be Unavailable (7-9PM)

Dear Internet User,

Google.com will be unavailable from 7 - 9 P.M. while we perform a **routine system upgrade.** We appreciate your patience, and ask that you refrain from using one of our competitors.

Sincerely,

Google Administrator

## Sound Unreasonable?

Many software teams equate the word "deployment" with "outage". However, it would be unacceptable for Google to take an outage to apply a patch or perform a system upgrade. So why does your organization settle for outage notices for routine patches and upgrades when you could utilize BTI's *Hot Deploy*?

## Why Hot Deploy

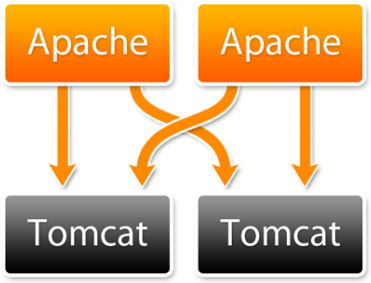
*Hot Deploy* allows for system maintenance and upgrades to occur without any impact to the end user. For organizations that are serious about uptime and system availability, *Hot Deploy* provides an architecture combined with disciplined processes that allow software teams to be responsive and non-intrusive for their clients.

## How Does Hot Deploy Work?

Hot deployments are the process of performing a software installation or system configuration change across many servers without interruption of service. It is accomplished by taking each server offline and updating it in turn, while ensuring that there is always a server available to handle client requests.

There are two elements that make a *Hot Deploy* possible:

- Well-designed clustered architecture
- Disciplined deployment practices




A cluster is a logical grouping of several similarly purposed servers, each capable of handling requests from customers. To perform a hot deployment, one server is taken out of the cluster, preventing it from receiving any new work, while the remaining servers continue to service client requests. After the new software has been deployed, the upgraded server is then added back to the cluster and continues serving requests. This process is repeated for each additional server until all servers in the cluster have been upgraded and the maintenance period is complete. When a hot deployment is performed successfully, end users should not experience any disruption in service.

## What About Agile Deployments?

When software teams think “agile” they commonly refer to software development methodologies and neglect system deployment strategies. Many “agile” projects revert back to the “waterfall” mindset when it comes to their deployment strategy, by sending out carefully crafted and orchestrated outage notifications.

Other projects, in an attempt to be agile, make reckless or untested configuration changes in a haphazard manner, causing outages and a flurry of “Spot Reports” detailing what went wrong and when it will be fixed. Consequently, flagship capabilities are often offline for several hours while the most routine updates are installed.

The *Hot Deploy* approach combines a clustered systems architecture with disciplined deployment practices. This allows our teams to be both agile yet disciplined. Our teams can respond quickly to client requests while putting safeguards in place to ensure system availability during deployments.

## *Hot Deploy* In Action

By designing an architecture with the goal of *Hot Deploy* in mind, BTI has been able to repeatedly deploy software updates to production systems without causing outages or degradation of service. *Hot Deploy* has seen success during peak usage times with thousands of end users.

So - why wait? Use *Hot Deploy* on your project!