OPSWAT.

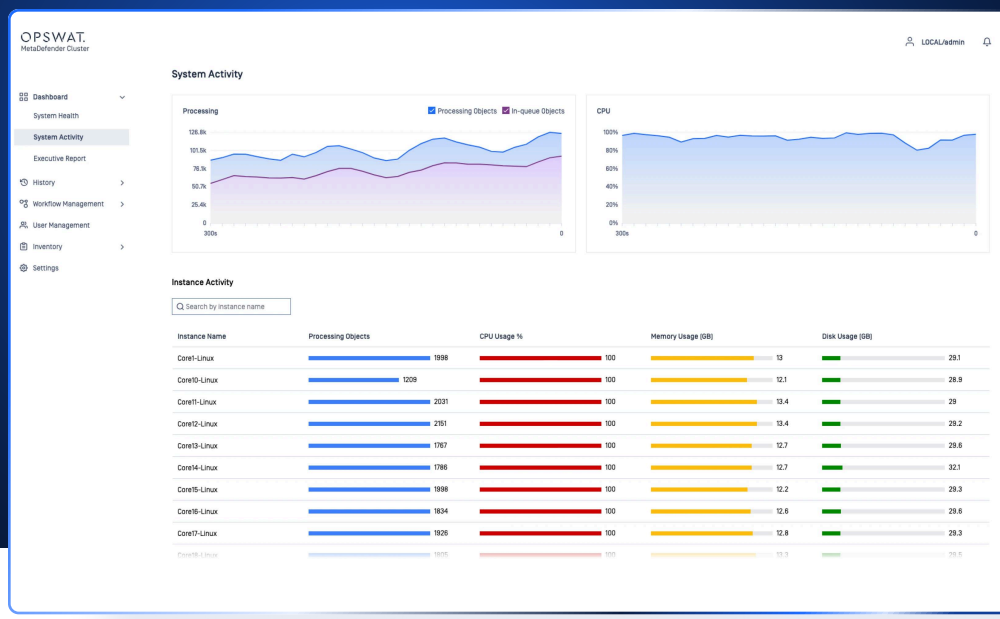
DATASHEET

METADEFENDER

Cluster

MetaDefender Cluster scales file scanning for high-volume enterprises, eliminating bottlenecks in email gateways, file portals, and ICS environments.

In threat-heavy sectors, downtime or slowdowns expose risks. MetaDefender Cluster supports resilient, linear-scaling multi-engine detection with centralized control.



Key Benefits

- Horizontal scaling via additional Core instances for high-throughput peaks
- Automated failover mechanisms avoiding single points of failure
- Parallel archive file processing
- Unified monitoring and management across worker nodes

Key Features

- Centralized Control Center
- Real-time scanning workflows
- Resilient, Distributed Architecture
- Configurable scanning policies and workflows

Architecture & Scalability

- Distributed file scanning architecture
- Horizontal scaling of scanning capacity via additional Core instances
- RabbitMQ-based workload distribution across Core workers
- Redis to store in-progress results for rapid retrieval
- Parallel processing of large and nested archives to reduce scan times
- Fault-tolerant, disruption-resistant design
- High Availability support across critical components

Use Cases

- Email/file gateways
- Secure upload portals for OT/ICS
- Enterprise file transfers with complex archives

METADEFENDER CLUSTER

Performance Highlights

Scenario	Instance
High-volume non-archive files (2M files - 800 files/sec)	Higher throughput and reduced processing time compared to load balancing, with lower CPU utilization
Medium archive processing (400 files)	Improved throughput and faster completion times compared to load balancing
Mixed workload (non-archive + archive files)	Improved throughput and reduced processing time compared to load balancing
Large archive files (CAB routing scenarios)	Significantly higher throughput and dramatically reduced processing time compared to load balancing scenarios

For detailed benchmark configurations and full performance results, scan QR code or visit here.

Deployment

MetaDefender Cluster architecture supports:

- On-premises infrastructure
- Cloud platforms (AWS/Azure/GCP)
- Hybrid environments
- Containerized

Integrations

- MetaDefender Storage Security
- Kiosk
- MFT
- ICAP/Email Gateways

Technical Specs

AWS Reference Hardware

Component	Instance	CPU/RAM	Disk (IOPS/Throughput/Size)
Core Workers	c5.2xlarge	8/16 GB	gp3 3000/125 MB/s/100 GB
File Storage	c5n.4xlarge	16/32 GB	gp3 12000/1000 MB/s/150 GB
API Gateway	c5n.4xlarge	4/8 GB	gp3 3000/256 MB/s/100 GB
PostgreSQL/RabbitMQ	c5.xlarge	4/8 GB	gp3 10000/550 MB/s/100 GB (PG); 3000/125/80 GB (RMQ)
Redis	c5.xlarge	4/32 GB	gp3 3000/125/80 GB

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