**Problem:**

Our cloud software generates major two-way traffic between the Soph-Ware FTP server (at iPage.com) and the AWS EB. The files are in the order of 100’s of KBs. Under CLB this causes EB to time out. Though perhaps not fatal, a time-out essentially kills our demo.

**Diagnosis:**

Specialist M A summarized the problem as “lack of sync between the TCP buffers on the CLB.”

**Guidance from AWS Support (excerpted from most recent response):**

2. Application Load Balancer:

ALB has tried to overcome the shortcomings of Classic Load Balancer by including TCP Flow control mechanism keeping in mind the need to download/upload large files from the server and serving the same to clients.

[Per Document #1 below: “With an Application Load Balancer, each process has a separate health check path that is monitored by the load balancer and Elastic Beanstalk enhanced health monitoring.”]

ALB nodes are designed for improved memory utilization and buffer capacity. If you do not decide to move ahead with S3 bucket I would recommend you move to ALB. ==============================

HOW TO SWITCH FROM CLB TO ALB ?

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-> Create a new environment with an ALB [1]. Please note that you can configure an environment with an ALB ONLY upon creation using the EB CLI or .ebextensions. Please have a look at the document below[1] on how to do that.

-> Once the new environment is up and running you can then do a CNAME swap [2] or Blue/Green[2] deployment between the 2 environments. Please note when doing a Blue/Green deployment both environments need to be apart of the same application.

**Documentation:**

References:

[1] ALB - Getting Started - <http://docs.aws.amazon.com/elasticbeanstalk/latest/dg/environments-cfg-applicationloadbalancer.html>

[2] Blue/Green Deployments with AWS Elastic Beanstalk - <http://docs.aws.amazon.com/elasticbeanstalk/latest/dg/using-features.CNAMESwap.html>

[3] Connection Timeout for CLB - <http://docs.aws.amazon.com/elasticloadbalancing/latest/classic/config-idle-timeout.html>

**Procedure:**

* Saved working app (Marcus\_APP) to external backup drive
* Modified the app’s existing .ebextensions, adding the five .config files from [1]ALB
* Verified the settings of each .config file per “Application Load Balancer Namespaces” links in [1]ALB

## Exception: aws:elbv2:listener:listener\_port Parameter “SSLCertificateArns:” in alb-secure-listener.config. Used generic example in [1]ALB. Should be “The ARN of a certificate stored in IAM or ACM.”

* Attempted to create a new (ALB) environment. Failed. See separate CLI “Log of 31Dec17.txt”