



Equipment Authorization System (EAS) Update

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EAS Webserver Performance

- Since early August the FCC EAS Webservers have been having intermittent performance issues
 - FCC has been closely monitoring sites to identify cause(s)
- Issue 1: Servers reaching maximum connection capacity and requiring restart
 - Different error messages returned based on user location on system
 - Causes:
 - Higher than normal volume of 731 submissions
 - Increase in traffic from WebCrawler's and automated (Bot) requests
 - One Bot hit server 400 times in 6 seconds
 - Second Bot hit server 1000 times in 5 minutes



EAS Webservice Performance II

- Observations:
 - Traffic appears to be legitimate data request and not denial of service attacks.
 - Primary sites FCCID and Grantee Searches
 - Traffic is at random times and from numerous sources
 - Domestic and international
 - If FCC blocks automated request, it may quickly appear from a different source address
 - FCC/EAS has finite number of allowed connections and when that number is reached, EAS server needs to be restarted



EAS Webserver Performance III

– FCC Actions

- Implemented software to monitor traffic to EAS sites
 - Gathering data for about month
- Block all known malicious sites automatically
- Implement cached results if automated request has been recently made
 - This keeps traffic from hitting server multiple times for same request.
 - » New request will continue to reach the server directly
- Implemented procedures to quickly identify and block high volume traffic sources that repeated impact performance
 - Blocked sources may appeal to FCC for reconsideration



EAS Webserver Performance IV

- Issue 2: Servers returning “Reference 97...” errors
 - Errors are typically short in duration and occur at random times-typically last about 10 minutes and then resolve self
 - Issues started to appear in mid August
 - Cause of issues appears to be due to reconfiguration of FCC EAS server firewall as a result of issue 1
 - Short term resolution implemented on about 9/30 and is currently being monitored.



EAS Modernization Update

- No significant changes since last TCBC Workshop
- FCC is continuing to work through system development lifecycle processes to ensure that effective support systems are in place when the process moves to production



Questions and Answers

Thanks