

Enterprise Manager (EM) Optimization via Environment Variables (25H1 and Later)



Warning – Level 2 Document, please do not distribute

Beginning with EM 25H1, several system-level environment variables are supported to assist with optimizing Enterprise Manager performance in enterprise-scale deployments. These variables primarily impact database threading behavior, server importer concurrency, and ingestion pacing. Configuration changes require an Enterprise Manager service restart or full system reboot to take effect.

This article documents supported variables, default values, and verification steps. These settings are intended for advanced configurations and should be managed with care.

Supported Environment Variables:

`_EM_DB_THREAD_POOL_SIZE`

Purpose:

Controls the number of database worker threads used by Enterprise Manager.

Default Value:

1

Notes:

In larger enterprise deployments, increasing this value to 2 or 4 may improve database concurrency. Changes affect database processing behaviour only and do not alter stored data.

`_EM_IMPORTER_NUMBER_OF_SERVERS_TO_CONNECT`

Purpose:

Defines how many ExacqVision servers Enterprise Manager attempts to connect to simultaneously during importer operations.

Default Value:

25

Notes:

This setting impacts connection concurrency only and does not affect whether servers are ultimately imported.

`_EM_IMPORTER_TIME_BETWEEN_CONNECT_TO_SERVERS`

Purpose:

Introduces a delay between batches of server connection attempts during importer execution.

Default Value:

30 seconds

Notes:

Increasing this value can help reduce the likelihood of importer queue saturation but increases the total time required for Enterprise Manager to connect to all servers.

`_EM_NUM_IMPORTERS`

Purpose:

Controls the number of importer processes spawned by Enterprise Manager.

Notes:

This variable is commonly used to reduce importer count on systems with high CPU core counts in order to improve performance predictability and reduce resource contention. If unset, Enterprise Manager determines importer count automatically.

Linux Configuration Example:

To set the number of importers to 7 on Linux systems, modify the `em_env_vars` file using the following command:

```
sed -i 's/export _EM_NUM_IMPORTERS=*/export _EM_NUM_IMPORTERS=7/'  
em_env_vars
```

Applying Changes:

After modifying any Enterprise Manager environment variable, restart the Enterprise Manager services or reboot the host system. Changes do not apply dynamically.

Verification:

After restart, navigate to the Enterprise Manager logs directory and verify importer log creation.

Importer logs are created using the following naming format:

importer1-logs.txt

importer2-logs.txt

...

importerX-logs.txt

The total number of importer log files created after restart should match the value configured in `_EM_NUM_IMPORTERS`. Log timestamps should reflect the most recent service restart.

Related Knowledge Base Article:

<https://support.exacq.com/#/knowledge-base/article/4746>