

Sitefinity Cloud

SOLUTION OVERVIEW

Carry the Business Forward with Sitefinity Cloud

Progress® Sitefinity® Cloud is a complete digital experience platform (DXP) that enables IT to reduce infrastructure management overhead and Marketing to engage all of their audiences across a broad array of digital touchpoints. Providing a globally available, fully managed infrastructure, Sitefinity Cloud is optimized for security, performance and scalability. Developers can easily write, manage and deploy custom code as well as integrate with various external cloud services and data sources.



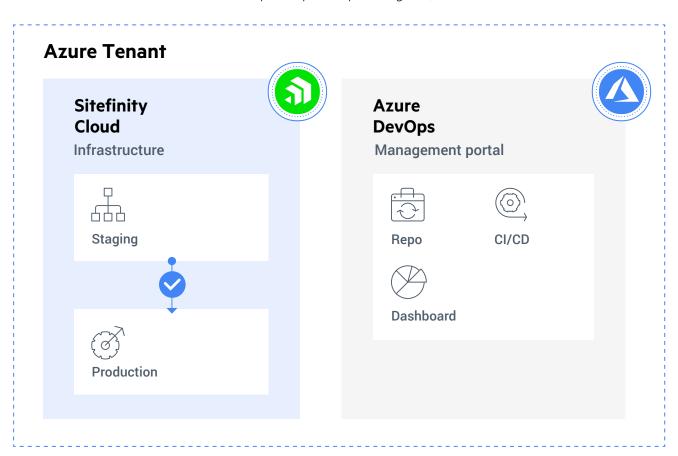
Sitefinity Cloud Platform Overview

As a cloud-native CMS hosted by Progress on Microsoft Azure, the Sitefinity Cloud Platform-as-a-Service (PaaS) offering provides hosting and infrastructure resources that may not be feasible in an on-premises environment. This enables digital agencies and system integrators to offload the burden of infrastructure management and place greater focus on developing engaging modern digital experiences. While organizations can capitalize on this key competitive advantage to boost marketer productivity and business agility through platform extensibility and improved operational efficiency.

Technology Stack

Sitefinity Cloud leverages Azure components and offers a set of administration, management, security and monitoring tools to provide operational control over staging and production environments. A high level of flexibility to develop, promote and maintain complex digital experiences is an added gain.

With Sitefinity Cloud, businesses get the tooling they need to manage the entire development lifecycle of multisite and multichannel digital experiences, with access to the code repository and a preconfigured, state-of-the-art CI/CD.





Full support for headless scenarios is available via the Sitefinity Cloud REST API, offering CRUD operations and content preview in all lifecycle stages. This enables partners and customers to leverage Sitefinity Cloud to implement SaaS for content management (Content-as-a-Service) as well. Because they aren't involved with any code-based extensions, business users are effectively working with a SaaS application.

The full web content management system can be customized for different verticals, with the widgets toolbox and system configurations enabling businesses to bring industry-specific use cases to life. The platform can be extended to accommodate vertical-specific requirements, custom content types, data connectivity and business logic.

Infrastructure

Global Data Center Availability

Sitefinity Cloud is available in multiple regions across North America, Europe and Asia Pacific to offer the scale needed to bring experiences closer to users around the world.

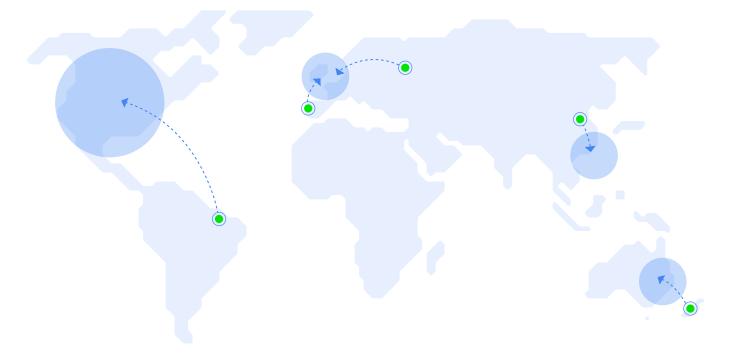




Content Delivery Network

In today's digital world, speed matters more than ever before. The Azure Content Delivery Network (CDN) helps reduce load times, save bandwidth and improve the speed and responsiveness of websites, mobile apps and omnichannel experiences.

Sitefinity Cloud works seamlessly with Azure CDN and utilizes multiple providers such as Akamai and Verizon to increase capacity during sudden traffic spikes and heavy loads. On top of that, Sitefinity Cloud helps mitigate threats and protect against denial-of-service attacks with robust security while advanced analytics provide insights by tracking how your customers engage with your content.



Autoscaling

Sitefinity Cloud dynamically scales the performance of production nodes to meet ever-changing business demands and maximize website responsiveness. Autoscaling rules are managed by the Progress DevOps team and multiple metrics are continuously monitored and tuned to meet momentary traffic spikes and seasonal variations.

Customers can choose from multiple tiers and request additional capacity as needed. Staging and live environments as well as pageview add-ons are available to meet custom requirements and demands.

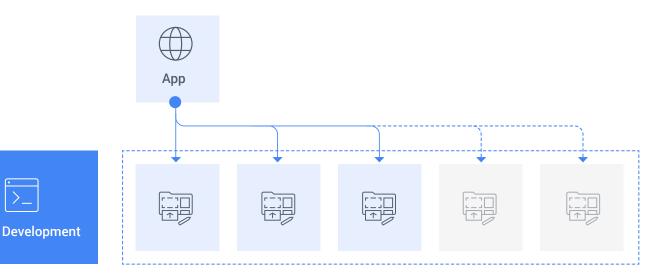


Resiliency

By minimizing the burden of infrastructure management, Sitefinity Cloud enables organizations to build digital experiences with confidence—they no longer have to worry about availability, disaster recovery and data backup.

• High Availability

With access to Azure's infrastructure and global network, Sitefinity Cloud aims to deliver high service level availability of 99.9%. This helps to eliminate loss of revenue from server crashes and outages—especially for high traffic websites and applications.



• Disaster Recovery and Backup

Sitefinity Cloud leverages Azure Site Recovery, combined with geo-redundant storage, to ensure better disaster recovery execution. Sitefinity Cloud can help protect against bad code, data corruption and accidental deletion by offering mechanisms to restore the entire solution to the last known working state. This risk can also be mitigated by leveraging CI/CD and Git workflows. At a CMS level, permissions, content publishing workflows, version history and the built-in audit module help protect and recover from content management mistakes.





Performance

Sitefinity Cloud leverages autoscaling and globally available infrastructure to deliver consistent digital experiences across multiple regions. Multi-tier plans help maximize the use of the underlying infrastructure and deliver optimal performance. Compared to an on-premises installation, customers can expect notable performance gains in multiple real-world scenarios by following best practices and leveraging the latest version of Sitefinity CMS.

1. General web test using homepage (with output cache). Executed three consecutive times and averaged the results.

	Self-Hosted	Sitefinity Cloud	Improvement
Start render	2.5s	1.5s	Reduced time by 40% (1.66x)
Total time	11s	8s	Reduced time by 27% (1.37x)

2. Requesting the homepage (without output cache). Executed 20 consecutive requests and averaged the response time.

Test Location	Self-Hosted	Sitefinity Cloud	Improvement
US East	4.85s	2.02s	Reduced response time by 58% (almost 2.5x)
EU North	6.67s	3.39s	Reduced response time by 49% (almost 2x)

3. CDN performance improvement. Requesting a large image.

	Self-Hosted	Sitefinity Cloud	Improvement
Start render	0.6s	0.3s	Reduced time by 50% (2x)
Total time	0.9s	0.6s	Reduced time by 30% (1.5x)

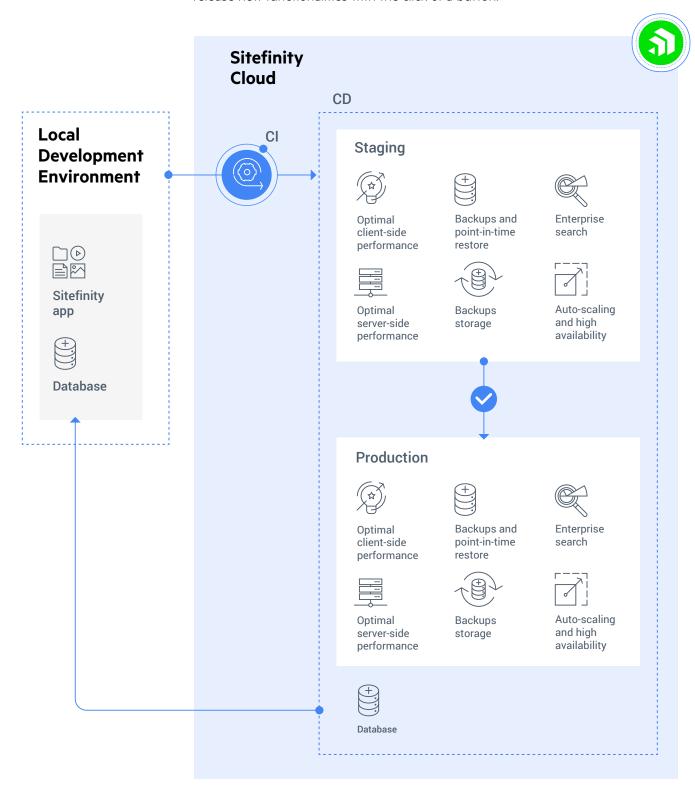


Development

Sitefinity Cloud delivers a set of modern development services and workflows that enable the IT organization to plan, collaborate, test and ship faster.

Continuous Integration and Continuous Delivery (CI/CD)

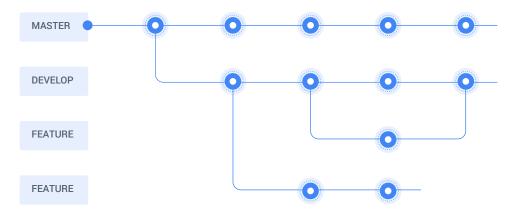
Sitefinity Cloud enables developers to put modern DevOps practices to good use, with built-in CI/CD capabilities that provide them with the ability to create, test and release new functionalities with the click of a button.





Git Repository

Delivers an isolated environment for codebase changes. The built-in Git Repository enables teams to capitalize on Git's branching capabilities so they can easily commit and review code to foster better compliance, security and collaboration with other team members. The four-eyes release principle, which ensures at least two people review all code changes, can also be utilized as a controlling mechanism to facilitate delegation, increase transparency and improve quality and governance.



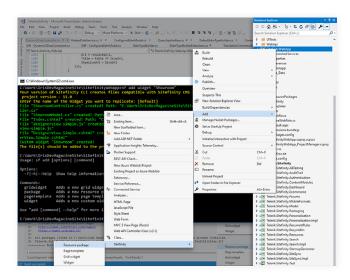
Platform Extensibility

Provides the tools and mechanisms to leverage a lightweight, highly testable MVC framework with the extensibility and scalability of Sitefinity CMS. This enables developers to reduce development cycles, improve performance and deliver new features with ease.

- Access to content and data using OData, with plug-and-play compatibility with Salesforce.com.
- An API-first approach to development of product functionality throughout the organization. This enables organizations to build reusable services for omnichannel delivery.
- Codeless integration with REST APIs by leveraging patented technology that automatically infers metadata and relationships between data entities.
- Pre-built integrations with all popular relational, NoSQL, Big Data and SaaS applications and data silos.

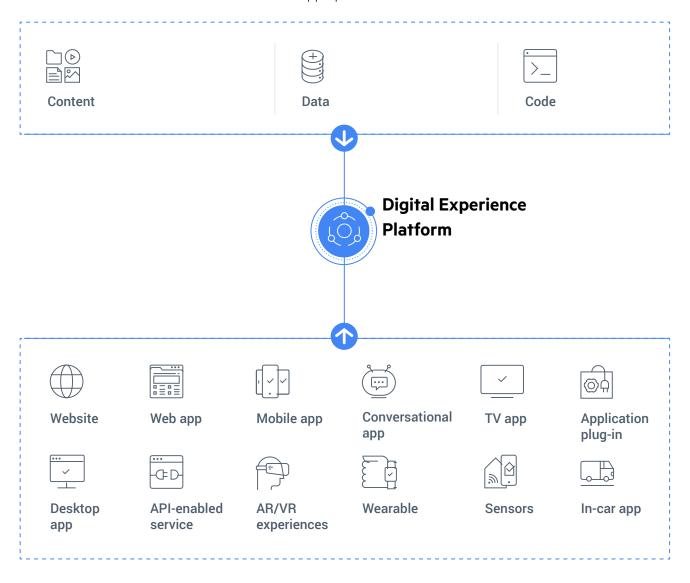


- Progress supplies frameworks and connectors to most of the top BI, ETL and analytics vendors on the market today. Many Digital Experience Platform (DXP) vendors rely on Progress to power their platforms.
- Progress is an Open Data committee member and adopter of industry standard API protocols such as OData, ODBC, JDBC and ADO as well as standard REST.





Sitefinity Cloud supports headless delivery of content via secure OData CRUD APIs. These content services provide documents and rich media that are contextualized for each digital channel based on classification. The platform can deliver world-class content and digital experiences not only via desktop and responsive mobile websites powered by its own renderer, but also via Single Page Applications (SPA), mobile apps and other devices. Built-in support for Accelerated Mobile Pages (AMP) enables efficient delivery of web content on smartphones and via Google search. Built-in support for OpenGraph helps customize reusable content in the form appropriate for various social networks.





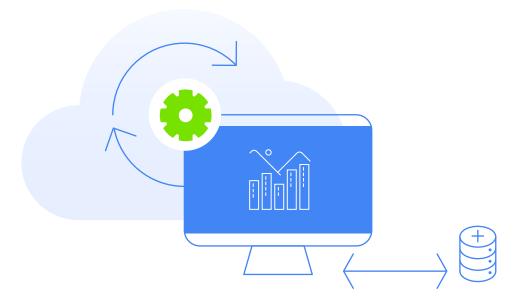
Data Connectivity and Integration

Sitefinity Cloud offers a powerful set of out-of-the-box integrations with third-party business applications and tools for connecting to various data sources.

Data Connectivity

Cloud and on-premises data connectivity solutions across Relational, NoSQL, Big Data and SaaS data sources are available for integration with complex digital experiences. This helps enterprises deliver analytics, integration and data management at any scale.

Progress DataDirect® <u>Hybrid Data Pipeline</u> (HDP) is a hybrid connectivity solution that can be run in the cloud or on-premises. With HDP, organizations can access data no matter where it resides, which helps to eliminate data silos and better integrate data with their digital experiences. Connectivity is available through a standard interface—SQL (ODBC, JDBC) or REST (OData 2, OData 4).



CRM Connectors

Enable integrations with market-leading CRM, ERP and marketing automation systems. The platform comes with a bi-directional Salesforce connector that supports the synchronization of contacts, leads and form responses with the CRM.

Progress is also a leader in data connectivity, supporting the platform integration with other CRMs such as SugarCRM, Oracle Sales Cloud and more. Furthermore, businesses can connect to several other third-party CRMs like Microsoft Dynamics CRM via integration solutions provided by Progress partners like Pavliks, Spinbox and SmoothFusion.



When it comes to collaboration and document management, the SharePoint (on-premises and cloud) and Office 365 two-way connector supports editing and synchronization of documents, digital assets and lists with items. Additionally, customer implementations commonly use rich APIs and extensibility points to deliver custom integration with digital asset management (DAM) software such as Adobe, Widen, Canto, WebDAM, Bynder, etc.

Sitefinity Cloud provides dedicated connectors for best-of-breed external marketing automation systems, including Marketo, Eloqua, HubSpot and MailChimp (open-source).

Partner Integrations

In addition to the built-in connectors, many Sitefinity partners provide multiple ecosystem integrations of their own, delivering best-of-breed solutions such as a .NET ecommerce platform covering various B2B and B2C scenarios.

Popular integrations include <u>Ucommerce</u>, <u>ROC Commerce</u> and <u>Smarter Commerce</u> (for JD Edwards) and HawkSearch. Through its extensibility, Sitefinity Cloud can also be integrated with various business process management platforms. Progress Corticon® can be integrated as well to enable digital decisioning management across the organization.





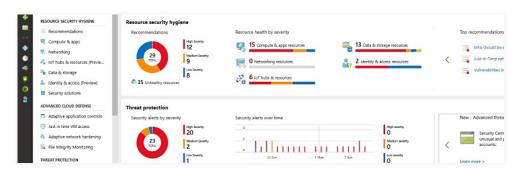


Security and Compliance

Sitefinity Cloud delivers advanced multi-layered endpoint and application-level threat protection to help safeguard data and streamline compliance.

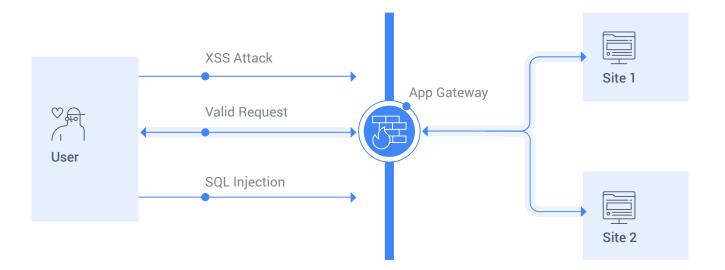
Endpoint Security

Utilizes endpoint protection and continuous assessment of staging and production environments to provide insights and recommendation to help tighten security.



Web Application Firewall

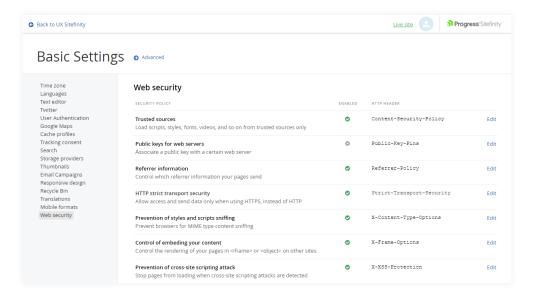
Leverages simplified security management tools to help protect against threats and intrusions. The Web Application Firewall (WAF) can react to security threats faster by centrally patching known vulnerabilities.





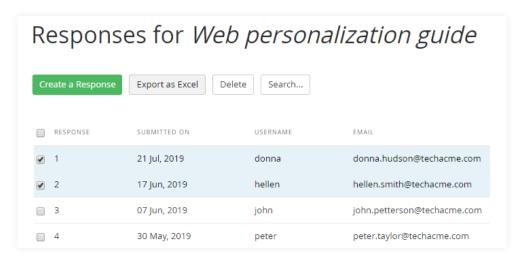
Web Security Module

The built-in Sitefinity Web Security Module enables IT administrators to configure HTTP security headers, redirect and referrer validation and protect against cross-site scripting (XSS), click jacking, code injection or man-in-the-middle attacks and content sniffing.



GDPR Compliance and Data Obfuscation

Enable organizations to address GDPR requirements and other data privacy laws by leveraging field mapping and personal information removal workflows, and data obfuscation during database restore to staging environment.





Azure Active Directory B2B

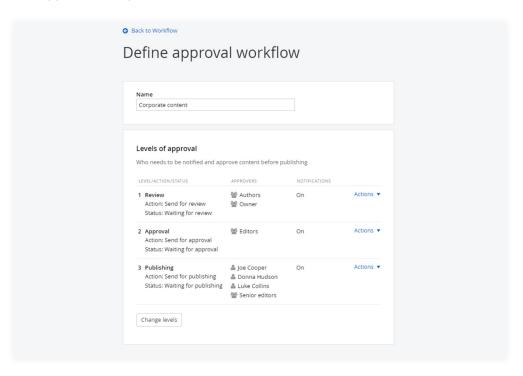
Leverages Azure Active Directory B2B to help IT administrators simplify user management and maintain access to applications and data and resources.



Development and Content Management Workflows

Simplifies DevOps operations and content governance initiatives with workflows for coding and content creation. This helps to boost process compliance and brand consistency.

- Workflows for developers: Everyone can contribute and commit code, but only one person can push to live.
- Workflows for content: Everyone can create content, but (if configured) only approvers can publish.



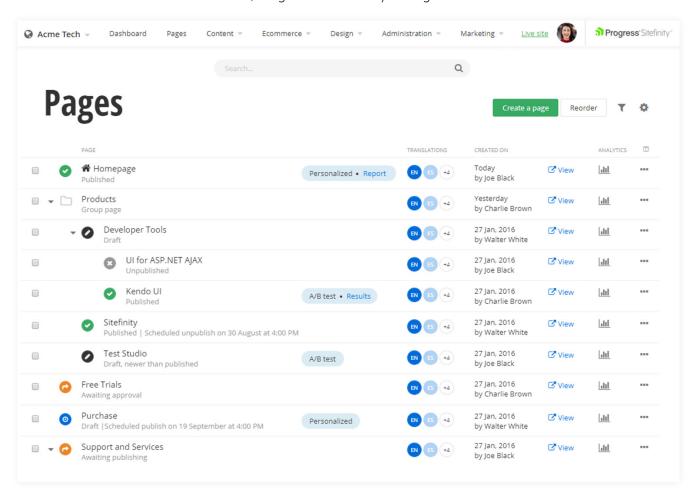


Content Management

Sitefinity Cloud enables marketers to create and manage future-proof digital experiences, promote brand consistency, and improve user engagement across sites, channels and touchpoints.

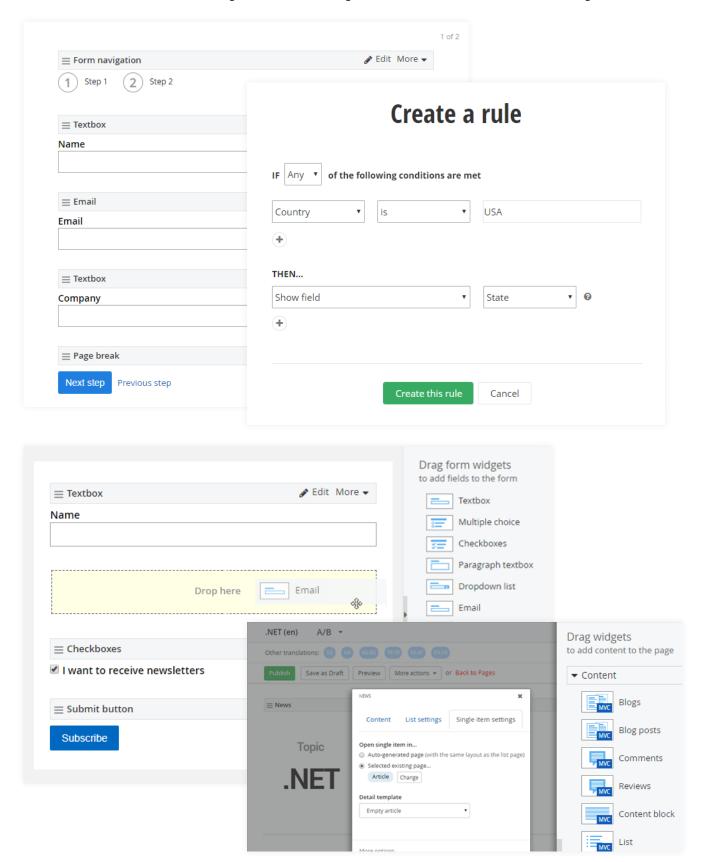
Content Management

Sitefinity Cloud leverages the award-winning Sitefinity content management platform to empower marketers with the ability to elevate their digital experiences while minimizing their reliance on IT. Sitefinity delivers a simple yet powerful user interface and supports hierarchical content organization, custom content types, document, images and taxonomy management tools.

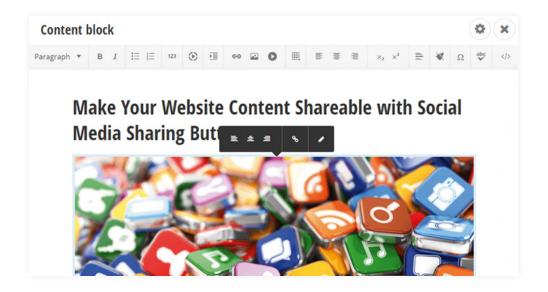




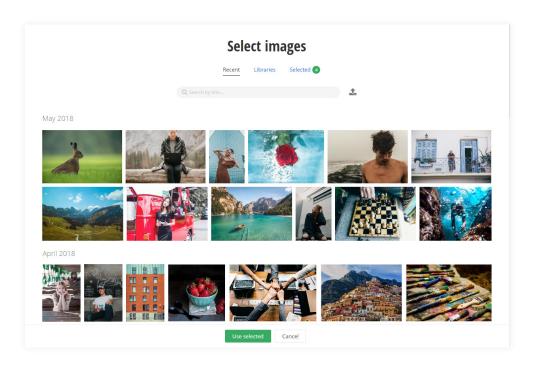
An Intuitive drag-and-drop interface facilitates quick and easy creation of new pages, design layouts, templates and rule-based forms. Content creators can manage multisite, multilingual and multichannel content from a single interface.





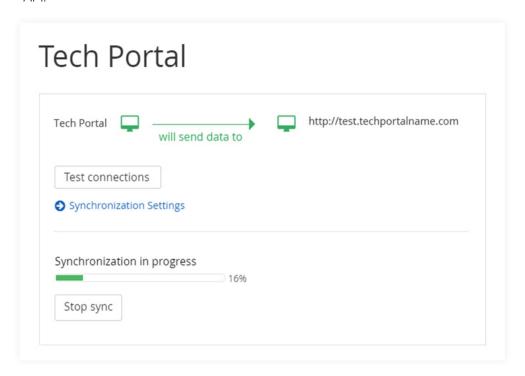


A built-in media library module enables business users to store and access different types of digital assets, including images, graphics, PDFs, text files, videos and audio. The media library module has full version control management and change tracking, as well as full support for tagging and translation. Custom implementations use APIs and extensibility points for integration with third-party DAM software such as Adobe, Widen, Canto, WebDAM, etc. Our technology partner, ScientiaMobile, provides an integration for its solution that delivers optimized image assets for websites and other delivery channels.





Forms data and content can be mapped to a contact profile or sent to external CRM and marketing automation systems, such as Salesforce, HubSpot and Eloqua. Form responses can also be exported for further analysis and use via a file or an API.



A headless API enables any content to be accessed from any digital channel, including the ability to present content within websites, portals, microapps and chat experiences. The API is used by third-party products to incorporate content in other digital efforts.

Content synchronization between environments can be configured to enable authors to independently publish changes, including media and template dependencies, to the live environment without help from IT.

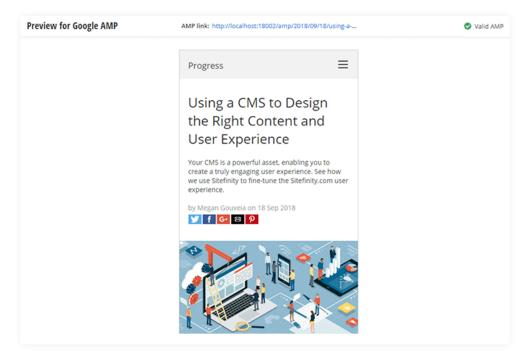
Digital and Content Marketing

Sitefinity Cloud is able to import data from virtually any system, which can then be analyzed using Al/machine learning (ML) analytics capabilities. SQL-based access is provided to any API with zero-coding required. This includes the ability to automatically sample and normalize, while creating metadata and the ability to provide the data cleansing required to support analytics processing requirements.

This approach supports the ability to leverage data from purpose-built social media marketing tools such as Sprout Social, HubSpot, Sprinklr and Hootsuite. Based on individual KPIs, marketers can track hashtag usage, engagements,



comments, likes, clicks, reactions, etc. to monitor overall social media platform success. Demographic information is also available (although varied) based on individual social media platform – e.g. LinkedIn tracks job role, while Facebook tracks interests. This information is useful to craft targeted campaigns towards customer groups for higher success rates. By taking this approach, social listening can be extended to all channels, including social media like Twitter and Facebook.



In essence, marketers are provided a toolset to optimize efforts by analyzing customer segmentations in addition to campaign and content performance. These tools are tied to KPIs that demonstrate value and suggest measures for improvement. Marketers can also map and analyze the customer journey by accumulating data across channels and systems to pinpoint touchpoints and interactions with a high probability for conversion.



Analytics, Personalization and A/B testing

Sitefinity Cloud's built-in Machine Learning algorithms power advanced analytics to help marketers make informed decisions and drive personalization and optimization.

Analytics

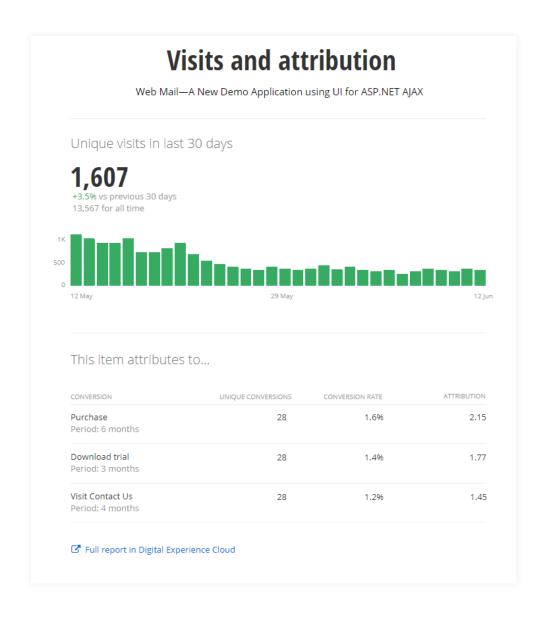
Sitefinity Cloud incorporates a variety of content and experience analytics tools while also providing interfaces for other popular third-party CRM and marketing automation systems (such as Salesforce, Marketo, HubSpot or Eloqua) for bidirectional data sharing. Available visitor and contact data is used to build composite visitor profiles that combine individual customer demographic properties with a behavior activity record.

To optimize marketing efforts, the system identifies the most frequented touchpoints across a visitor segment and generates ML-based "best next experience" recommendations with predicted probabilities for increased conversion. Based on the recommendations, marketers can tie campaigns to business goals and better allocate and target their digital assets, touchpoints and channels. Moreover, they are able to track and measure the value and ROI of campaign efforts.

Audience segmentation and detailed customer journey logs help marketers better understand the behavior and interactions of website visitors with their business. By integrating data from external systems, such as CRMs and marketing automation systems, marketers can build a holistic 360-degree view of their visitors.

The platform collects behavior data for both anonymous and known users and is able to merge previously recorded anonymous records from multiple channels once the users identify themselves with a form fill or a login. The platform collects data on content performance, calculates relevance of content to specified goals (i.e. conversions) and produces aggregated metrics on website traffic, as well as splits based on implemented personalization. Sitefinity Cloud also uses Google Analytics APIs to provide familiar GA views directly in the CMS context.





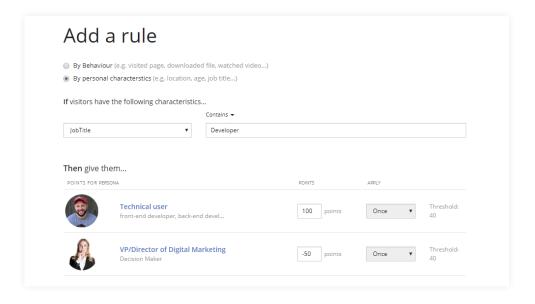
Sitefinity Cloud provides rich ML-based tools to help users identify high-impact touchpoints with the greatest conversion probability across multiple visitor journeys. Additionally, it identifies the most frequently occurring touchpoints across a visitor segment for specific conversions.

Rule-based lead scoring facilitates visitor segmentation into multiple lead categories, which can then be used for content personalization segmented according to lead scores.



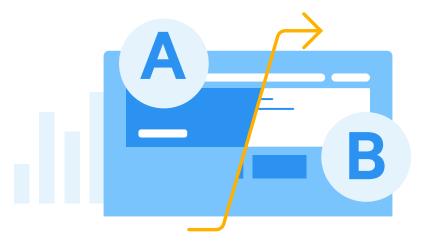
Personalization

Sitefinity Cloud implements personalization of content and presentation of web pages based on integrated or third-party analytics. Site variations can be implemented for numerous audience segments, which can refer to a specific defined persona or a lead score within a lead type. Lead score is identified on internal lead score or values from marketing automation systems, e.g. Marketo or Pardot.



Conversion Rates Optimization

The platform provides automation for creating A/B two- and multivariate test experiments measuring both positive and negative metrics for each variant and determining a winner with statistical significance. Built-in capabilities are used to implement A/B and multivariate tests using variations of website pages, including content and template variations. Version ranking reports are provided in real-time. The test completes at the achievement of 95% statistical significance, with one-click publishing of the winning version.



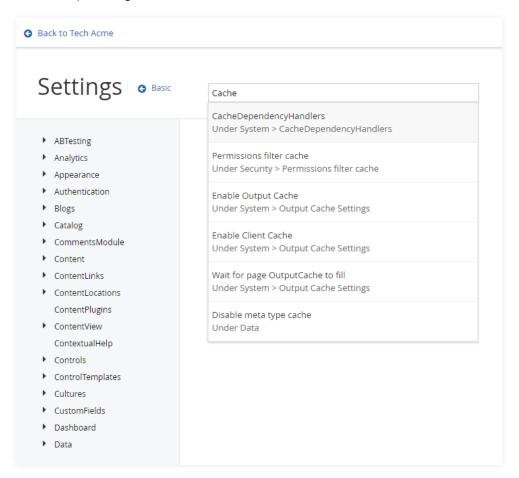


Experience Management

Sitefinity Cloud enables you to swiftly scale your business with its simplified architecture, while maintaining your ability to support complex, large-scale digital projects.

Administration and Configuration

Sitefinity Cloud enables administrators to gain high visibility into the development process through detailed reports and metrics on the information they care about most. Users, resources and services are centrally managed through a single admin back-end providing all the tools to control the entire installation.



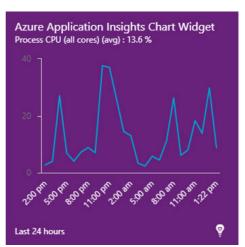
Monitoring

Sitefinity Cloud utilizes the diverse monitors available in Azure. The autoscaling infrastructure implements on-demand up/down horizontal scaling based on measured load and resource utilization in order to optimize load balancing depending on varying website traffic and activity. The additional application instances can be seamlessly brought online and connected to Sitefinity Distributed Output Cache for minimal warmup times.



For administrators, the Sitefinity Cloud Management Portal provides predefined and customizable dashboards that display key application and infrastructure metrics. The Application Metrics dashboard covers website usage, availability and response times. The Deployment dashboard visually represents project deployments and pipeline status summary for staging and production environments. Finally, customers can further analyze website and application metrics with Azure Application Insights.





Product Tiers

Leverage high-availability cloud infrastructure that scales as requirements change and business grows.

Fast, Highly Available and Ready to Scale

Sitefinity Cloud is available in multiple tiers to deliver the necessary flexibility for building and deploying advanced digital experiences. Add-ons, such as partner integrations, connectors or pageviews, are available upon request.

	Tier 1	Tier 2	Tier 3
General			
Included Domains	1	1	1
Pageviews per Month, up to	1,000,000	5,000,000	30,000,000
Included Management Portal Users	10	20	30
Supported Number of Websites ¹	100	1000	1000
Uptime Service Level Availability (SLA)	99.9%	99.9%	99.9%
Support			
Managed Service	✓	~	✓
Support	Based on edition	Based on edition	Based on edition
Availability Management	24/7	24/7	24/7
Root Cause Analysis	8/5	8/5	8/5
Software Maintenance	✓	~	✓
Security			
SSL Certificate	✓	~	✓
SSL Encryption	✓	✓	✓
Automated OS Security Updates	~	~	✓
DDoS Mitigation	✓	~	✓
Virtual Network	✓	✓	✓
DB Backup	~	~	✓
Geo-replicated DB	~	~	✓
DB Backup Retention (days)	35	35	35
Monitoring			
Application Monitoring	✓	~	✓
Health Monitoring	✓	~	✓
Management Portal			
Source Control Repository	✓	✓	✓
Continuous Integration	✓	✓	✓
Continuous Delivery	✓	✓	✓
Dashboards	~	~	~
Wiki	✓	✓	✓



Production Environment			
Auto-Scaling	~	~	~
Load Balancing	✓	✓	✓
vCores	1	2	4
RAM	3.5GB	7GB	14GB
CDN	✓	✓	✓
Search Service	✓	✓	✓
Distributed Cache	✓	✓	✓
Dedicated Instance for content management ²			~
Staging Environment			
Auto-Scaling	✓	✓	✓
Load Balancing	✓	✓	✓
vCores	1	2	4
RAM	3.5GB	7GB	14GB
Search Service	✓	✓	✓
Distributed Cache	✓	✓	✓

- 1. This is a performance guidance metric based on the allocated capacity of the Tier. Sitefinity website in this usage is defined as a website created using the Sitefinity multisite feature. Due to the flexibility of Sitefinity multisite, these separate sites may be created as separate domains, subdomains or in subfolders. Domain and subdomain licensing restrictions still apply to any sites created this way.
- 2. High performance deployment template with separate instances for web presentation and content creation/management in the production environment.

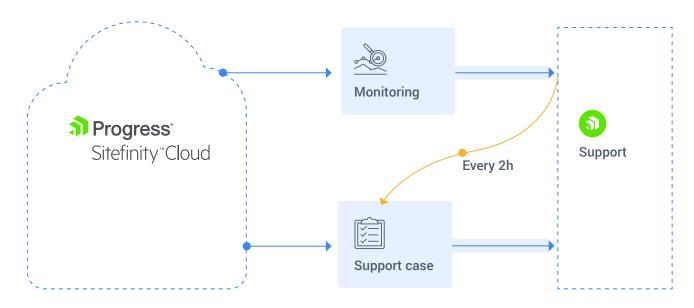
Support

Sitefinity CMS support services provide round-the-clock customer support and maintenance services, handled by a dedicated in-house team that works closely with the Sitefinity product development and engineering teams.

Cloud support includes 24/7 monitoring and recovery for outages and performance issues. After that, standard support terms appropriate for the purchased edition are applied.



On top of your Enterprise Support package, Progress offers an optional upgrade to a personalized support service to proactively resolve issues, prevent downtime and quickly deliver business results. You get a designated Customer Success Manager (CSM) as a point-of-contact to work with you and monitor the status of your overall support communication. The CSM helps ensure your project is successful by working with the support team to provide priority assistance and proactively prevent unplanned downtime that could negatively impact your application projects and business.





About Progress

Progress (NASDAQ: PRGS) offers the leading platform for developing and deploying strategic business applications. We enable customers and partners to deliver modern, high-impact digital experiences with a fraction of the effort, time and cost. Progress offers powerful tools for easily building adaptive user experiences across any type of device or touchpoint, award-winning machine learning that enables cognitive capabilities to be a part of any application, the flexibility of a serverless cloud to deploy modern apps, business rules, web content management, plus leading data connectivity technology. Over 1,700 independent software vendors, 100,000 enterprise customers, and two million developers rely on Progress to power their applications. Learn about Progress at www.progress.com or +1-800-477-6473.

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