RazorSafe 8-Series

Benchmarking Report

Intradyn 5/8/2013



RazorSafe 8-Series Benchmarking Report

This report provides most comprehensive benchmark information on RazorSafe 8-Series. It is intended to facilitate the selection process for the most suitable RazorSafe appliance. We understand that each business environment is unique and the actual results may vary.

The benchmarking was performed in our test lab. Most common production environment settings (based on historic data and customer feedback) were used to setup the test servers to obtain realistic results. The tests were designed to run all major processes simultaneously. The goal was to exert maximum stress conditions on each 8-Series model.

	RS800-B1	RS800-B4	RS8000-B8
5 year deployment	8K~9K	35K~40K	75K~80K
	emails per day	emails per day	emails per day
4 year deployment	10K~11K	45K~50K	120K~125K
	emails per day	emails per day	emails per day
3 year deployment	13K~14K	55K~65K	155K~165K
	emails per day	emails per day	emails per day
Parallel Searches	20	40	60

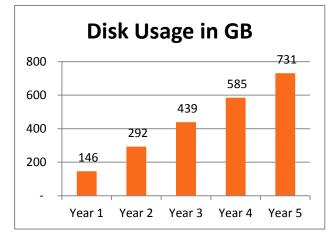
Summary of the results

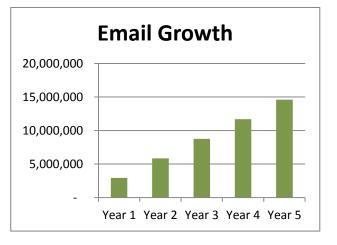
These numbers are guidelines extrapolated from tests performed in controlled environment. The individual results may vary.

RS180-B1

RazorSafe 8-Series

Maximum storage capacity	15 million emails
Recommended Daily Load for ${\bf 5}$ year deployment	8K ~ 9K Emails per day
Recommended Daily Load for ${f 4}$ year deployment	10K ~ 11K Emails per day
Recommended Daily Load for ${\bf 3}$ year deployment	13K ~ 14K Emails per day
Maximum number of parallel searches	20



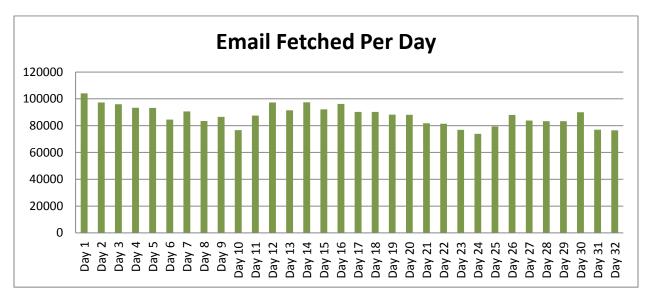


	Hardware Specification	
Chassis Form Factor	1U-4x3.5"	
CPU	1 x 4 cores	
Memory	12 GB	
1Gbit Network Ports	2	
Disk Size	2X2TB - 3.5" – SATA – 7.2K RPM	
Raid Level	Software RAID 1	
Storage	1TB	

Benchmark Details (RS180-B1)

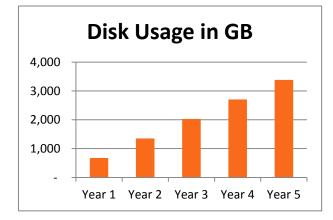
Benchmarking Period	32 days
Sustainable fetch load per day (Number of emails that a RazorSafe can handle on a daily bases until it is full.)	30,000 emails
Maximum email fetched in a day during benchmarking	104,136 emails
Average number of emails fetched during benchmarking	86,523 emails
Average size of an email	75кв
Disk saving via de-duplication & compression	35%

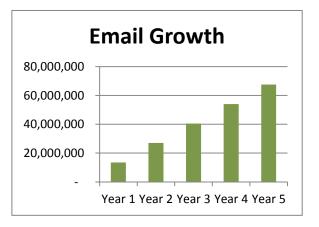
Email fetched per day for duration of benchmarking



RS800-B4

Maximum storage capacity	67 million emails
Recommended Daily Load for ${\bf 5}$ year deployment	35K ~ 40K Emails per day
Recommended Daily Load for ${f 4}$ year deployment	45K ~ 50K Emails per day
Recommended Daily Load for ${f 3}$ year deployment	55K ~ 65K Emails per day
Maximum number of parallel searches	40

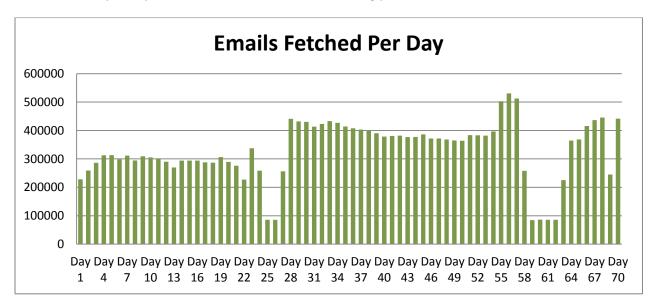




	Hardware Specification
Chassis Form Factor	1U-4x3.5"
CPU	1 x 6 cores
Memory	48 GB
1Gbit Network Ports	2
Disk Size	4x2TB - 3.5" – SATA – 7.2K RPM
Raid Level	Hardware RAID 5
Storage	4TB

Benchmark Details (RS800-B4)

Benchmarking Period	70 days
Sustainable fetch load per day (Number of emails that a RazorSafe can handle on a daily bases until it is full.)	100,000 emails
Maximum email fetched in a day during benchmarking	530,000 emails
Average number of emails fetched during benchmarking	308,611 emails
Average size of an email	75кв
Disk saving via of de-duplication & compression	35%

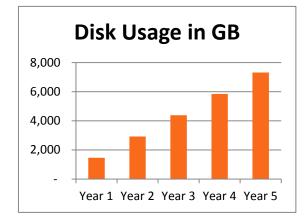


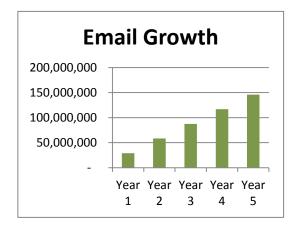
Emails fetched per day for the duration of the benchmarking period

RS8000-B8

RazorSafe 8-Series

Maximum storage capacity	140 million emails
Recommended Daily Load for ${\bf 5}$ year deployment	75K ~ 80K Emails per day
Recommended Daily Load for ${f 4}$ year deployment	120K ~ 125K Emails per day
Recommended Daily Load for ${\bf 3}$ year deployment	155K ~ 165K Emails per day
Maximum number of parallel searches	50



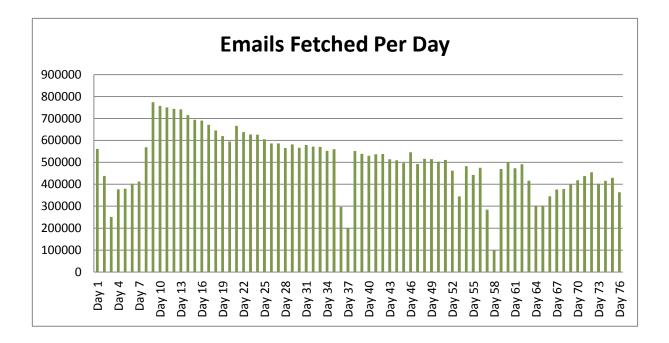


Hardware Specification		
Chassis Form Factor	1U-4x3.5"	
CPU	2 x 6 cores	
Memory	64 GB	
1Gbit Network Ports	2	
Disk Size	12x1TB - 2.5" – SATA – 7.2K RPM	
Raid Level	Hardware RAID 5	
Storage	8 TB	

Benchmark Details (RS8000-B8)

Benchmarking Period	76 days
Sustainable fetch load per day (Number of emails that a RazorSafe can handle on a daily bases until it is full.)	168,000 emails
Maximum email fetched in a day during benchmarking	774,000 emails
Average number of emails fetched during benchmarking	505,694 emails
Average size of an email	75кв
Disk saving via de-duplication & compression	35%

Emails fetched per day for the duration of the benchmarking period



Definition of Terms

Sustainable Load

Number of emails that a RazorSafe can handle on a daily bases until it is full.

Maximum Load

Maximum load can be sustained for a few weeks but *will result in severe performance degradation*.

Parallel Searches

Total number of searches a RazorSafe can handle simultaneously.

Benchmarking Methodology

Scheduled and configured processes

- 1) Each machine was setup to **fetch** and receive emails via **SMTP**.
- 2) Each machine was setup to run data aging on **daily** basis.
- 3) Each machine was setup to perform remote backup on **daily** basis.
- 4) Each machine was scheduled to perform searches once every **15 minutes.**

Searching

- 1) Parallel searches were performed number of times daily (at least 2 times daily).
- 2) Total 5000 searches were performed 6 to 8 hours daily during benchmarking period.

Email Data:

- 1) Average size of one email [randomly generated]: 75KB
- 2) Average size of each attachment: 530KB average attachment
- 3) Three percent (3%) of emails included attachments.
- 4) Fifty percent (50%) of the emails were multipart emails.
- 5) Portion of data set included emails containing double byte character. These include emails which have been collected over the past few years.

About Intradyn

Intradyn[™], a privately held company, was founded in 2001 and created its first product in 2003. Intradyn[™] had a vision of creating a next-generation disk-based network backup and archiving appliance that could solve three common problems: no assurance of successful backup, unacceptably slow retrieval, and restore failure. In 2004, Intradyn[™] introduced a first-of-its-kind email archiving appliance for small to midsized businesses.

Today, Intradyn[™] is a recognized leader in e-Discovery and archiving markets, producing leading edge products for businesses of all sizes. In addition, Intradyn[™] licenses its technology to leading technology companies in their vertical markets who wish to private label. The company has a seasoned management team and skilled developers with proven track records in information technology development and industry expertise.

www.lntradyn.com 1355 Mendota Heights Road, Mendota Heights, MN 55120



Sales Phone: +1 (800) 284-4156 General Phone: +1 (651) 203-4600



General Fax: +1 (651) 203-4607

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