



What's new in Sitecore 9.1

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MVP

Technology 2018





Software Release Strategy & Cadence

Software Release



- + Major or dot release
- + 6 month cadence (Spring, Fall)
- + New features and functionality

Update Release



- + Update or patch release
- + Frequency as needed to support customers
- + Contains only fixes, not major features
- + Will not include breaking changes



Headless & JSS

The content in a headless CMS is considered “pure”, because it has no presentation layer attached, and content can be reused for display on any device; website, mobile, tablet, Internet of Things devices, smart watches, etc.

With Sitecore 9.1 release Sitecore **JavaScript Services** (JSS) will be introduced to the general public after a very successful preview program where we had 4 releases and got a lot of valuable feedback from our community.

Headless & JSS



What is
headless?

- "API-only" approach to WCM
- Front-end developers to access "pure content"
- Marketers have limited control over the content presentation
- Personalization and Analytics are integrated separately



How does Sitecore
support this?

- Support has always been there!
- Content separated from presentation
- Sitecore SSC Web API
- Sitecore Experience Accelerator Data Modelling & JSON Rendering
- NEW - Sitecore JavaScript Services
- Commerce services are supported through an API and accessed through JSS



What is
Sitecore JSS?

- Complete toolkit for modern JavaScript developers
- Build full-fledged solutions (SPAs, PWA, websites)
- By being completely unplugged
- Deploy in a physically decoupled manner and run headlessly
- "Code-first", beyond APIs



Fully integrated
with XP?

- Automated app import
- Same codebase – Sitecore runs JavaScript
- Full Experience Platform capabilities:



- Experience Editor
- Personalization and testing
- Tracking & analytics



Headless & JSS

JSS provides a native developer experience to consume Sitecore content for those working in the extremely popular React, Angular, and Vue frameworks.

What is Sitecore JSS?

JSS is a complete SDK for JavaScript developers allowing to build full-fledged modern solutions using Sitecore and JavaScript and being completely disconnected during development and deploy to any platform in a headless configuration with full Experience Platform capability preserved.

Sitecore Accelerator Framework (SxA)

Providing reusable, templated UX layouts and components to help you get up and running quickly.

The Sitecore Experience Accelerator (SXA) reduces your time to market by allowing content teams to design, assembly, and deploy web content across channels with fewer development resources.



Sitecore Accelerator Framework (SxA)

- Creation of WCAG 2.0 compatible websites
- Wireframe and grayscale Modes
- Cross-site linking
- Per-site views
- Rendering variant component embedding





Platform Enhancements

- 3rd party updates (including: NET Framework, Newtonsoft. JSON, Telerik and Solr.Net)
- Content search improvements to native indexing of Word and PDF files available in Azure and OnPrem
- Support of Solr 7.2.1
- Helix enhancements, including the addition of Foundation, Feature, Project folders to the content tree
- Sitecore Helix configuration patch folders
- Item inheritance enhancements
- Content delivery enhancements
- Experience Management-related functionality without xDB and Analytics
- Scalability & infrastructure improvements





Platform Enhancements

	9.0.2 XM	9.1 XM only
Cold start of CM to Launch Pad	31.63	16.63
Number of files in bin	529	296
Content Editor opened first time	24.01	4.21
Experience Editor opened first time	4.82	3.01



Sitecore Forms Enhancements

Forms has some exciting new features such as conditions and pre-filling of fields. Pre-filling allows to set a data-provider for a field and pre-fill that field with data. Conditions allows to build forms that respond to user input and only show relevant questions.

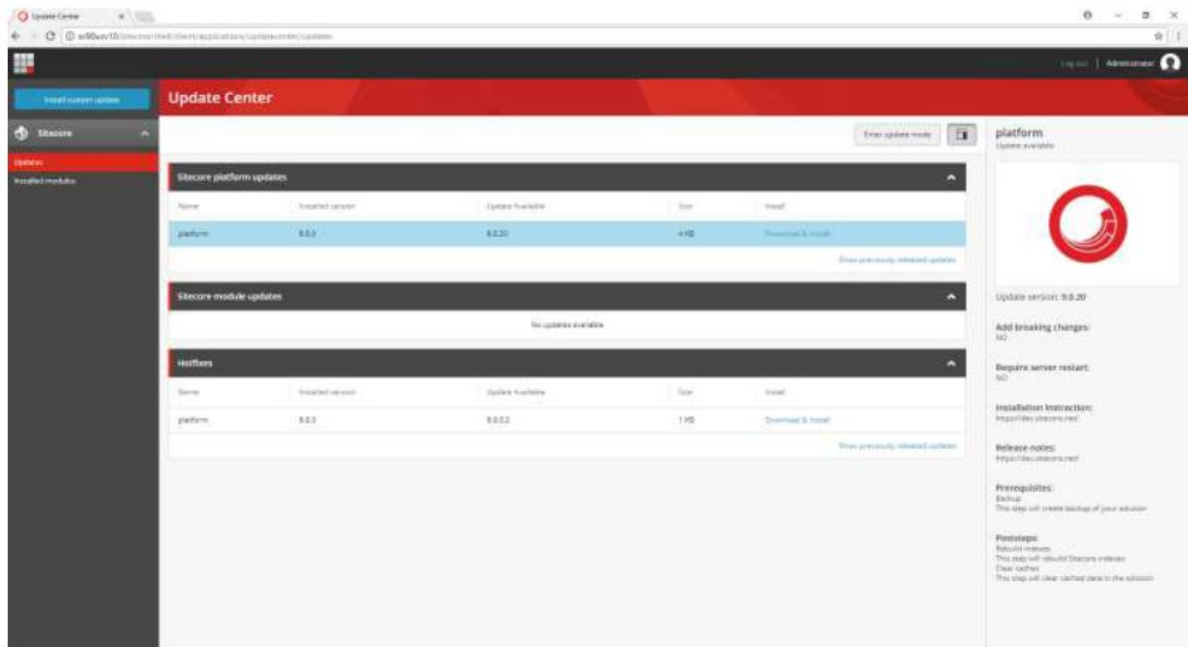
This screenshot shows the 'Edit conditions' dialog box in Sitecore Forms. It is used to define conditional logic for form fields. The dialog has a title bar with 'Edit conditions' and standard window controls. The main area is divided into 'IF' and 'THEN' sections. In the 'IF' section, a dropdown menu is set to 'Product Usage Radio Button List', followed by a comparison operator 'is' and a value 'No'. The 'THEN' section contains two actions: 'Product Usage Section' set to 'hide' and 'Submit Button' set to 'show'. There are 'Add condition' and 'Add' buttons on the right side of the dialog. At the bottom, there are 'OK' and 'Cancel' buttons.This screenshot shows a 'Product survey' form in Sitecore Forms. The form has a dark header with navigation links: 'Home', 'About', 'Services', and 'Contact'. The main content area is titled 'Product survey' and includes a sub-header 'Home > Product survey'. The first question is 'What products have you used?', with radio button options for 'Blue car', 'Red car', and 'Black car'. Below this, there are two text input fields for feedback: 'What should we improve on our blue car?' and 'What should we improve on our red car?'. At the bottom, there are 'Back' and 'Next' buttons.



Enhancing the existing - Update Center

Now refactored to be a Speak 3 application with the ability to download and install update packages. Connects to an external service to retrieve available packages for the Sitecore Platform version and is able to download the exact chosen update or the latest available.

During the Update Package installation, the Update Center can switch Sitecore instance to Update mode which will disable Modules, Customer and Environment configuration layers.



Building the future



Sitecore Identity



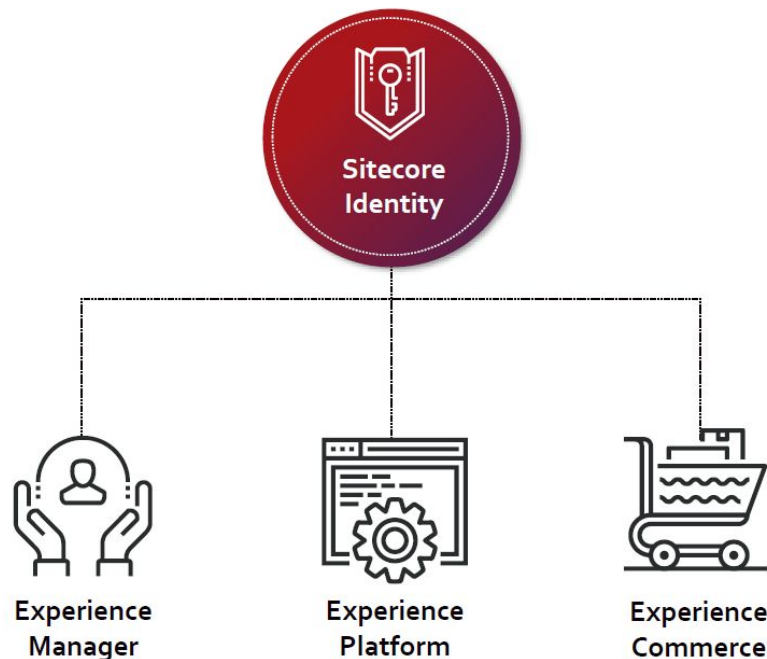
IdentityServer4





Sitecore Identity

- Responsible for handling the authentication of users
- Provides Single Sign On using standard federated authentication protocols
- Based on Identity Server4
- Compatible with old Membership
- Already used as the authentication mechanism for Commerce
- From 9.1 it is the default login mechanism across the platform

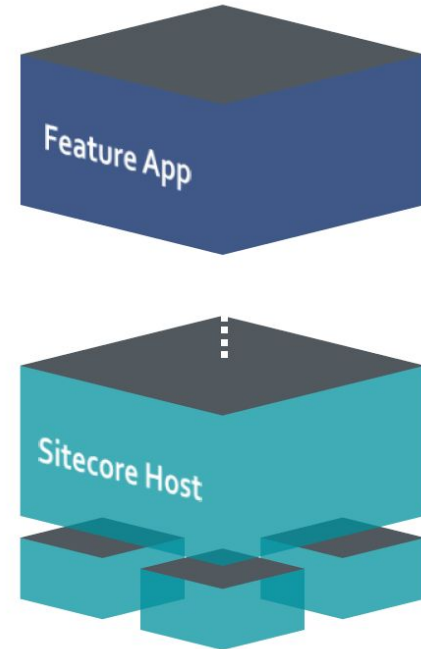




Sitecore Host

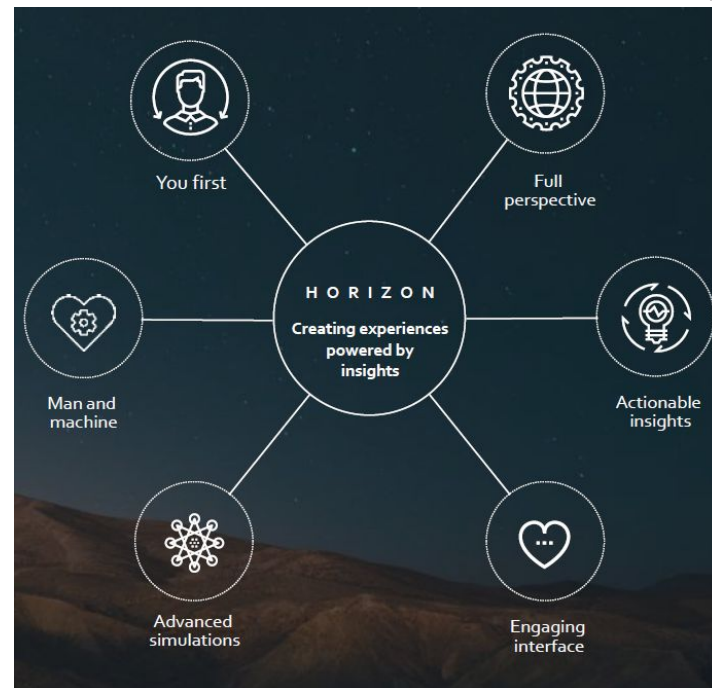


- Sitecore is going to extract the services in Sitecore.kernel into individual independent services i.e. caching, logging, messaging etc. and make them single responsibility.
- Lean common runtime for Sitecore NET Core instances
- Can host web/console apps and windows services
- Facilitates crosscutting concerns (e.g. logging configuration)
- Functionality added via plugin mechanism (built-in or dynamically using Nuget)
- Powering Apps and Services in 9.1—Horizon, Universal Tracker and Sitecore Identity

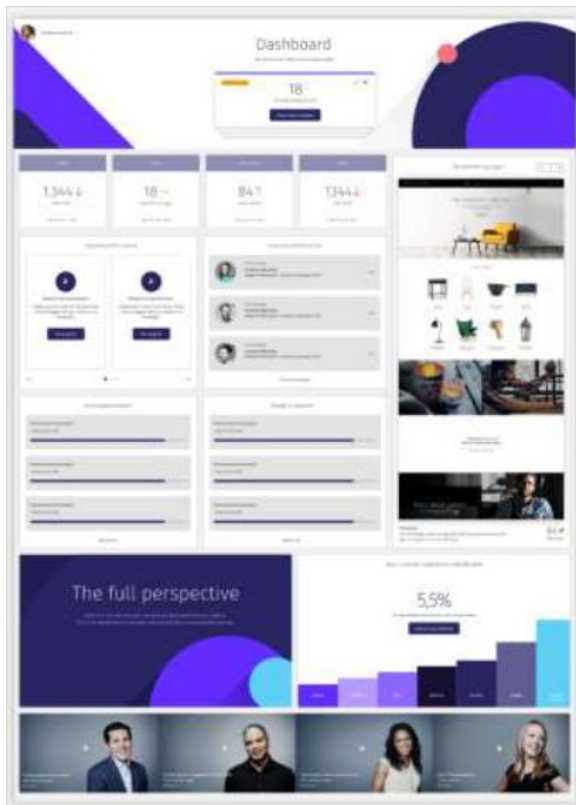


Introducing to new UI - Horizon

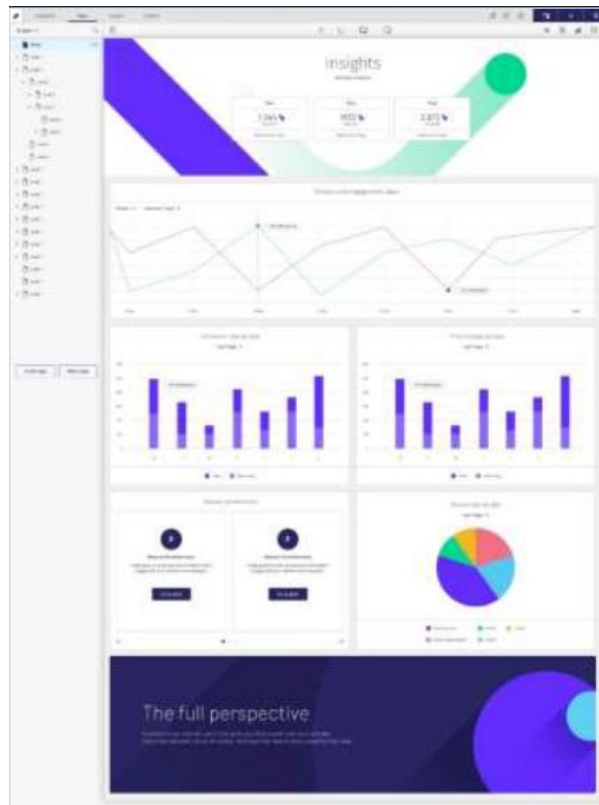
- Horizon is the next generation experience for content management
- Reduces time to value significantly with focus on the need of tomorrow's user profiles
- Out of the box features for easy adoption and utilization of the full Sitecore potential
- Providing a user interface that is just as powerful and innovative as the engine behind



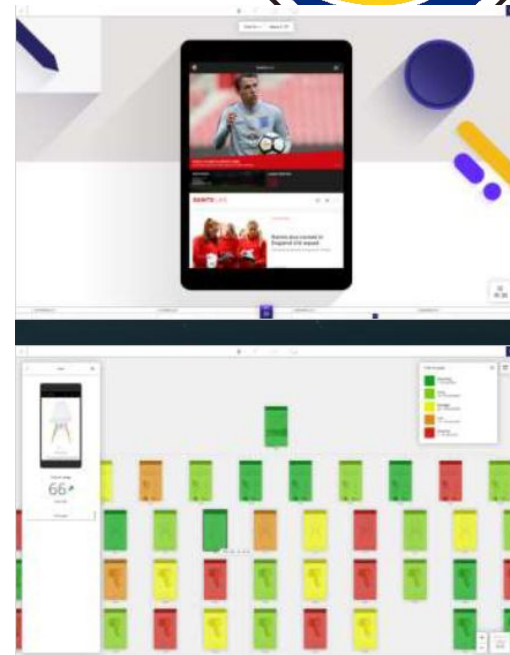
Introducing to new UI - Horizon



Site dashboard



Page insights & improvements



Site perspective with insights

Experience Platform: Sitecore Cortex

Harness your Experience Data with the power of Machine Learning

Generate real-time insights of customer data

Scalable Data-Processing platform designed to integrate with the xDB and Machine Learning workers





Experience Platform: Sitecore Cortex

- Use existing experience data in the xDB
- Fully pluggable architecture
- Process and train models of data at scale with the Sitecore Cortex Data Processing Engine
- Extend the Data Processing Engine to process existing XDB customers data with specific ML processors



Sitecore Cortex - Content Tagging

- Sitecore Cortex automates the task of content tagging for both internal and external search.
- Integration with Open Calais comes with an out-of-the-box taxonomy. You do not need to train your own model!
- Content tagging creates information taxonomies used to provide better SEO rankings, content experiences and search results on your website.
- Sitecore Cortex uses a configurable provider framework for content tagging which allows you to bring your own Natural Language Provider.

Universal Tracker

Collect all events during interactions on all devices

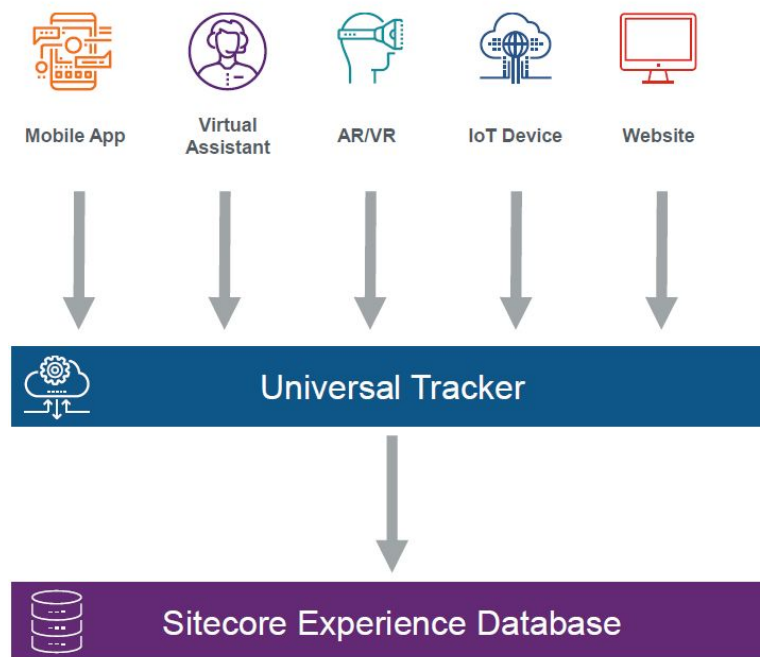
Scalable tracking service based on web API technology designed for full freedom of collecting events as they occur real-time on any device





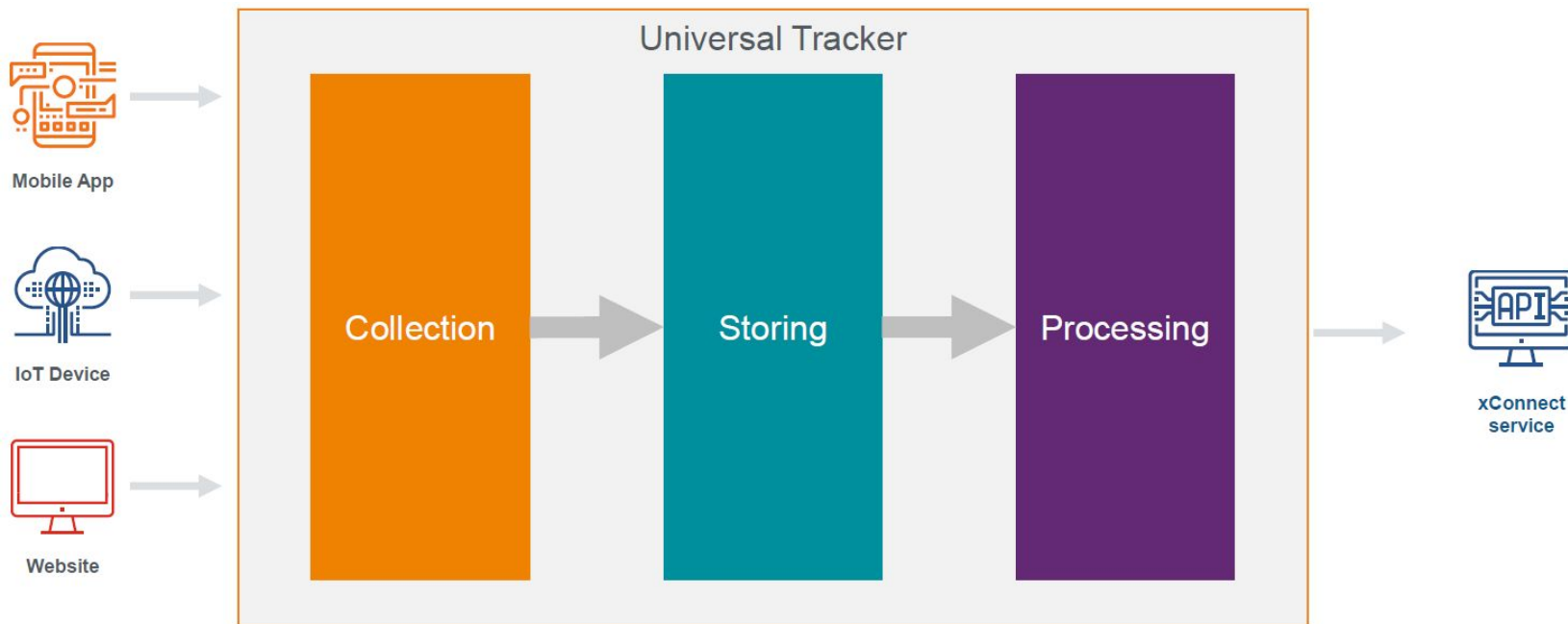
Universal Tracker

- Tracking service based on Web/REST API technology
- Track interactions as they're occurring
- Process interactions before they go into the Experience Database
- Plugin architecture
- .NET Core



Universal Tracker

The Universal Tracker uses different stages in the whole process



Universal Tracker



→ Headless API for xDB collection

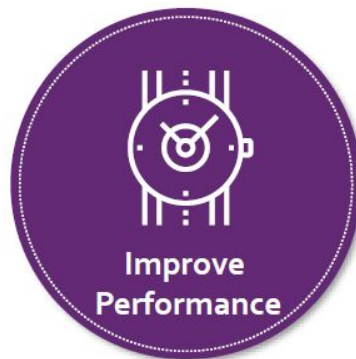
→ Updated Sitecore Xamarin API



Sitecore 9.1 - Cloud areas of focus



Azure Search and Solr
Application Insights and Log Analytics



Azure CDN Support
XM only packages
Revised Azure Resource Sizings



App Service Environments (ASEv2)
Azure Application Gateway WAF
Azure Security Center



Azure Search and Solr

- Azure Search is optional in ARM & WDPs as of 9.0.2
- ARM Templates will not create Azure Search resource if Solr connection string passed in
- WDPs accept a “Search Provider” flag (Azure or Solr)
- Setup a Solr instance ahead of time and pass connection string to setup
- You still need to setup Solr cores manually



Application Insights

- Application Insights currently available in 6 DCs with 6 planned
- There are only 4 geographies that do not have App Insights
- With 9.1 you can disable App Insights during setup and use Diagnostic Logs and/or Log Analytics instead



Log Analytics & Alerts

- Application Insights only gives you visibility into Sitecore
- Log Analytics gives you the ability to monitor Sitecore + Infrastructure in once place
- With Log Analytics + Alerts you can create complicated Alerts such as:
 - Page response time > 10 sec + Web DB DTU @ 100% = Do Something
- For 9.1 SAT will generate Log Analytics ARM Templates with Dashboards & Alerts

Data Center support before 9.1



Data Center support after 9.1





Azure CDN Support

- CDNs reduce load on the Content Delivery server (~40% of requests)
- Help to deliver content to customers quicker
- For 9.1 Sitecore Media Library updated to better handle CDN integration
- For 9.1 ARM Templates updated to optionally setup Azure CDN instance



Experience Management (XM) only packages

- XM packages still bring XP resources along for the ride
- These extra resources add unnecessary performance tax
- The XM packages in 9.1 do not contain any XP resources
- Significantly faster cold start and delivery times
- Much smaller packages



Revised Azure Resource Sizings

- Habitat Home is an example of how we would like to see Sitecore sites built
- Follows Helix patterns, uses SXA, lots of content, personalization, commerce, etc.
- Internal performance testing will be updated to use Habitat home
- For PaaS we expect all sizes to be increased to Pv2



App Service Environments (ASEv2)

- Fully isolated and dedicated environment for securely running App Service apps
- Runs inside a VNet completely isolated from the internet
- Control over inbound and outbound application network traffic
- Create high-speed secure connections over VPNs to on-premises corporate resources.
- Recommended for highly regulated industries



Azure Application Gateway WAF

- A layer 7 load balancer enabling URL routing, SSL termination, session affinity, and more
- Web Application Firewall (WAF) feature provides centralized protection of web applications
- OWASP core rule sets 3.0 or 2.2.9 (includes SQL injection attacks, cross site scripting)
- Detection and Prevention mode for WAF
- Requires ASE to work with App Services



Azure Security Center

- Unified view of security across all of your Azure Resources
- Apply security policies to ensure compliance with security standards
- Continuously monitor the security of your machines, networks, and Azure services using built-in security assessments or create your own.
- Very limited Preview functionality with Shared App Services
- Greater support with App Service Environments (ASE)



Other things...



New Packages

- Sitecore JavaScript Services (JSS)
 - node.js is the only additional role
- Sitecore Publishing Service
 - Dedicated publishing role
- Experience Management (XM)
 - Identity Service
 - New Sitecore role working in combination with the CM
- Experience Platform (XP)
 - Cortex (Machine Learning)
 - Two new Sitecore roles working with Microsoft Machine Learning Server



So what's new for Cloud in 9.1?

New Data Centers and Services

Nearly all Azure data centers are supported

Azure CDN support

ARM templates to support new Microsoft pricing plans and App Server Environment (ASE)

Monitoring

Customers can disable Application Insights

Introducing Azure Log Analytics

Security

Web Application Firewall (WAF) support for CD

Azure SecurityCenter support

Search

Out-of-the-box Solr support

Azure Search support index time boosting and improved search with special symbols

SIF 2.0

New features:

- Ability to install all the prerequisites needed for your installation
- Developer workstation templates
- Uninstall support
- Remote distributed deployments
- On-premises equivalent of cloud





Sitecore 9.1 Developer Installation

The Prerequisites for Sitecore 9.1 are known

- Windows 2016 server or Windows 10
- IIS 10.0
- .Net Framework 4.7.1
- SQL Server 2016 SP2 or SQL Server 2017
- SQL Server 2014 is compatible with the XM Scaled topology
- Solr 7.2.1
- .Net Core 2.1 for the new Sitecore Identity server
- Sitecore Install Framework 2.0.0



Sitecore 9.1 Developer Installation

If want to install and play with Sitecore 9.1 while still working on 9.0.X project ?

- Install SIF 2.0 and keep 1.2.1 – you will need it for Sitecore 9.0.X. installation
- Install Solr 7.2.1 on a different port than 6.6.2 (you will need both instances)

Thank you!



Q&A