

 magnolia

Advanced Security

Take the security of your custom Magnolia Cloud solution and your data to the next level

Magnolia Advanced Security Solutions

At Magnolia, we incorporate a high standard of security practices into both our application and our cloud platform.

If you're a Magnolia PaaS customer operating a business with extensive security needs, our Advanced Security features help take the security of your custom Magnolia solution and data to the level your business requires.

This brief describes the advanced features that you can select to bolster security across your website, data, and operations, as well as to enhance security testing and management of security-related information.

With a complete, end-to-end security solution, you gain peace of mind and can focus on your strategic business goals instead of operational concerns.

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Advanced CDN Security

Using a content delivery network (CDN) solution helps ensure that your websites can deliver fast, personalized, and secure experiences to your customers globally.

If you're using Fastly, our default CDN on Magnolia Cloud, you can now bring more of its security features and benefits into your custom Magnolia solution. These include:

DDoS Mitigation and Protection with Advanced Edge Rate Limiting

Your Magnolia PaaS subscription already comes with distributed denial-of-service (DDoS) mitigation and protection for Layers 3, 4, and 7 delivered by Fastly. These automatically block highly disruptive Layer 3 or 4 DDoS attacks, and inspect and block more complex Layer 7 attacks.

Advanced Security enables advanced edge rate limiting as an additional security layer in front of our Fastly Next-Gen WAF (Web Application Firewall). With advanced edge rate limiting, you can limit the capacity of your website to serve the areas you expect your traffic to come from, while limiting or excluding access from other areas. As a result, you can ensure that your website is fully available for your regular visitors while remaining blocked for malicious traffic.

WAF Custom Rule Set

Your Magnolia PaaS subscription includes a ModSecurity Core Rule Set for your web application firewall. The rule set provides the most common rules that protect a website from malicious requests.

With Advanced Security, you have the possibility to customize your WAF Rule Set and implement your own logic for handling requests in the WAF. If your website includes some very specific applications, or if you have specific security weaknesses, you can create custom rules to overcome those potential security risks.

Advanced Bot Protection

Magnolia Advanced Security detects and mitigates anomalous and velocity-based bot attacks based on request header and body anomalies, traffic source reputation, and other criteria. Volumetric bot-generated traffic is mitigated via advanced rate limiting to both detect and prevent automated behavior against your applications and APIs.



Fastly Managed Security Service

For even more peace of mind, you can opt for a fully managed security service from Fastly. Especially in the case of a big scale attack, Fastly's experience in handling such attacks from first signs to reaction can make all the difference in successfully fighting such security threats.

24/7 proactive monitoring enables you to focus on your core business and reduce risk. You can rest assured knowing that Fastly's security experts continuously monitor for threats and take proactive actions to mitigate attacks.

You also get access to comprehensive reporting which provides actionable, tracked insights that continuously improve your security posture.

	Response Security Service	Managed Security Service
24/7/365 attach support, 15-minute response SLA	✓	✓
Direct security phone line and chat channel	✓	✓
Configuration assistance	✓	✓
Access to security expert	✓	✓
24/7/365 proactive monitoring w/ threat hunting		✓
Post-event reports		✓
Monthly security reports and reviews		✓
Readiness drills		✓



Advanced Data Security

As data is moving more and more across multi-cloud, distributed cloud, or even hybrid cloud environments, immediate measures must be taken to mitigate cloud data security challenges.

Encryption, intrusion monitoring, and vulnerability scanning are proactive measures to help retain control over your data and reduce data security risks. Our Advanced Security features enhance the security of your data through:

Encryption Key Storage

To ensure data is confidentially stored with cloud providers, Magnolia Advanced Security extends the usage of existing key management services (KMS) from strong-default standards up to customer-managed keys. This capability covers any storage-based data, such as disks, file shares, or object storage being encrypted at rest.

You can hold and manage your own data encryption keys, in accordance with a Zero Trust approach to security. Magnolia still needs access to the keys to encrypt or decrypt data, but you have full control over the keys, with the ability to change them or even turn off Magnolia's access if desired.

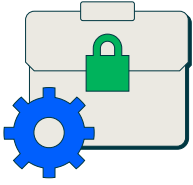
Active Threat Monitoring

Magnolia Advanced Security implements Intruder Detection System (IDS) and Intruder Prevention System (IPS) services that automatically detect and even actively suppress occurring anomalies on the cluster on demand. The platform has all required tools to address outbreaks, perform forensic analysis, and prevent similar threat patterns from becoming active in the future.

Vulnerability Scanning

To prevent outdated, vulnerable, or malicious packages and libraries from being pushed to your production cluster, Magnolia Advanced Security can scan your code in an isolated pipeline environment while the code is being processed. This capability also helps developers replace vulnerable components quickly by suggesting alternative versions.

The system scans what is already deployed at runtime, as well as what is newly introduced at the build pipeline. With this approach, your productive code is continuously scanned and kept in a healthy state.



Advanced Operational Security

To improve threat detection and prevention within organizations' operations, Magnolia Advanced Security offers a set of features that increase protection of sensitive information across asset management tools, public-facing websites, and cluster communications.

Malware Detection

With Magnolia Advanced Security, uploads of assets or zip files to the Magnolia DAM are scanned and checked for malware. This feature will be extended to cover assets stored in connected DAM systems as well. If malware is detected, you receive instant feedback.

This capability provides an extra layer of protection in case an employee computer was hacked and helps prevent damage from intentional malicious behavior.

Web Defacement Protection

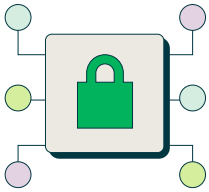
Magnolia Advanced Security offers web defacement protection that monitors public-facing websites 24/7 to detect possible website defacements or hacks.

The solution will monitor your site (for example, your top most visited 10 pages), take snapshots of suspicious changes, and it even allows you to revert to a previous version if your public facing website underwent an attack. You are notified via email if an attack occurs or if your website changes.

Secure Cluster Communication Traffic

In addition to securing every outgoing service communication, Magnolia Advanced Security can leverage existing concepts to secure and encrypt communication inside the clusters. This capability uses a service mesh to encrypt network traffic and API communication by using mTLS by default, even if this is not considered in the application itself or in a development state (pod to pod).

With this feature, you maximize the security of your clusters, so that if any system within an environment is hacked, the other pieces of the environment are not affected.



Advanced Security Testing

To provide the most secure environment for our customers, the Magnolia PaaS platform (PaaS) regularly undergoes security testing, including but not limited to penetration testing executed by Compass Security Group, an independent third-party security vendor.

With Advanced Security, you can also opt in for an external penetration test of your own dedicated PaaS infrastructure.

External Penetration Test

During the penetration test, we analyze your exposed infrastructure and search for vulnerabilities and possible direct attack vectors by first scanning your system and services, and then manually testing each of them. The identified attack vectors will be exploited and proved out to identify and measure risks associated with the exploitation of the target's attack surface. We then provide a detailed report with suggestions to improve or fix possible vulnerabilities detected.

The penetration tests are performed in partnership with our longtime and highly trusted security partner Compass Security Group.

Overview of Standard Security vs. Advanced Security


Magnolia Advanced Security brings a wealth of additional features on top of what's included in the standard Magnolia PaaS subscription. A quick overview of the advanced security capabilities is reflected in the table below.

Area of concern	Feature	Base Subscription	Advanced Security
CDN Security	DDoS Mitigation and Protection	Layer 3, 4 & 7	Layer 3, 4 & 7 + advanced edge rate limiting
	WAF	Default Rule Set	Custom Rule Set
	Bot Protection Service	Excluded	Included
Data Security	Encryption Key Storage	Key owned by cloud vendor or Magnolia	Key owned by customer
	Active Threat Monitoring	Excluded	Included
	Vulnerability Scanning	Docker image scanning	Isolated pipeline environment
Operational Security	Malware Detection	Excluded	Included with ClamAV installation
	Web Defacement Protection	Excluded	Included
	Secure Cluster Communication Traffic	Excluded	Included
Security Testing	External Penetration Test	Optional	Included

Magnolia Advanced Security Packages at a Glance

You can opt for the full Magnolia Advanced Security solution or select individual packages, depending on your security needs.

Advanced CDN Security	DDoS mitigation & protection	Bot protection service
	DDoS observer dashboard	Advanced edge rate limiting
	WAF custom rule set	

 Managed Services	24/7/365 Security Service	24/7/365 proactive monitoring with threat hunting
	24/7/365 attack support with 15-minute response SLA	Post-event reports
	Direct security phone line and chat channel	Monthly security reports and reviews
	Access to security expert	Readiness drills

Advanced Data Security	Encryption key storage	Active threat monitoring
	Vulnerability scanning	Additional resources (node)

Advanced Operational Security	Malware detection	Secure cluster communication traffic
	Web defacement protection	

Advanced Security Testing	External penetration test	Kickoff & scoping
	Conducting of pen test	Pen test report

Get started with Magnolia

Navigating the wide range of digital experience technologies available today can be difficult. Even after exploring different solution types, deployment options, editorial experiences, development approaches, and delivery methods, you need to carefully weigh the benefits and drawbacks of each choice for your marketing and technology teams.

Magnolia helps you capitalize on the best technologies for your business while overcoming key limitations. You gain a truly composable, modular platform with essential building blocks for creating a robust DXP plus the flexibility for change. Magnolia also fosters real collaboration, enabling multiple teams to work together using a single, unified interface.

Importantly, Magnolia is committed to your success. Instead of remaining invisible to a large DXP vendor or attempting to build a DXP all on your own, you can work closely with our digital experience architects to help you realize your ideal business outcomes.



Lukas Reck
Product Manager
Magnolia PaaS

Ready to learn more?

[Book a demo with us](#)