

# ESA Work Queue Backup Mitigation



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## Contents

### Introduction

#### Tactics to Mitigate Work Queue Backups

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This document describes common tactics to mitigate work queue backups on Cisco Email Security Appliance (ESA).

## Tactics to Mitigate Work Queue Backups

The most typical cause of work queue backup is that the system is overburdened. You can reduce the load on your servers if you performance tune the configurations and/or add more appliances. In many cases, performance tuning is sufficient to improve overall performance.

Here is a list of tactics that might help mitigate work queue backups.

- Reduce the Listener Maximum Global Concurrency to less than 300. Increase only as absolutely necessary and monitor the resultant system performance.
- When there is a volume spike, reduce this value by 80% or more in order to help drain the work queue and improve the overall system performance.
- Review all Host Access Table (HAT) settings and reduce settings in all policies and defaults to the maximum numbers required by your organization. For instance, the ESA ships with a default maximum message size accepted of 100 MB. Email is a poor choice of medium to transmit files this large, and most organizations and many ISPs forbid it. You might wish to reduce this to something closer to 10MB. If you must accept messages greater than 10MB in size, use a message filter to direct these messages to an ESA that is specially configured with a very low (10–20) Max Global Concurrency.
- In nearly all environments, the use of the ROOT Domain Name Server (DNS) often results in better DNS lookup performance.
- Use SenderBase Reputation Score (SBRS) settings in the HAT in order to reduce Spam traffic before it burdens the Anti-Spam engine on the ESA.
- Use conversational Lightweight Directory Access Protocol (LDAP) recipient validation to short-circuit processing of any messages that would be bounced anyway.

- Use footer stamping sparingly. Footer stamping requires that multiple copies of a message be maintained while processing, which reduces performance.
- Review message filters. Reduce the number and complexity of your filters, because regular expressions are costly and reduce performance.

Contact your authorized support center for further help.

Ultimately, it is important to have the correct number of systems to handle your company's email volume. If you need to resize your environment, contact your sales representative to help determine the appropriate number of appliances.

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