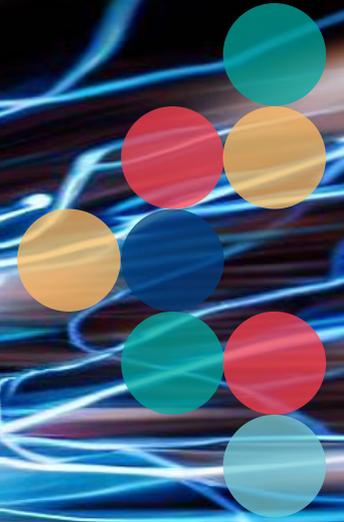




# Tridion Sites 10 Bootcamp Upgrade Unleashed

Ben Middleton

10 May 2023



# Agenda



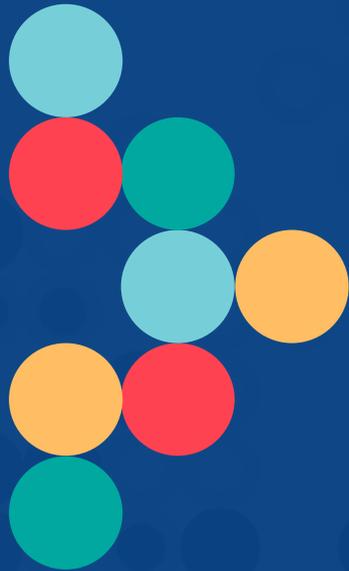
Support



OpenSearch

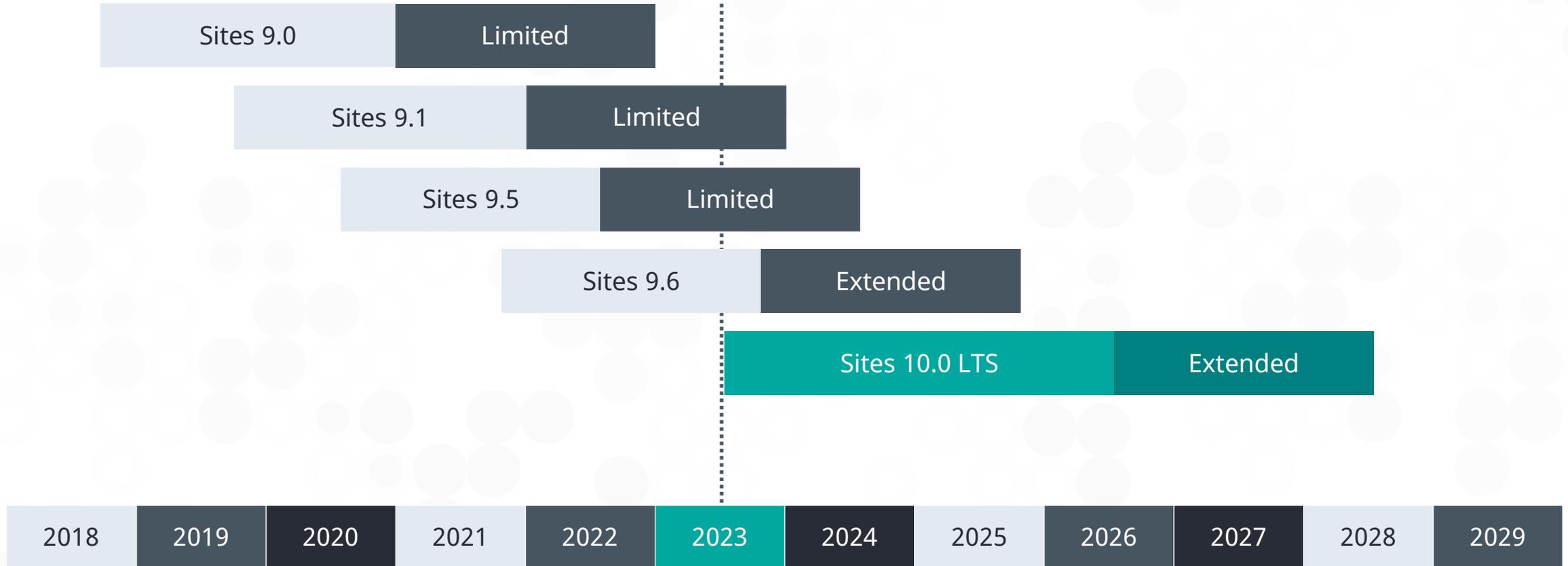


Platforms &  
Deprecations

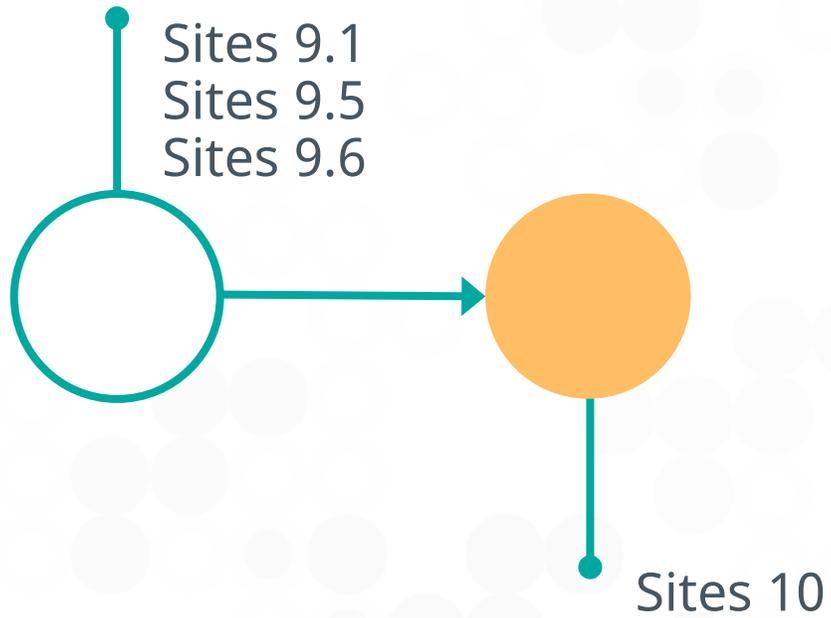


# Long Term Support

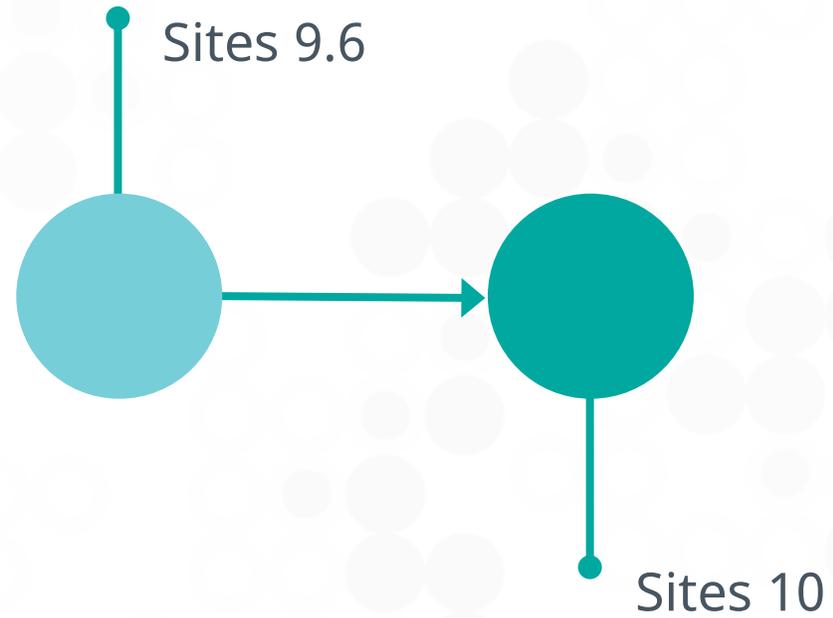
# Sites 10 Long Term Support (LTS)



# Upgrade paths



**All at once /  
Staged**



**Rolling**

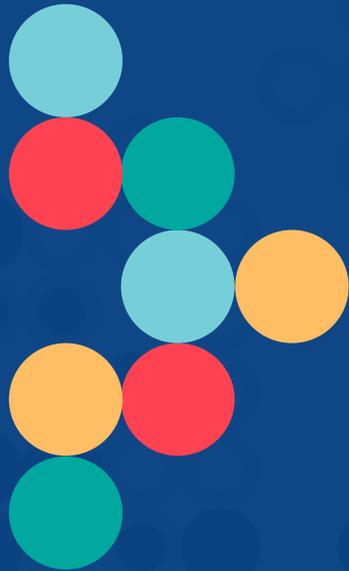
# VERACODE

## RWS Stage 1 Veracode Security Policy

Static Application Security Testing (SAST)

Software Composition Analysis (SCA)

Penetration Testing (AppCheck)



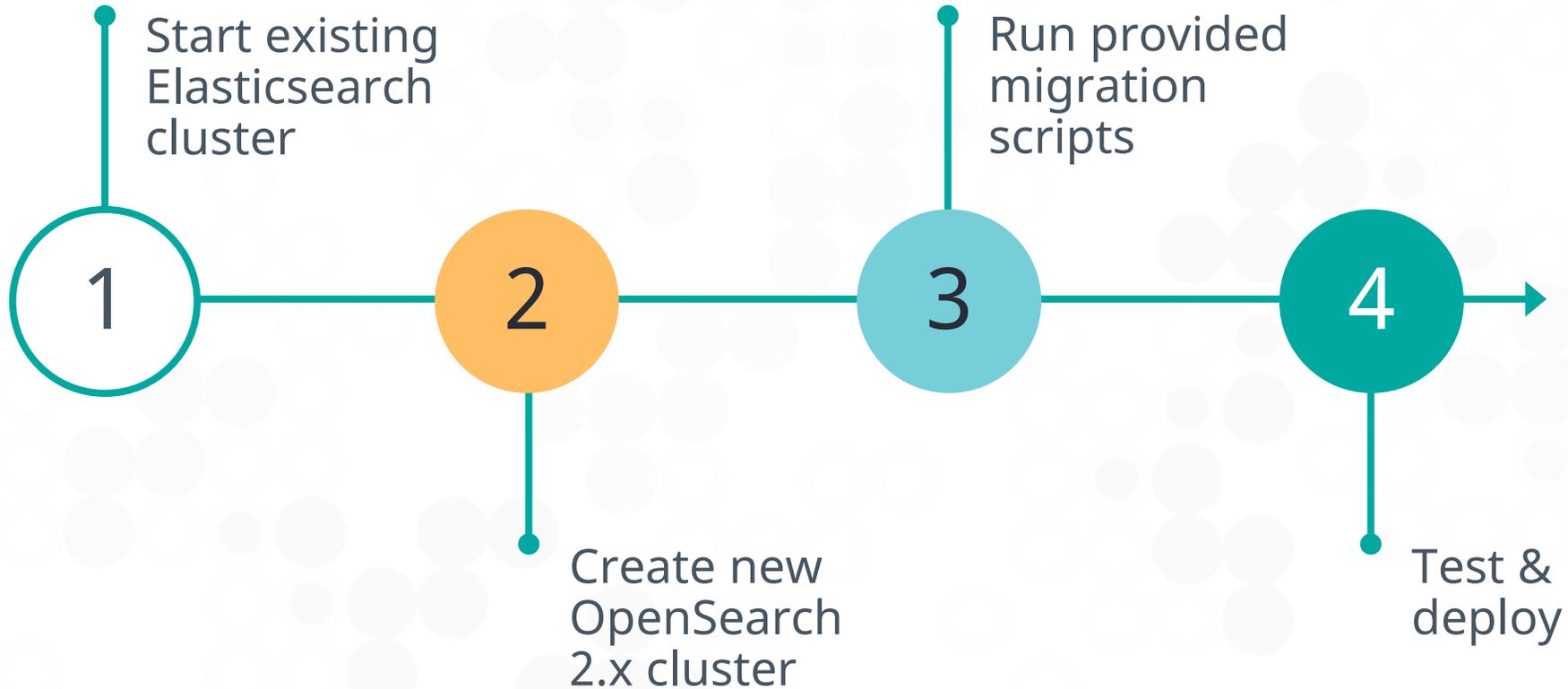
# OpenSearch

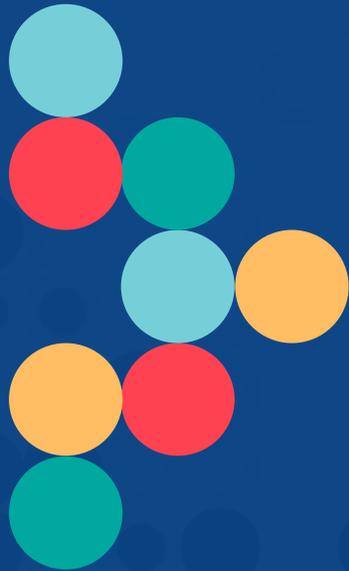
# OpenSearch

- Elastic changed the license on Elasticsearch, making it broadly incompatible with our customer's deployment requirements
- OpenSearch was forked from Elasticsearch 7.10 in 2021
- OpenSearch is Apache 2.0 licensed
- Many security features provided out-of-the-box
- Addition Machine Learning features available
- Sites 10.0 CD is supported against the latest OpenSearch 2.x release



# Elasticsearch > OpenSearch migration





# Platform support

# Platform Support – Database Systems

Platform	CM	CD
AWS RDS MSSQL 2017	*	*
AWS RDS MSSQL 2019	✓	✓
Microsoft Azure SQL Database	✓	✓
MS SQL Server 2017	X	X
MS SQL Server 2019	✓	✓
MS SQL Server 2022	✓	✓
Oracle Database 18c (18.3)	X	X
Oracle Database 19c (19.3)	✓	✓
Elasticsearch 7.10	X	X
OpenSearch 2.x		✓
Apache Ignite 2.15.0		✓

# Platform Support – Operating Systems

Platform	CM	CD
macOS Ventura (CME Browser OS)	✓	
Windows 8.1 (CME Browser OS)	X	
Windows 10 (CME Browser OS)	✓	
Windows 11 (CME Browser OS)	✓	
Windows Server 2016 (x64)	X	X
Windows Server 2019 (x64)	✓	✓
Windows Server 2022 (x64)	✓	✓
Red Hat Ent Linux 7 (latest minor)		X
Red Hat Ent Linux 8 (latest minor)		*
Red Hat Ent Linux 9 (latest minor)		✓

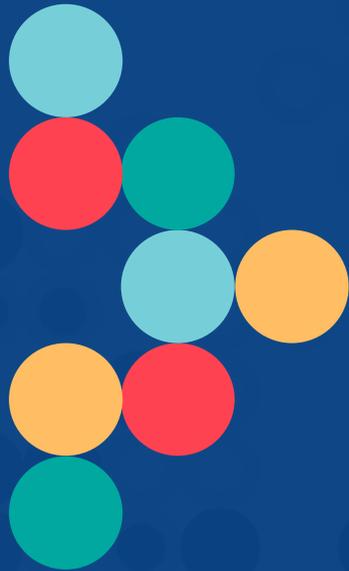
# Platform Support – Virtual Machines & Browsers

Platform	CM	CD
.NET Framework 4.8.x	✓	✓
.NET Core 6.0.x	✓	✓
Eclipse Temurin 11.0	X	X
Eclipse Temurin 17.0	✓	✓
Oracle JDK 11.0	X	X
Oracle JDK 17.0	✓	✓
Chrome	✓	
Firefox	✓	
Microsoft Internet Explorer 11 (CME/Add-on)	X	
Microsoft Edge	✓	
Safari	✓	

# Platform Support – Application Servers

Platform	CM	CD
Microsoft IIS 10.0	✓	✓
Apache Tomcat 8.5		*
Apache Tomcat 9.0		✓
IBM WebSphere 8.5.5.22 *		*
IBM WebSphere 9.0.5.12 (Liberty)		✓
JBoss EAP 7.4 (Update 8+)		*
Oracle WebLogic Server 12c R2 *		*
Oracle WebLogic Server 14c *		*

\* These Web Application Servers do not support JDK17. However, the CD 11.6 Java CIL library is forward compatible with CD 12 services.



# Deprecations

# Dropped functionality

Component	Deprecated	Dropped
Audience Manager	9.1	10.0
Cache Channel Service	9.1	10.0
Monitoring Service	9.1	10.0
Outbound e-mail	8.5	10.0
User Generated Content	9.1	10.0

# Deprecated functionality

Component	CM/CD	Deprecated
Ambient Data Framework (ADF)	CD	9.6
Content Interaction Libraries (CIL)	CD	10.0
Content Interaction Services (CIS)	CD	10.0
Context Service	CD	10.0
Contextual Image Delivery Service	CD	10.0
Filesystem Storage	CD	9.0
WebDAV	CM	10.0

# IQ Standalone Services

- Standalone IQ Index and IQ Query services have been removed
- We continue to provide the IQ Combined Service (which contains both capabilities)
- Customers still using IQ Query are encouraged to switch to the Content Service Search API instead
- Search API supports legacy Raw queries

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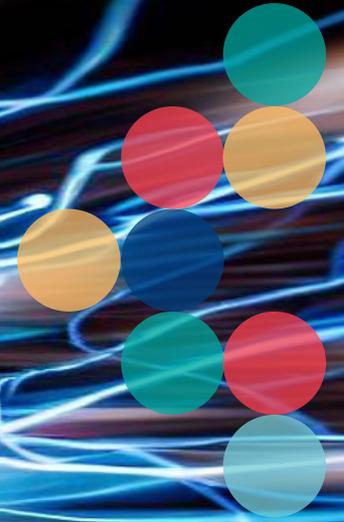


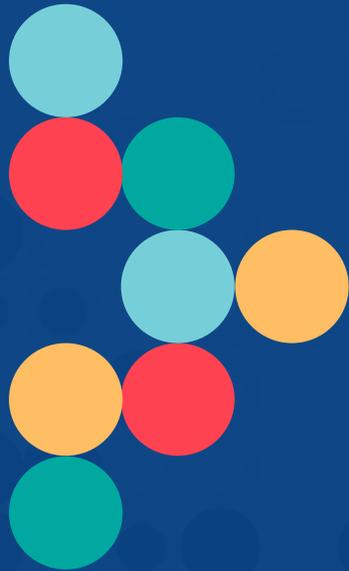


# Tridion Sites 10 Bootcamp Semantic AI

Ben Middleton

10 May 2023

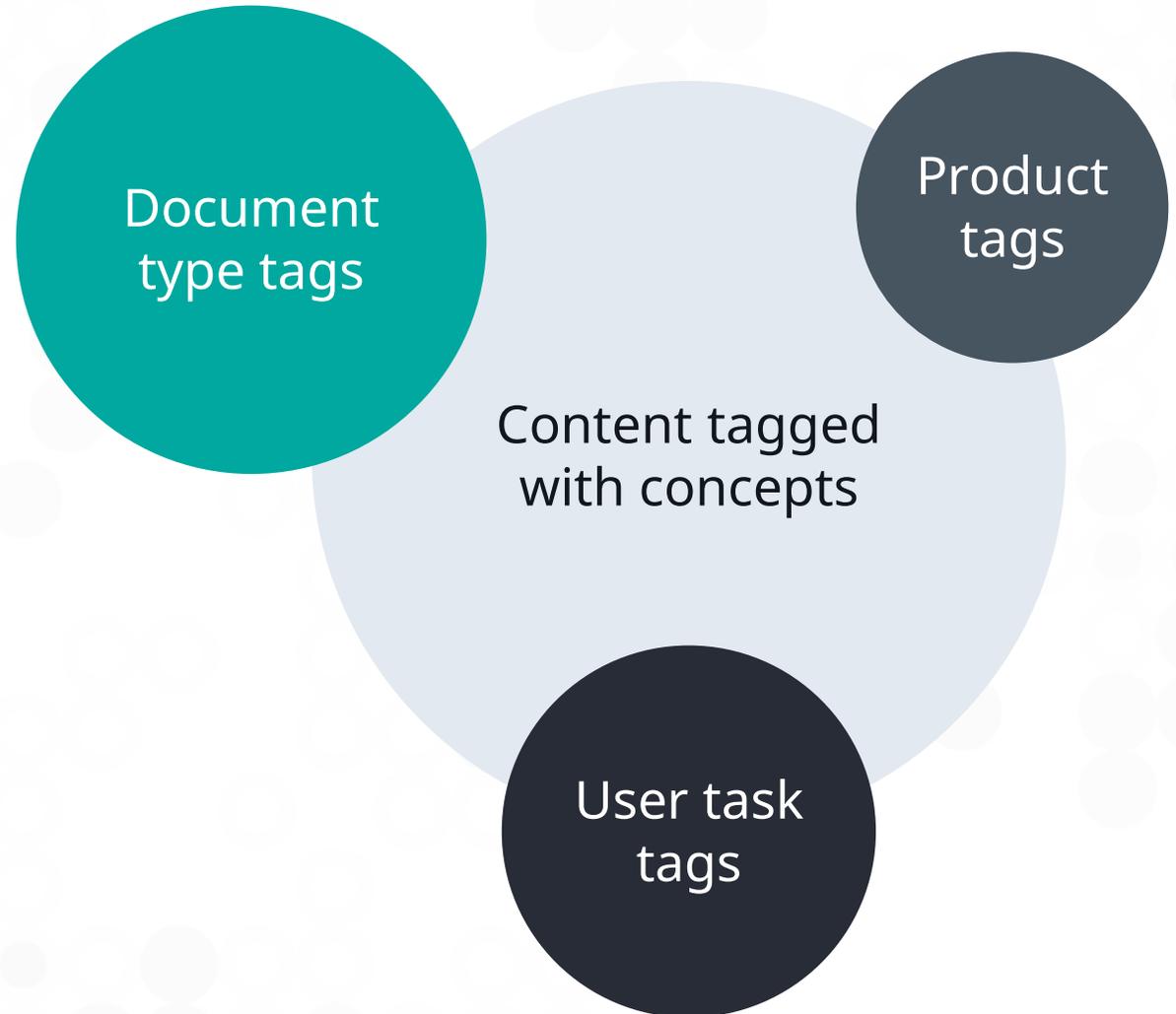




# Revolutionizing search: Introducing our new Semantic AI Recommendation system

# Content Recommendations

*“Show me other content like this...”*



# Content Recommendations

- Extended Content search API to allow recommendations
- Existing document footprint can be used to drive the recommendations
- Reliable taxonomy-based recommendations (using PoolParty Semantic AI index)
- Concept schemes can be configured, and their relative weights boosted
- Full filtering of results using existing search criteria
- Combine Semantic Content Model in results

# Content Recommendations

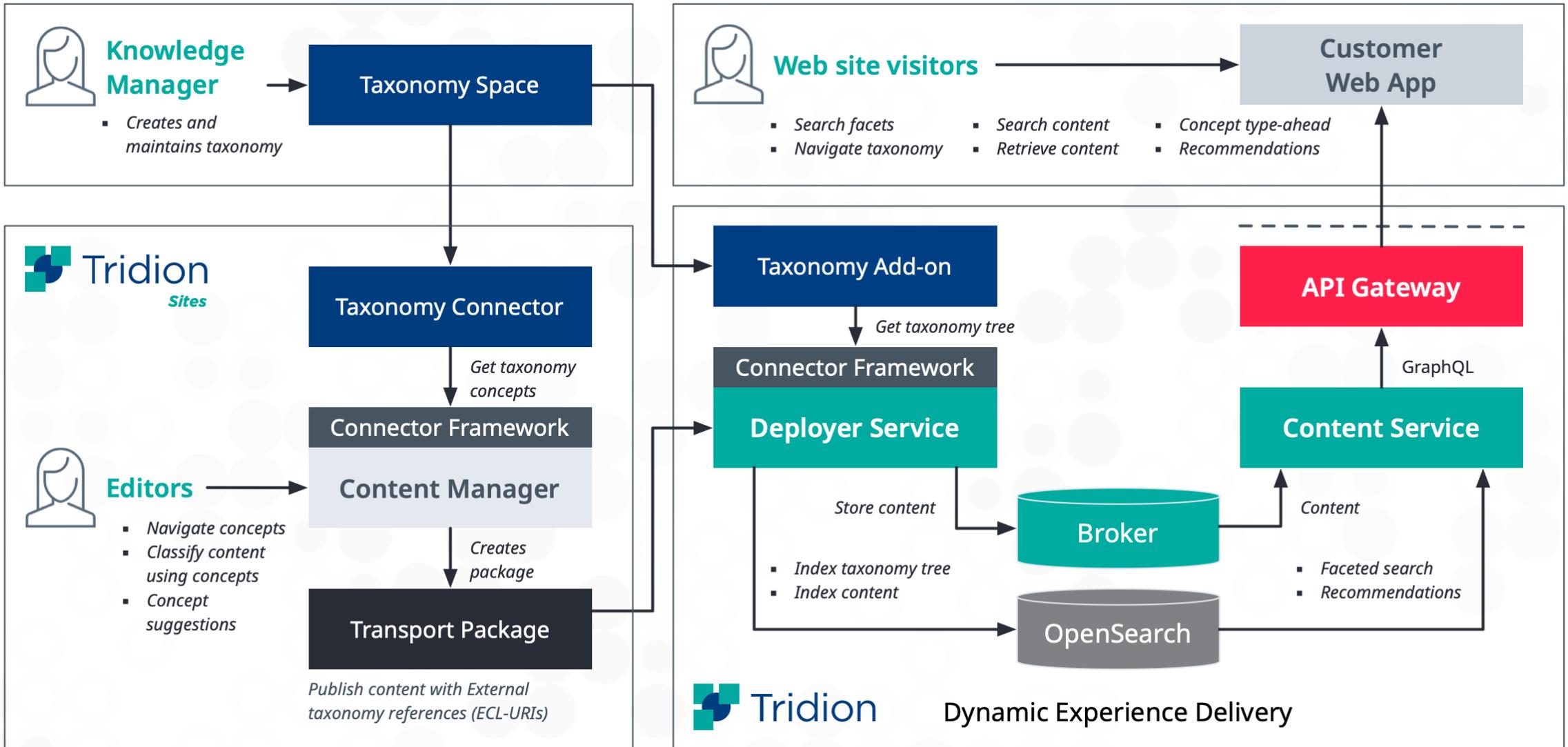
REQUEST

```
{
  search(
    recommend: { id: "tcm_5-1962" }
    criteria: { field: { key: "namespace", value: "tcm" } }
  ) {
    results(first: 5) {
      hits
      edges {
        node {
          search {
            score
            id
            itemType
            rawLanguageTitle
            conceptSchemes {
              connectorId
              concepts {
                id
                label
              }
            }
          }
        }
      }
    }
  }
}
```

RESPONSE

```
{
  "data": {
    "search": {
      "results": {
        "hits": 2,
        "edges": [
          {
            "node": {
              "search": {
                "score": 0.9186288,
                "id": "tcm_5-1984",
                "itemType": "component",
                "rawLanguageTitle": "Mudslide cocktail",
                "conceptSchemes": [
                  {
                    "connectorId": "ppingredients",
                    "concepts": [
                      {
                        "id": "e-learning-poolparty-biz_cocktails_7c4a2cfe-6750-419a-87d1-dcb4919ff92b",
                        "label": "Blackberry"
                      },
                      {
                        "id": "e-learning-poolparty-biz_cocktails_94cca1b4-3603-472b-9c78-6d6a43b6b4ca",
                        "label": "Tabasco sauce"
                      },
                      {
                        "id": "e-learning-poolparty-biz_cocktails_59ccd2fc-1807-45eb-8621-8d3e898e6d37",
                        "label": "Dark rum"
                      }
                    ]
                  },
                  {
                    "connectorId": "ppcocktails",
                    "concepts": [
                      {
                        "id": "e-learning-poolparty-biz_cocktailsii_a91e62df-cee0-4c41-a43b-63b3026e4193",
                        "label": "Mudslide"
                      }
                    ]
                  }
                ]
              }
            }
          }
        ]
      }
    }
  }
}
```

# Search Architecture



# Demonstration



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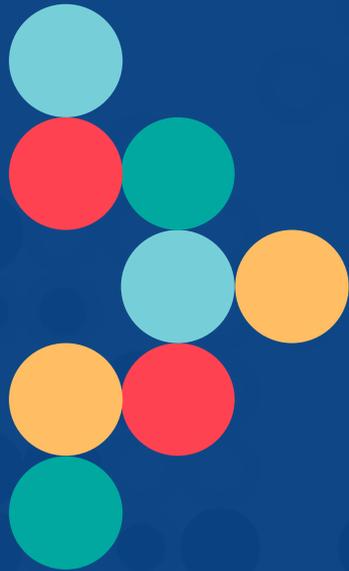


# Tridion Sites 10 Bootcamp Product Evolution

Andriy Zhidko, Ben Middleton & Nataliia Napriienko

10 May 2023





# Content Delivery Performance Improvements

## The old Content Delivery cache

- Relies on hand-crafted cache memory management and configuration
  - Implements a complicated dependency-based invalidation strategy
  - Hard to monitor & debug
- Caused 19 hotfixes in 2021



# However



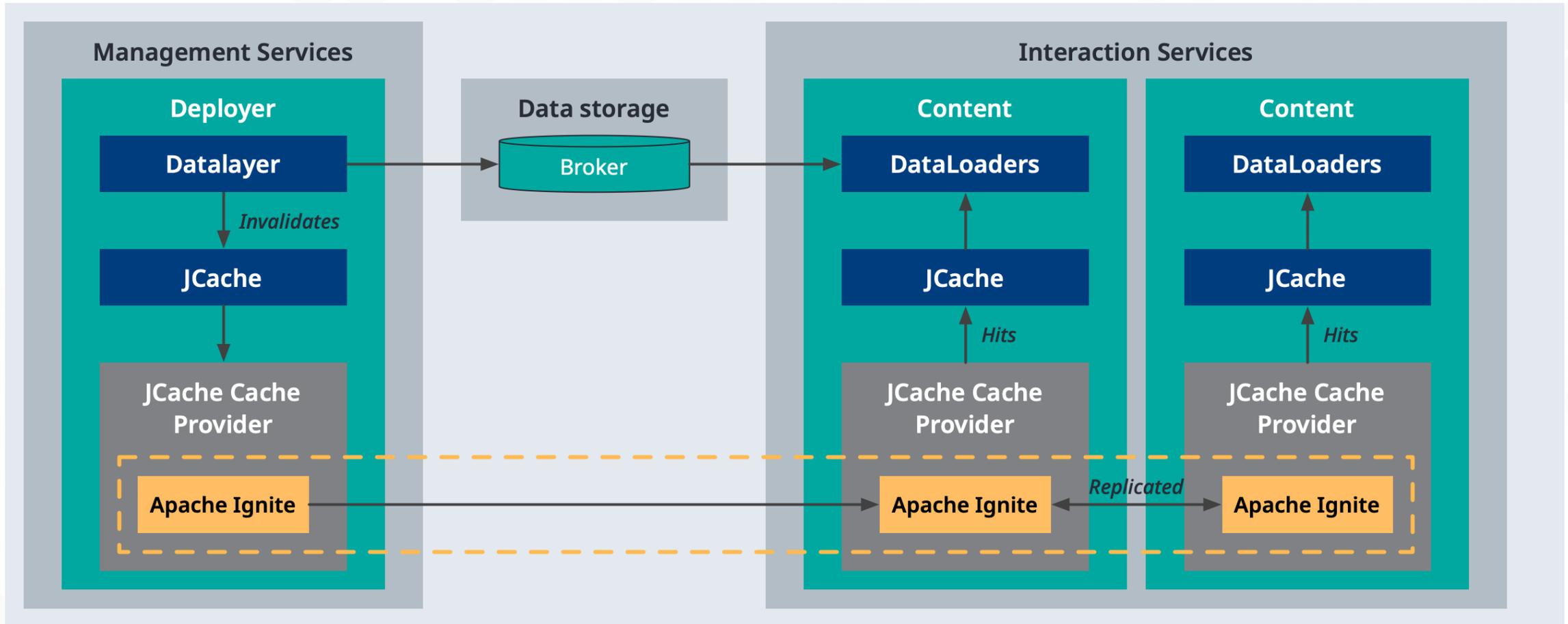
- Customers demand ever-greater performance from our delivery service
- The way we cache and invalidate entries is changing
- Improved scaling is key to these changes

# Introducing a new Content Delivery cache

- Standards-based (JCache)
- Simple, timestamp-based design, providing fast staleness check
- Relies on 3<sup>rd</sup> party cache provider to handle memory management, expiration and scaling
- Flexible deployment options - embedded (partitioned or replicated), distributed
- Updated database connection pool (HikariCP)



# Cache architecture



# Configuration

*application.properties*

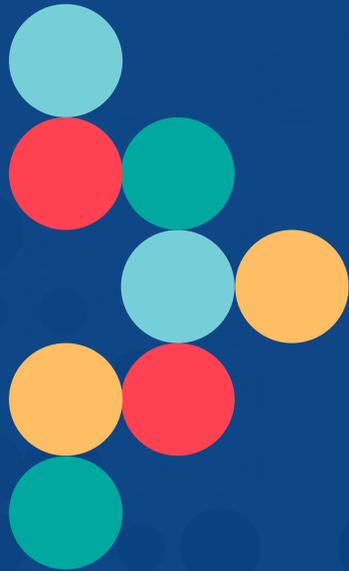
```
# Cache configuration
spring.cache.type=jcache
spring.cache.jcache.provider=org.apache.ignite.cache.CachingProvider
spring.cache.jcache.config=${cacheconf:file:config/cache-conf.xml}

# Enable cache for entire service
cache.enabled=${cacheenabled:true}

# Enable or disable cache for specific cache in form:
# cache.content.<cachename>.enabled
# where <cachename> can be one of the following:
# BinaryComponent, BinaryContent, BinaryVariant,
# Component, ComponentPresentation,
# ComponentPresentationContent, ContentJsonByPath,
# ContentParsedJson, ContentRawJson, CustomMeta,
# Page, Publication, Schema, Taxonomy,
# TaxonomyKeywords, TaxonomyList, Template,
# EvictionBlocks
```

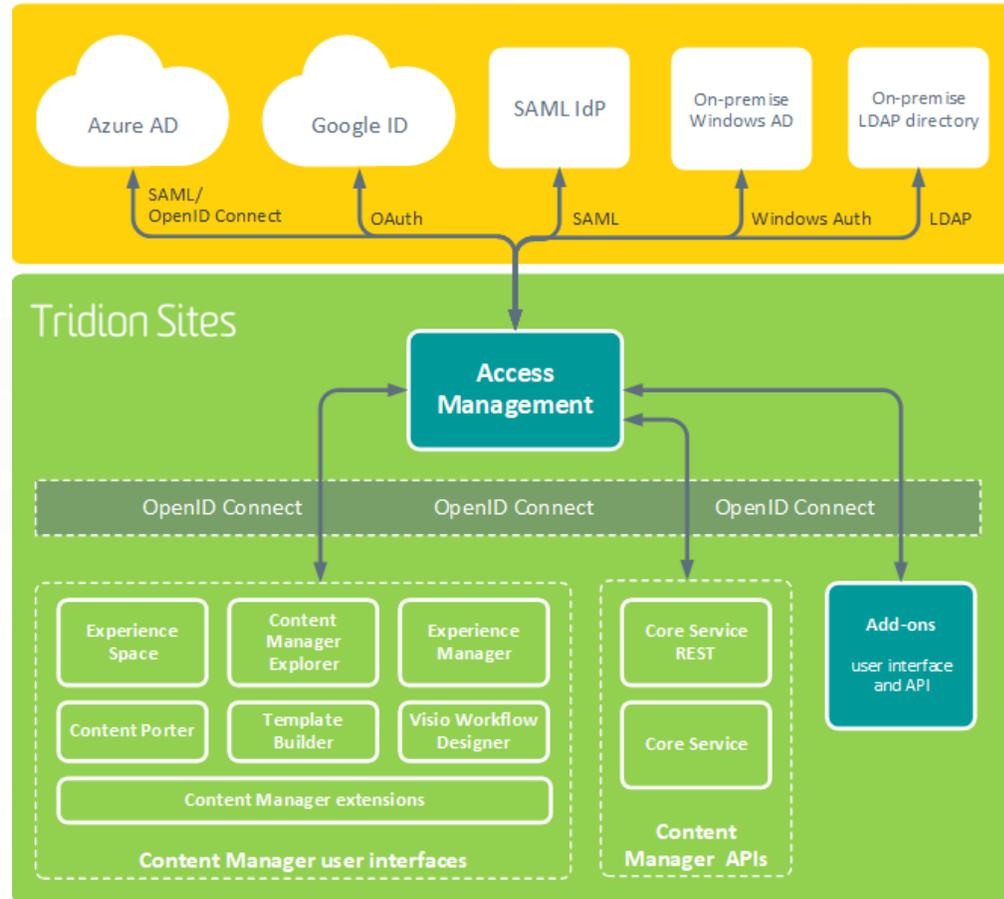
*cache-conf.xml*

```
<property name="discoverySpi">
  <bean class="org.apache.ignite.spi.discovery.tcp.TcpDiscoverySpi">
    <property name="ipFinder">
      <bean
class="org.apache.ignite.spi.discovery.tcp.ipfinder.jdbc.TcpDiscoveryJdbcIpFinder">
        <property name="shared" value="true"/>
        <property name="initSchema" value="false"/>
        <property name="dataSource">
          <bean class="com.zaxxer.hikari.HikariDataSource">
            <property name="poolName" value="ignite-ipfinder-pool"/>
            <property name="maximumPoolSize" value="1"/>
            <property name="dataSourceClassName" value="${dbclass}"/>
            <property name="username" value="${dbuser}"/>
            <property name="password" value="${dbpassword}"/>
            <property name="dataSourceProperties">
              <bean
class="com.sdl.delivery.ignite.FilteredDataSourcePropertiesFactory">
                <property name="dbClass" value="${dbclass}"/>
                <property name="dataSourceProperties">
                  <props>
                    <prop key="serverName">${dbhost}</prop>
                    <prop key="portNumber">${dbport}</prop>
                    <prop key="databaseName">${dbname}</prop>
                    <prop key="driverType">thin</prop>
                    <prop key="serviceName">${dbname}</prop>
                    <prop key="user">${dbuser}</prop>
                    <prop key="password">${dbpassword}</prop>
                    <prop key="encrypt">${dbencrypt:false}</prop>
                  </props>
                </property>
              </bean>
            </property>
          </bean>
        </property>
      </bean>
    </property>
  </bean>
</property>
```



# Access Management: Custom applications and improvements

# Tridion Access Management



Tridion Access Management simplifies implementation of SSO by using a single authentication protocol OpenID Connect while still supporting use of various protocols by individual applications and services

# Access Management is required component

- Access Management becomes mandatory component to be installed for Experience Space, due to security improvement by introducing Backend for Front End API
- Direct Windows authentication is not supported with Experience Space anymore, instead you can use Windows authentication by configuring Windows Identity Provider in Access Management
- Dropping support for legacy authentication configurations: **SAML, SSO SiteMinder, SSO Tivoli**
  - Migrate SAML configuration to Access Management as Identity Provider
  - SSO can also be migrated if it supports SAML or OpenID Connect

# Windows identity provider where Access Management is installed as a Windows service

- Before Sites 10 you needed to install Access Management in IIS in order to use Windows authentication
- Sites 10 supports using a Windows Identity provider where Access Management is installed as a Windows service

# Support custom applications in Access Management

- Register custom application and service accounts

The screenshot shows the 'Register application' form in the Access Management console. The form is titled 'Register application' and has a close button in the top right corner. It contains several fields and a dropdown menu:

- \* Client ID:** A unique identifier for your custom application, as coded in the application code. After registering the application you can no longer change the ID. The value entered is 'CustomApplication'.
- \* Name:** The display name of your custom application. The value entered is 'Custom Application'.
- \* Allowed authentication flow type:** The supported authentication flow of your custom application that determines how the tokens are requested and returned to the client. The dropdown menu is set to 'AuthorizationCodeWithPkce'.
- \* Allowed redirect URLs:** Application URLs that can return a user to the application following user authentication. Define at least one redirect url. The value entered is 'https://custom\_application/ui/signin-oidc'. There is a '+ Add another URL' button below the input field.

At the bottom right of the form, there are 'Save' and 'Cancel' buttons.

The screenshot shows the 'Add service account' form in the Access Management console. The form is titled 'Add service account' and has a close button in the top right corner. It contains several fields and a list of services and roles:

- \* Client ID:** A unique identifier for the service account. Use this ID also in your application code. After saving the service account, you can no longer change the ID. The value entered is 'dd16421e-80c6-4c66-a82f-5d13bee2bc77'.
- \* Name:** The display name of the service account. The value entered is 'Service Account for Custom Application'.
- \* Services and roles:** Select the APIs and roles this service account can access. The list includes:
  - Access Management API
  - Add-ons API O
  - Tridion Sites O
  - Global Service
  - Service AccountUnder each category, there are checkboxes for roles:
  - Access Management API:  Administrator
  - Add-ons API O:  Administrator
  - Tridion Sites O:  Read-only,  Service
  - Global Service:  Tridion Sites Content Manager API
  - Service Account:  Administrator,  User

At the bottom right of the form, there are 'Save' and 'Cancel' buttons.

- Provides the client library to be used in custom application
  - Supports applications with Net 6.0 backend
  - Use to authenticate users in custom application to leverage same SSO experience as for Tridion Sites applications

# Demonstration



# Automatic signing keys management

- **Before Sites 10** you needed to configure and rotate a signing certificate in Access Management's appsettings.json file

```
"Certificates": {  
  "Signing": {  
    "Path": "Certificates/TridionAccessManagementService.pfx",  
    "Password": "*****"  
  },  
  "Validation": [  
    {  
      "Path": "Certificates/TridionAccessManagementServiceNew.pfx",  
      "Password": "*****"  
    }  
  ]  
},
```

- **Sites 10** release adds automatic key management
  - Automatic rotation of keys
  - Announcement of upcoming new keys
  - Maintenance of retired keys
- SAML-based identity provider still requires configuring the certificate, however, is used only to communicate with external SAML IdP and is *not* used to sign a token

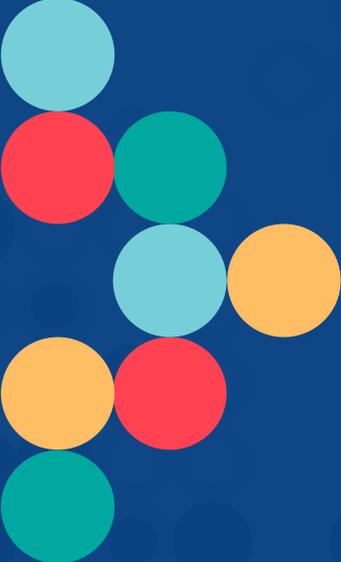
```
..  
"Certificates": {  
  "Signing": {  
    "Path": "Certificates/TridionAccessManagementService.pfx",  
    "Password": "*****"  
  }  
},
```

# Predefined, bootstrapped data

- Ability to quickly and consistently set up Access Management using a bootstrapping mechanism and bootstrap files
- Bootstrap files are JSON files containing predefined data for the environment, including definitions of applications, roles, and service accounts
- Support custom bootstrap files, you can add predefined data to Access Management for the following entities:
  - Identity providers
  - Custom applications
  - Custom API resources and roles
  - Custom service account

```
"Bootstrap": {  
  "Modules": "AccessManagement, AddonService, SitesCM, Custom"  
}
```

Default configuration (don't change)      Custom configuration



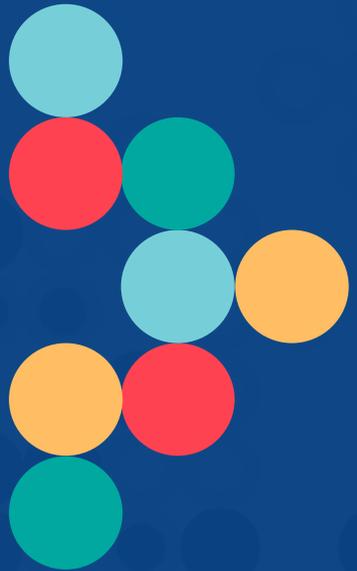
# Content Manager: Lock management right

# Lock management right

The screenshot shows the Tridion web interface with the 'Rights' configuration for the 'Lock Management Users' group. The 'Lock Management' checkbox is checked, indicating that this right is granted to the group. The interface includes a navigation bar with tabs like 'General', 'Publishing', and 'Security'. The 'Rights' section lists various permissions, with 'Lock Management' being the only one checked.

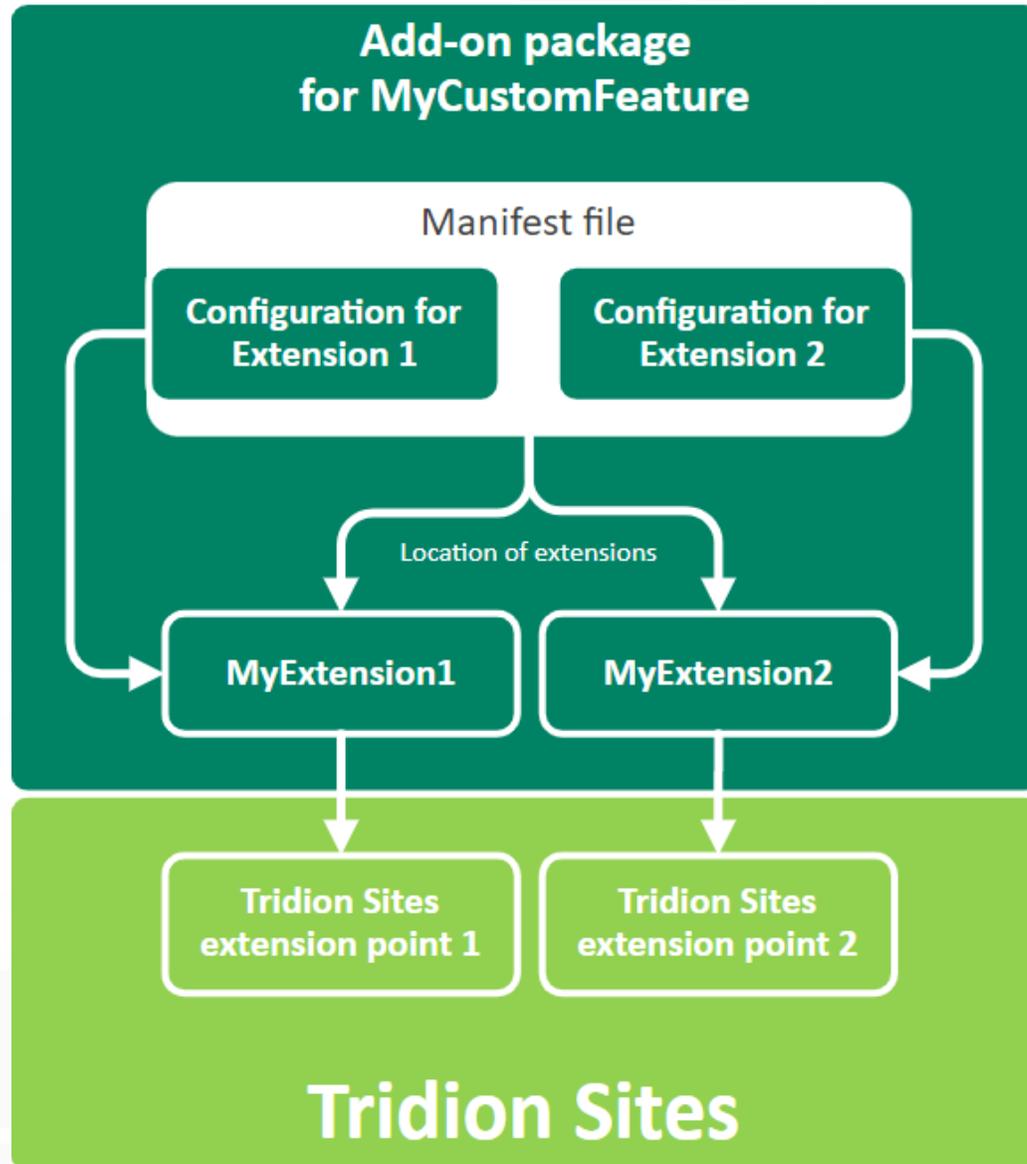
Users and Groups:	Rights:
<input type="checkbox"/> Name	<input type="checkbox"/> Publication Management
<input type="checkbox"/> Information Designer	<input type="checkbox"/> Folder Management
<input type="checkbox"/> Author	<input type="checkbox"/> Structure Group Management
<input type="checkbox"/> Template Designer	<input type="checkbox"/> Schema Management
<input type="checkbox"/> Editor	<input type="checkbox"/> Component Management
<input type="checkbox"/> Chief Editor	<input type="checkbox"/> Component Template Management
<input type="checkbox"/> Publication Manager	<input type="checkbox"/> Page Management
<input type="checkbox"/> Interaction Manager	<input type="checkbox"/> Page Template Management
<input type="checkbox"/> Business Process Type Manager	<input type="checkbox"/> Customer Management
<input type="checkbox"/> Site Manager	<input type="checkbox"/> Publish to Content Distributor
<input type="checkbox"/> Developer	<input type="checkbox"/> Permission Management
<input type="checkbox"/> Lock Management Users	<input type="checkbox"/> Workflow Management
	<input type="checkbox"/> Category Management
	<input type="checkbox"/> Template Building Block Management
	<input type="checkbox"/> Virtual Folder Management
	<input type="checkbox"/> Bundle Management
	<input type="checkbox"/> Business Process Type Management
	<input type="checkbox"/> Publication Administration
	<input checked="" type="checkbox"/> Lock Management <i>(Allowed)</i>
	<input type="checkbox"/> Translation Configuration
	<input type="checkbox"/> Translation Management

- Resolving locks on items that are locked or and checked out by another user without being a System Administrator



# Add-ons: Usability and auditing improvements

# Tridion Add-on Management



Various Add-ons, Extensions and Connectors are available for Tridion Sites, which can be used to extend product functionality or integrate it with other systems. You can also develop your own custom Extensions and Connectors and add them to your implementation using the Add-ons feature.

# Add-ons: improving usability and auditing

- Store auditing data
  - Upload/Update add-ons or configuration
- Capability to enable/disable Add-on
  - Usability

**Add-ons**  
The quickest and easiest way to extend Tridion Sites

Manage Find and Develop

Add-ons 6 + Upload Add-on Package

Refresh

<input type="checkbox"/>	NAME	VERSION	STATUS	CONFIGURATION	AUTHOR	UPLOADED BY	UPLOADED	
<input type="checkbox"/>	deployer-xo 2	12.0.0-stable	Success	Optional	RWS Group	N/A	Mar 16, 2023 9:25 PM	>
<input type="checkbox"/>	context-extension 1	12.0.0-stable	Success	Optional	RWS Group	N/A	Mar 16, 2023 9:26 PM	>
<input type="checkbox"/>	connector-framework-extension 1	12.0.0-stable	Success	Optional	RWS Group	N/A	Mar 16, 2023 9:26 PM	>
<input type="checkbox"/>	udp-content-session-extension 1	12.0.0-stable	Pending activation	Mar 17, 2023 11:29 AM	RWS Group	N/A	Mar 16, 2023 9:26 PM	>
<input type="checkbox"/>	xo-content-extension 1	12.0.0-stable	Pending activation	Optional	RWS Group	AMSLDAP\MMouse	Mar 17, 2023 11:34 AM	>
<input type="checkbox"/>	dxa-model-extension 1	12.0.0-stable	Pending activation	Optional	RWS Group	AMSLDAP\MMouse	Mar 17, 2023 11:34 AM	>

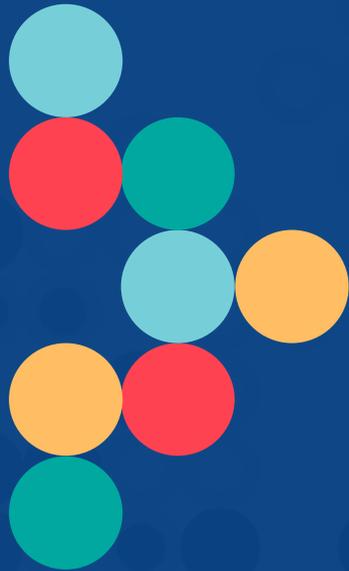
# Extension point for Experience Space

```
{
  "manifestVersion": "1.0",
  "id": "example-extension",
  "name": "example-extension",
  "description": "Example Extension",
  "version": "1.0.0",
  "author": "My Company",
  "extensions": [
    {
      "name": "example-extension",
      "type": "ExperienceSpaceExtension",
      "properties": {
        "files": [
          "extension.js",
          "navigation\\public\\*.css",
          "navigation\\public\\*.js",
          "navigation\\public\\dashboard.html",
          "public\\*.css",
          "public\\*.js",
          "public\\dashboard.html",|s"
        ]
      }
    }
  ]
}
```

New extension point for Experience Space in Add-on Service  
Files parameter supports wildcards, for example "extensionFiles/\*.js" - to mention all JS files in the extensionFiles folder.

# Demonstration





# CoreService.REST updates

# CoreService.REST API delta

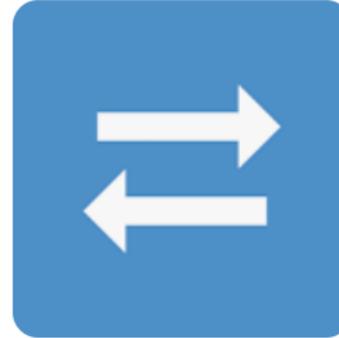
New/Changed/Deleted	Controller	Method/Property	Description
NEW	Binaries	POST /v{api-version}/items/{escapedFolderId}/upload	Uploads a single binary file and creates a multimedia component.
NEW	BatchOperations	POST /v2.0/batch/startActivity	Starts a batch of activities.
NEW	BatchOperations	POST /v2.0/batch/finishActivity	Finishes a batch of activities.
NEW	BatchOperations	POST /v2.0/batch/restartActivity	Restarts a batch of activities.
NEW	BatchOperations	POST /v2.0/batch/reassignActivity	Reassigns a batch of activities.
NEW	Lists	GET /v2.0/lockedItems	Gets a list of locked items (either versioned items or organizational items).
NEW	Lists	GET /v2.0/users	Gets a list of Users.
NEW	Lists	GET /v2.0/groups	Gets a list of Groups.
NEW	OrganizationalItems	GET /v2.0/items/{escapedOrgItemId}/itemsPage/{pageIndex}	Gets a paged list of child items of a specified organizational item.
CHANGED	Search	GET /v{api-version}/items/search changed to GET /v2.0/system/search	Searches the system for a specified text string.
NEW	Settings	GET /v2.0/userSettings	Gets user settings for authenticated user
NEW	Settings	PUT /v2.0/userSettings	Saves user settings for authenticated user
NEW	Settings	DELETE /v2.0/userSettings	Deletes user settings for authenticated user
NEW	Settings	GET /v2.0/applicationSettings	Gets application settings for specified application Id
NEW	Settings	PUT /v2.0/applicationSettings	Saves application settings with specified application Id
NEW	Settings	DELETE /v2.0/applicationSettings	Deletes application settings for specified application Id
NEW	Workflow	GET /v2.0/activityInstances	Gets a list of Activity Instances.
NEW	Workflow	POST /v2.0/items/{escapedActivityInstancelId}/restartActivity	Restarts an automated Activity Instance which is in Failed state.
NEW	Workflow	POST /v2.0/items/{escapedActivityInstancelId}/reassignActivity	Reassigns a Workflow Activity to another User or Group.

# Deprecated methods

Method	Controller	Description	Notes
GET /v2.0/items/{escapedItemId}/appData	ApplicationData	Gets application data for all applications related to a specified item.	Replaced with GET /v2.0/applicationSettings
GET /v2.0/extensions	Extensions	Gets a list of Experience Space extensions	We do not see use cases for customers to use this method. It will be moved to the internal API next release
GET /v2.0/checkedOutItems	Lists	Gets a list of items that are checked out.	Replaced with a new method GET /v2.0/lockedItems

# CORS support for CoreService.REST

Cross-origin resource sharing (CORS) is a **standard mechanism that allows JavaScript XMLHttpRequest (XHR) calls executed in a web page to interact with resources from non-origin domains**. CORS is a commonly implemented solution to the same-origin policy that is enforced by all browsers.



- Dashboards
- Content creation
  - Jira
  - Confluence
  - Custom apps like blogs
- Bots

A screenshot of a Jira issue page. At the top, there is a status bar with a sun icon, the text 'In Progress', and '2 months ago More'. Below this is the issue title 'Tridion Core Service REST API - CORS Support' with a '+3' comment count and a dropdown arrow. The description reads 'Ability to use Tridion Core Service API to use with Javascript Clients'. There is a 'Create Jira Ticket' button on the right. At the bottom right, there is a user profile for 'Rajesh Saminathan' with a profile picture icon. A small 'API' tag is visible near the bottom left of the issue content area.

# Demonstration



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[www.rws.com](http://www.rws.com)



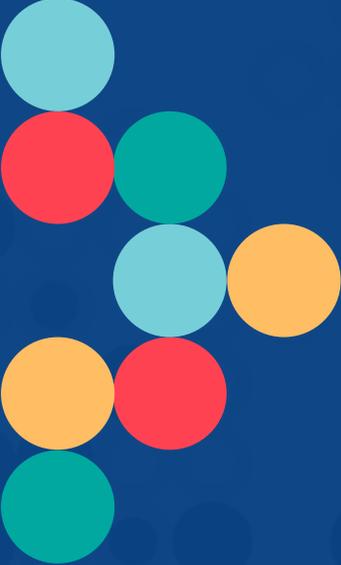


# Tridion Sites 10 Bootcamp What's new in Experience Space

Nataliia Napriienko, Nick Hill, & Mihai Papasima

10 May 2023

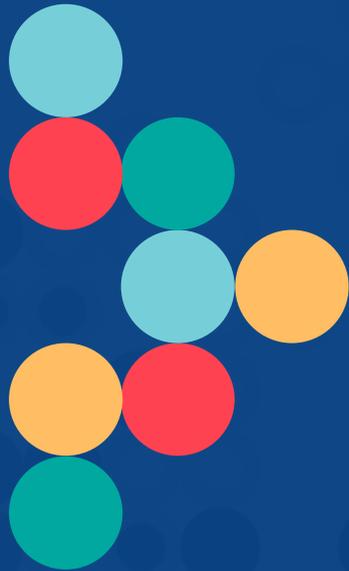




# User interface security

# Experience Space security improvement

- Introduced Backend For Frontend API (BFF)
  - Access token management are handled by BFF instead of front end
  - BFF creates security Sessions and only provides a Security Session Identifier to the user interface (stored in a cookie)
- BFF provides security benefits
  - No secure or sensitive data is stored on the user interface (browser)
  - It also applies to requests for images and other binaries
  - There is less data to transmit from frontend to backend for each request



# Tag Suggestions Improvements

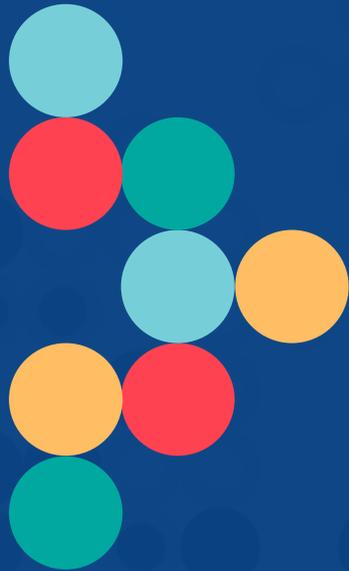
# Tag suggestions improvement

- Suggest tags are now supported on organizational items metadata

The screenshot shows the Tridion Sites editor interface for a page titled "Demo News". The browser address bar indicates the URL is `sites-cm-b8f6d5-dev-eu-west-1-blztestgrid.tridion.sdlproducts.com/ui/editor/page?activetcm=tcm:5-744-64&item=tcm:5-744-64&tab=general.metad...`. The page is in "Incognito" mode. The editor shows the "General" tab with fields for Name, File name, Page template, and Page schema. The "Metadata" tab is active, showing a description: "IBA official cocktails are divided into three categories: unforgettables, contemporary classics, and new era drinks." The "Tags" section shows three tags: "IBA official cocktails", "Contemporary Classics", and "New Era Drinks". A notification box at the bottom right states: "We updated one or more fields with suggestions for tags to classify 'Demo News'. Review the suggestions, and change as needed."

# Demonstration





# Workflow Support

# Activities View

Tridion Sites
Content
Activities 1
devsdproducts test1user 🔔 ?

**Workflow Activities** ⚙️

📄 🔄
Filters ▾
Assigned to ▾
Sort by: ↑ (None) ▾ ⚙️

<input type="checkbox"/>	ACTIVITY DEFINITION	DATE ASSIGNED	ASSIGNED TO	PUBLICATION	PERFORMER	PRIMARY ITEM	DATE STARTED	STATUS
<input type="checkbox"/>	Assign to Proc...	5/9/2023 5:52...	Tridion Sites C...	200 Example C...		<a href="#">Compone...</a>		<span style="background-color: #ffc107; padding: 2px 5px;">WAITING</span>
<input type="checkbox"/>	Assign to Proc...	5/8/2023 11:4...	Tridion Sites C...	200 Example C...	Tridion Sites C...	<a href="#">Compone...</a>	5/8/2023 11:4...	<span style="background-color: #dc3545; padding: 2px 5px;">FAILED</span>
<input type="checkbox"/>	Perform Task	5/8/2023 11:4...	devsdproduct...	200 Example C...	devsdproduct...	<a href="#">Compone...</a>	5/8/2023 11:4...	<span style="background-color: #28a745; padding: 2px 5px;">COMPLETED</span>
<input type="checkbox"/>	Perform Task	5/8/2023 8:11...	Tridion Sites C...	200 Example C...				<span style="background-color: #6c757d; padding: 2px 5px;">ASSIGNED</span>
<input checked="" type="checkbox"/>	Perform Task	5/5/2023 9:49...	devsdproduct...	200 Example C...	devsdproduct...	<a href="#">Compone...</a>	5/5/2023 9:49...	<span style="background-color: #28a745; padding: 2px 5px;">COMPLETED</span>
<input type="checkbox"/>	Perform Task	5/5/2023 9:49...	devsdproduct...	200 Example C...	devsdproduct...	<a href="#">Compone...</a>	5/5/2023 9:49...	<span style="background-color: #17a2b8; padding: 2px 5px;">IN PROGRESS</span>
<input type="checkbox"/>	Perform Task	5/5/2023 9:48...	devsdproduct...	200 Example C...	devsdproduct...	<a href="#">Compone...</a>	5/5/2023 9:48...	<span style="background-color: #17a2b8; padding: 2px 5px;">IN PROGRESS</span>
<input type="checkbox"/>	Perform Task	5/5/2023 9:27...	devsdproduct...	200 Example C...	devsdproduct...	<a href="#">Page 4</a>	5/5/2023 9:27...	<span style="background-color: #17a2b8; padding: 2px 5px;">IN PROGRESS</span>
<input type="checkbox"/>	Perform Task	5/5/2023 9:27...	devsdproduct...	200 Example C...	devsdproduct...	<a href="#">Page 3</a>	5/5/2023 9:27...	<span style="background-color: #17a2b8; padding: 2px 5px;">IN PROGRESS</span>
<input type="checkbox"/>	Perform Task	5/5/2023 9:26...	devsdproduct...	200 Example C...	devsdproduct...	<a href="#">Page 2</a>	5/5/2023 9:26...	<span style="background-color: #17a2b8; padding: 2px 5px;">IN PROGRESS</span>
<input type="checkbox"/>	Perform Task	5/5/2023 9:26...	devsdproduct...	200 Example C...	devsdproduct...	<a href="#">Page 1</a>	5/5/2023 9:26...	<span style="background-color: #17a2b8; padding: 2px 5px;">IN PROGRESS</span>

**1. Perform Task** ✕ i

---

**Information** ☰ 🕒

**URI**  
tcm:4-13-131104

**Activity definition**  
Perform Task

**Description**  
Perform the specified task.

**Publication**  
[200 Example Content](#)

**Status**  
COMPLETED

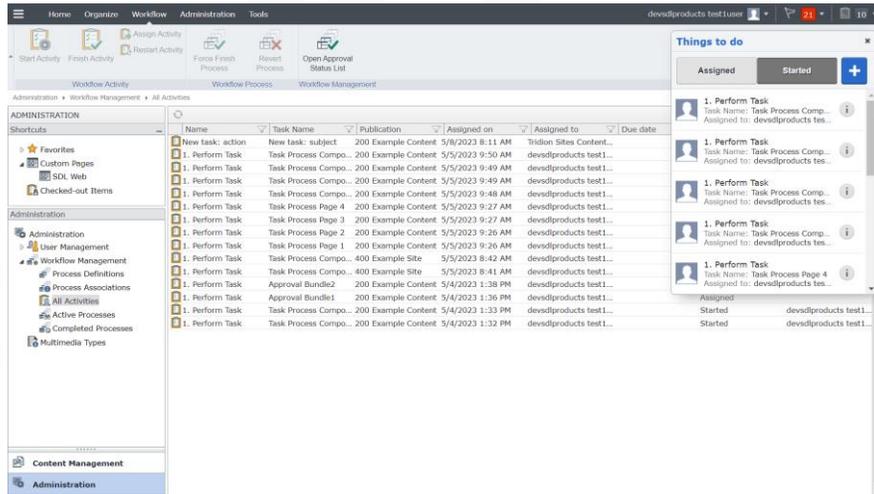
**Assigned to**  
[devsdproducts test1user](#)

**Date assigned**  
5/5/2023 9:49 AM

**Performer**  
[devsdproducts test1user](#)

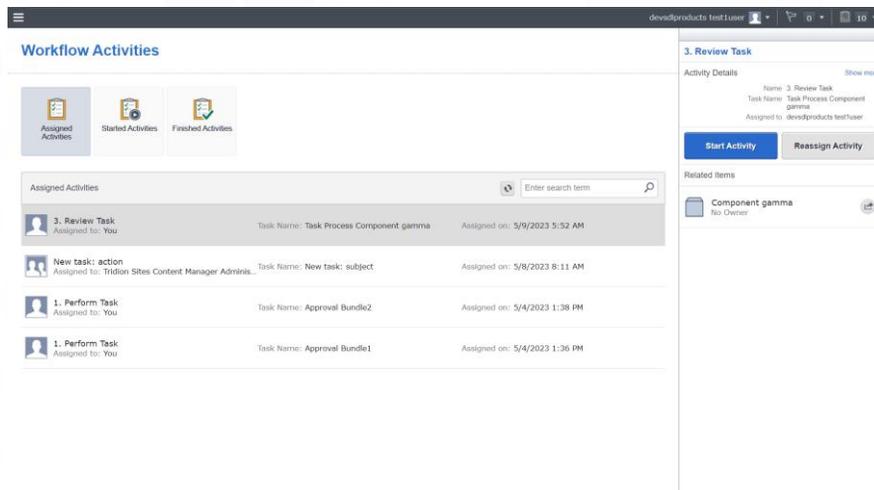
**Date started**

# Activities View



## Features

- **Single list**
- Updated terminology
- Insights panels provide better context
- Batch action support
- Extensibility
- Unobtrusive 'new activity' notification



# Activities View

The screenshot displays the 'Activities View' in Tridion Sites. The main area shows a table of workflow activities. The table has the following columns: ACTIVITY DEFINITION, DATE ASSIGNED, ASSIGNED TO, PUBLICATION, PERFORMER, PRIMARY ITEM, DATE STARTED, and STATUS. The activities listed include 'Assign to Proc...', 'Perform Task', and 'Page 1' through 'Page 4'. The status of these activities varies, including 'WAITING', 'FAILED', 'COMPLETED', 'ASSIGNED', and 'IN PROGRESS'. A detailed view panel on the right shows the details for a selected activity, including its URI, Activity Definition, Description, Publication, Status, Assigned to, Date assigned, Performer, and Date started.

ACTIVITY DEFINITION	DATE ASSIGNED	ASSIGNED TO	PUBLICATION	PERFORMER	PRIMARY ITEM	DATE STARTED	STATUS
Assign to Proc...	5/9/2023 5:52...	Tridion Sites C...	200 Example C...		Compon...		WAITING
Assign to Proc...	5/8/2023 11:4...	Tridion Sites C...	200 Example C...	Tridion Sites C...	Compon...	5/8/2023 11:4...	FAILED
Perform Task	5/8/2023 11:4...	devsdproduct...	200 Example C...	devsdproduct...	Compon...	5/8/2023 11:4...	COMPLETED
Perform Task	5/8/2023 8:11...	Tridion Sites C...	200 Example C...				ASSIGNED
Perform Task	5/5/2023 9:49...	devsdproduct...	200 Example C...	devsdproduct...	Compon...	5/5/2023 9:49...	COMPLETED
Perform Task	5/5/2023 9:49...	devsdproduct...	200 Example C...	devsdproduct...	Compon...	5/5/2023 9:49...	IN PROGRESS
Perform Task	5/5/2023 9:48...	devsdproduct...	200 Example C...	devsdproduct...	Compon...	5/5/2023 9:48...	IN PROGRESS
Perform Task	5/5/2023 9:27...	devsdproduct...	200 Example C...	devsdproduct...	Page 4	5/5/2023 9:27...	IN PROGRESS
Perform Task	5/5/2023 9:27...	devsdproduct...	200 Example C...	devsdproduct...	Page 3	5/5/2023 9:27...	IN PROGRESS
Perform Task	5/5/2023 9:26...	devsdproduct...	200 Example C...	devsdproduct...	Page 2	5/5/2023 9:26...	IN PROGRESS
Perform Task	5/5/2023 9:26...	devsdproduct...	200 Example C...	devsdproduct...	Page 1	5/5/2023 9:26...	IN PROGRESS

## Features

- **Single list**
  - Updated terminology
  - Insights panels provide better context
  - Batch action support
  - Extensibility
  - Unobtrusive 'new activity' notification
- 
- Editors only see 'their' activities
  - Admins/workflow managers see all activities
  - Can be changed via request configurator

# Activities View

ACTIVITY DEFINITION	DATE ASSIGNED	ASSIGNED TO	PUBLICATION	PERFORMER	PRIMARY ITEM	DATE STARTED	STATUS
<input type="checkbox"/> Assign to Proc...	5/9/2023 5:52...	Tridion Sites C...	200 Example C...		Compone...		WAITING
<input type="checkbox"/> Assign to Proc...	5/8/2023 11:4...	Tridion Sites C...	200 Example C...	Tridion Sites C...	Compone...	5/8/2023 11:4...	FAILED
<input type="checkbox"/> Perform Task	5/8/2023 11:4...	devsdproduct...	200 Example C...	devsdproduct...	Compone...	5/8/2023 11:4...	COMPLETED
<input type="checkbox"/> Perform Task	5/8/2023 8:11...	Tridion Sites C...	200 Example C...				ASSIGNED
<input checked="" type="checkbox"/> Perform Task	5/5/2023 9:49...	devsdproduct...	200 Example C...	devsdproduct...	Compone...	5/5/2023 9:49...	COMPLETED
<input type="checkbox"/> Perform Task	5/5/2023 9:49...	devsdproduct...	200 Example C...	devsdproduct...	Compone...	5/5/2023 9:49...	IN PROGRESS
<input type="checkbox"/> Perform Task	5/5/2023 9:48...	devsdproduct...	200 Example C...	devsdproduct...	Compone...	5/5/2023 9:48...	IN PROGRESS
<input type="checkbox"/> Perform Task	5/5/2023 9:27...	devsdproduct...	200 Example C...	devsdproduct...	Page 4	5/5/2023 9:27...	IN PROGRESS
<input type="checkbox"/> Perform Task	5/5/2023 9:27...	devsdproduct...	200 Example C...	devsdproduct...	Page 3	5/5/2023 9:27...	IN PROGRESS
<input type="checkbox"/> Perform Task	5/5/2023 9:26...	devsdproduct...	200 Example C...	devsdproduct...	Page 2	5/5/2023 9:26...	IN PROGRESS
<input type="checkbox"/> Perform Task	5/5/2023 9:26...	devsdproduct...	200 Example C...	devsdproduct...	Page 1	5/5/2023 9:26...	IN PROGRESS

## Features

- Single list
  - Updated terminology
  - Insights panels provide better context
  - Batch action support
  - Extensibility
  - Unobtrusive 'new activity' notification
- 
- Task name (Classic UI) → Process
    - Process definition
    - Primary item
  - Consolidated owner and performer into single property (Performer)
  - Distinctive colors help identify activity state

# Activities View

ACTIVITY DEFINITION	DATE ASSIGNED	ASSIGNED TO	PUBLICATION	PERFORMER	PRIMARY ITEM	DATE STARTED	STATUS
Assign to Proc...	5/9/2023 5:52...	Tridion Sites C...	200 Example C...		Compone...		WAITING
Assign to Proc...	5/8/2023 11:4...	Tridion Sites C...	200 Example C...	Tridion Sites C...	Compone...	5/8/2023 11:4...	FAILED
Perform Task	5/8/2023 11:4...	devsdproduct...	200 Example C...	devsdproduct...	Compone...	5/8/2023 11:4...	COMPLETED
Perform Task	5/8/2023 8:11...	Tridion Sites C...	200 Example C...				ASSIGNED
Perform Task	5/5/2023 9:49...	devsdproduct...	200 Example C...	devsdproduct...	Compone...	5/5/2023 9:49...	COMPLETED
Perform Task	5/5/2023 9:49...	devsdproduct...	200 Example C...	devsdproduct...	Compone...	5/5/2023 9:49...	IN PROGRESS
Perform Task	5/5/2023 9:48...	devsdproduct...	200 Example C...	devsdproduct...	Compone...	5/5/2023 9:48...	IN PROGRESS
Perform Task	5/5/2023 9:27...	devsdproduct...	200 Example C...	devsdproduct...	Page 4	5/5/2023 9:27...	IN PROGRESS
Perform Task	5/5/2023 9:27...	devsdproduct...	200 Example C...	devsdproduct...	Page 3	5/5/2023 9:27...	IN PROGRESS
Perform Task	5/5/2023 9:26...	devsdproduct...	200 Example C...	devsdproduct...	Page 2	5/5/2023 9:26...	IN PROGRESS
Perform Task	5/5/2023 9:26...	devsdproduct...	200 Example C...	devsdproduct...	Page 1	5/5/2023 9:26...	IN PROGRESS

**1. Perform Task**

**Information**

URI  
tcm:4-13-131104

**Activity definition**  
Perform Task

**Description**  
Perform the specified task.

**Publication**  
200 Example Content

**Status**  
COMPLETED

**Assigned to**  
devsdproducts test1user

**Date assigned**  
5/5/2023 9:49 AM

**Performer**  
devsdproducts test1user

**Date started**

## Features

- Single list
- Updated terminology
- Insights panels provide better context
- Batch action support
- Extensibility
- Unobtrusive 'new activity' notification

- **Information panel**  
general info about selected activity
- **Related items panel**  
lists the item(s) the activity is associated with
- **Process history panel**  
shows selected activity in the context of the other activities for the corresponding process

# Activities View

Workflow Activities

Filters Assigned to Sort by: (None)

ACTIVITY DEFINITION	DATE ASSIGNED	ASSIGNED TO	PUBLICATION	PERFORMER	PRIMARY ITEM	DATE STARTED	STATUS
<input type="checkbox"/> Perform Task	5/5/2023 9:48...	devsdlproduct...	200 Example C...	devsdlproduct...	Compone...	5/5/2023 9:48...	IN PROGRESS
<input type="checkbox"/> Perform Task	5/5/2023 9:27...	devsdlproduct...	200 Example C...	devsdlproduct...	Page 4	5/5/2023 9:27...	IN PROGRESS
<input type="checkbox"/> Perform Task	5/5/2023 9:27...	devsdlproduct...	200 Example C...	devsdlproduct...	Page 3	5/5/2023 9:27...	IN PROGRESS
<input type="checkbox"/> Perform Task	5/5/2023 9:26...	devsdlproduct...	200 Example C...	devsdlproduct...	Page 2	5/5/2023 9:26...	IN PROGRESS
<input type="checkbox"/> Perform Task	5/5/2023 9:26...	devsdlproduct...	200 Example C...	devsdlproduct...	Page 1	5/5/2023 9:26...	IN PROGRESS
<input type="checkbox"/> Perform Task	5/5/2023 8:42...	devsdlproduct...	400 Example S...	devsdlproduct...	Compone...	5/5/2023 8:42...	IN PROGRESS
<input type="checkbox"/> Perform Task	5/5/2023 8:41...	devsdlproduct...	400 Example S...	devsdlproduct...	Compone...	5/5/2023 8:41...	IN PROGRESS
<input checked="" type="checkbox"/> Perform Task	5/4/2023 1:38...	devsdlproduct...	200 Example C...	devsdlproduct...	Approval ...	5/4/2023 1:38...	ASSIGNED
<input type="checkbox"/> Perform Task	5/4/2023 1:36...	devsdlproduct...	200 Example C...	devsdlproduct...	Approval ...	5/4/2023 1:36...	ASSIGNED
<input type="checkbox"/> Perform Task	5/4/2023 1:33...	devsdlproduct...	200 Example C...	devsdlproduct...	Compone...	5/4/2023 1:33...	IN PROGRESS
<input type="checkbox"/> Perform Task	5/4/2023 1:32...	devsdlproduct...	200 Example C...	devsdlproduct...	Compone...	5/4/2023 1:32...	IN PROGRESS

1. Perform Task

Related items

Filter

- Approval Bundle2  
Performer: (None)
- Component D  
Performer: (None)
- Component C  
Performer: (None)
- Page B  
Performer: (None)

## Features

- Single list
- Updated terminology
- Insights panels provide better context
- Batch action support
- Extensibility
- Unobtrusive 'new activity' notification

- Information panel  
general info about selected activity
- Related items panel  
lists the item(s) the activity is associated with
- Process history panel  
shows selected activity in the context of the other activities for the corresponding process

# Activities View

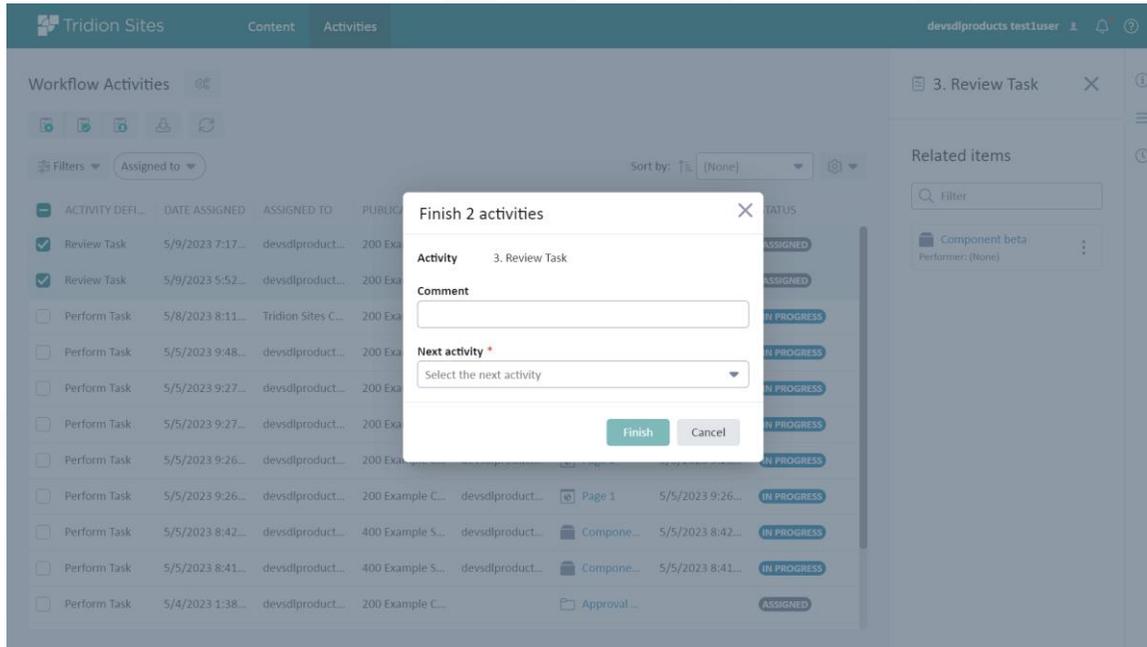
The screenshot displays the 'Activities View' in Tridion Sites. The interface includes a header with 'Tridion Sites', 'Content', and 'Activities' tabs. A user profile 'devsdproducts test1user' is visible in the top right. The main content area shows a list of 'Workflow Activities' with a table of columns: ACTIVITY DEFINITION, DATE ASSIGNED, ASSIGNED TO, PUBLICATION, PERFORMER, PRIMARY ITEM, DATE STARTED, and STATUS. A task is selected, and a detailed information panel is open on the right, showing process history, assigned user, date assigned, comment, and performer.

ACTIVITY DEFINITION	DATE ASSIGNED	ASSIGNED TO	PUBLICATION	PERFORMER	PRIMARY ITEM	DATE STARTED	STATUS
Assign to Proc...	5/9/2023 5:52...	Tridion Sites C...	200 Example C...		Compone...		WAITING
Assign to Proc...	5/8/2023 11:4...	Tridion Sites C...	200 Example C...	Tridion Sites C...	Compone...	5/8/2023 11:4...	FAILED
Perform Task	5/8/2023 11:4...	devsdproduct...	200 Example C...	devsdproduct...	Compone...	5/8/2023 11:4...	COMPLETED
Perform Task	5/8/2023 8:11...	Tridion Sites C...	200 Example C...				ASSIGNED
Perform Task	5/5/2023 9:49...	devsdproduct...	200 Example C...	devsdproduct...	Compone...	5/5/2023 9:49...	COMPLETED
Perform Task	5/5/2023 9:49...	devsdproduct...	200 Example C...	devsdproduct...	Compone...	5/5/2023 9:49...	IN PROGRESS
Perform Task	5/5/2023 9:48...	devsdproduct...	200 Example C...	devsdproduct...	Compone...	5/5/2023 9:48...	IN PROGRESS
Perform Task	5/5/2023 9:27...	devsdproduct...	200 Example C...	devsdproduct...	Page 4	5/5/2023 9:27...	IN PROGRESS
Perform Task	5/5/2023 9:27...	devsdproduct...	200 Example C...	devsdproduct...	Page 3	5/5/2023 9:27...	IN PROGRESS
Perform Task	5/5/2023 9:26...	devsdproduct...	200 Example C...	devsdproduct...	Page 2	5/5/2023 9:26...	IN PROGRESS
Perform Task	5/5/2023 9:26...	devsdproduct...	200 Example C...	devsdproduct...	Page 1	5/5/2023 9:26...	IN PROGRESS

## Features

- Single list
  - Updated terminology
  - Insights panels provide better context
  - Batch action support
  - Extensibility
  - Unobtrusive 'new activity' notification
- 
- Information panel
    - general info about selected activity
  - Related items panel
    - lists the item(s) the activity is associated with
  - Process history panel
    - shows selected activity in the context of the other activities for the corresponding process

# Activities View



## Features

- Single list
- Updated terminology
- Insights panels provide better context
- **Batch action support**
- Extensibility
- Unobtrusive 'new activity' notification

- Supported actions
  - Start
  - Finish
  - Assign
  - Restart
- Batch support for all actions
  - Batch actions are not available to editors in Classic UI

# Activities View

Workflow Activities

Filters: Assigned to

Sort by: (None)

ACTIVITY DEFINITION	DATE ASSIGNED	ASSIGNED TO	PUBLICATION	PERFORMER	PRIMARY ITEM	DATE STARTED	STATUS
Review Task	5/9/2023 7:17...	devsd/product...	200 Example C...		Compone...		ASSIGNED
Assign to Proc...	5/9/2023 7:15...	Tridion Sites C...	200 Example C...	Tridion Sites C...	Compone...	5/9/2023 7:15...	FAILED
Review Task	5/9/2023 5:52...	devsd/product...	200 Example C...		Compone...		ASSIGNED
Assign to Proc...	5/8/2023 11:4...	Tridion Sites C...	200 Example C...	Tridion Sites C...	Compone...	5/8/2023 11:4...	FAILED
Perform Task	5/8/2023 8:11...	Tridion Sites C...	200 Example C...	devsd/product...		5/9/2023 7:17...	IN PROGRESS
Perform Task	5/5/2023 9:48...	devsd/product...	200 Example C...	devsd/product...	Compone...	5/5/2023 9:48...	IN PROGRESS
Perform Task	5/5/2023 9:27...	devsd/product...	200 Example C...	devsd/product...	Page 4	5/5/2023 9:27...	IN PROGRESS
Perform Task	5/5/2023 9:27...	devsd/product...	200 Example C...	devsd/product...	Page 3	5/5/2023 9:27...	IN PROGRESS
Perform Task	5/5/2023 9:26...	devsd/product...	200 Example C...	devsd/product...	Page 2	5/5/2023 9:26...	IN PROGRESS
Perform Task	5/5/2023 9:26...	devsd/product...	200 Example C...	devsd/product...	Page 1	5/5/2023 9:26...	IN PROGRESS
Perform Task	5/5/2023 8:42...	devsd/product...	400 Example S...	devsd/product...	Compone...	5/5/2023 8:42...	IN PROGRESS

Information

URI  
tcm:4-27-131104

Activity definition  
Assign to Process Creator

Description  
Task was finished and it will be sent to the process creator.

Publication  
200 Example Content

Status  
FAILED

Assigned to  
Tridion Sites Content Manager  
System NT Authority User

Date assigned  
5/9/2023 7:15 AM

Performer  
Tridion Sites Content Manager

## Features

- Single list
  - Updated terminology
  - Insights panels provide better context
  - Batch action support
  - Extensibility
  - Unobtrusive 'new activity' notification
- 
- Custom actions
    - action buttons
    - context menu items
  - Custom columns (user configurable)
  - Activities view menu item can be hidden

# Activities View

The screenshot displays the 'Activities View' in Tridion Sites. The top navigation bar shows 'Tridion Sites', 'Content', and 'Activities 1'. The user is logged in as 'devsdproducts test1user'. The main area is titled 'Workflow Activities' and contains a table with the following data:

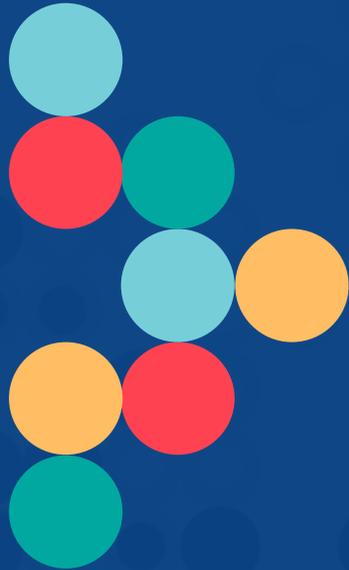
ACTIVITY DEFINITION	DATE ASSIGNED	ASSIGNED TO	PUBLICATION	PERFORMER	PRIMARY ITEM	DATE STARTED	STATUS
<input type="checkbox"/> Assign to Proc...	5/9/2023 5:52...	Tridion Sites C...	200 Example C...		Compone...		WAITING
<input type="checkbox"/> Assign to Proc...	5/8/2023 11:4...	Tridion Sites C...	200 Example C...	Tridion Sites C...	Compone...	5/8/2023 11:4...	FAILED
<input type="checkbox"/> Perform Task	5/8/2023 11:4...	devsdproduct...	200 Example C...	devsdproduct...	Compone...	5/8/2023 11:4...	COMPLETED
<input type="checkbox"/> Perform Task	5/8/2023 8:11...	Tridion Sites C...	200 Example C...				ASSIGNED
<input checked="" type="checkbox"/> Perform Task	5/5/2023 9:49...	devsdproduct...	200 Example C...	devsdproduct...	Compone...	5/5/2023 9:49...	COMPLETED
<input type="checkbox"/> Perform Task	5/5/2023 9:49...	devsdproduct...	200 Example C...	devsdproduct...	Compone...	5/5/2023 9:49...	IN PROGRESS
<input type="checkbox"/> Perform Task	5/5/2023 9:48...	devsdproduct...	200 Example C...	devsdproduct...	Compone...	5/5/2023 9:48...	IN PROGRESS
<input type="checkbox"/> Perform Task	5/5/2023 9:27...	devsdproduct...	200 Example C...	devsdproduct...	Page 4	5/5/2023 9:27...	IN PROGRESS
<input type="checkbox"/> Perform Task	5/5/2023 9:27...	devsdproduct...	200 Example C...	devsdproduct...	Page 3	5/5/2023 9:27...	IN PROGRESS
<input type="checkbox"/> Perform Task	5/5/2023 9:26...	devsdproduct...	200 Example C...	devsdproduct...	Page 2	5/5/2023 9:26...	IN PROGRESS
<input type="checkbox"/> Perform Task	5/5/2023 9:26...	devsdproduct...	200 Example C...	devsdproduct...	Page 1	5/5/2023 9:26...	IN PROGRESS

The sidebar on the right shows details for the selected activity '1. Perform Task':

- Information: URI tcm:4-13-131104
- Activity definition: Perform Task
- Description: Perform the specified task.
- Publication: 200 Example Content
- Status: COMPLETED
- Assigned to: devsdproducts test1user
- Date assigned: 5/5/2023 9:49 AM
- Performer: devsdproducts test1user
- Date started: (empty)

## Features

- Single list
  - Updated terminology
  - Insights panels provide better context
  - Batch action support
  - Extensibility
  - Unobtrusive 'new activity' notification
- 
- Counter shows number of newly assigned activities since list was last viewed.



# Data Loading & Caching

# Background loading

The Classic UI and previous versions of Experience Space store item data on the client in a central repository.

When a user modifies an item, or we receive an updated version of an item in a list request, we do our best to keep this repository up to date.

But over time, the data in the client becomes desynchronized, e.g., changes to parent items are not propagated to shared children.

In Tridion Sites 10.0, we've migrated 'Explorer' functionality from a central store approach (React Redux) to an approach where each component is responsible for its own data (React Query).

# Background loading

The screenshot displays the Tridion Sites Content Manager interface. The top navigation bar includes 'Tridion Sites', 'Content', and 'Activities', along with a user profile 'devsdlproducts test1user'. The main area shows a folder view for '500 Items - B' containing 18 items, each a 'Copy' of a document. The information panel on the right provides details for the selected folder.

NAME	STATUS	SCHEMA	SHARED FROM	DATE MODIFIED
Copy 10 of ...		Bootstrap Confi...	200 Example Co...	5/5/2023 12:09...
Copy 11 of ...		Bootstrap Confi...	200 Example Co...	5/5/2023 12:09...
Copy 12 of ...		Bootstrap Confi...	200 Example Co...	5/5/2023 12:09...
Copy 13 of ...		Bootstrap Confi...	200 Example Co...	5/5/2023 12:09...
Copy 14 of ...		Bootstrap Confi...	200 Example Co...	5/5/2023 12:09...
Copy 15 of ...		Bootstrap Confi...	200 Example Co...	5/5/2023 12:09...
Copy 16 of ...		Bootstrap Confi...	200 Example Co...	5/5/2023 12:09...
Copy 17 of ...		Bootstrap Confi...	200 Example Co...	5/5/2023 12:09...
Copy 18 of ...		Bootstrap Confi...	200 Example Co...	5/5/2023 12:09...

**Information**

**URI**  
tcm:5-191-2

**Name**  
500 Items - B

**Type**  
Folder

**Location**  
\\400 Example Site\Building Blocks\Bootcamp

**Date created**  
5/5/2023 12:09 PM

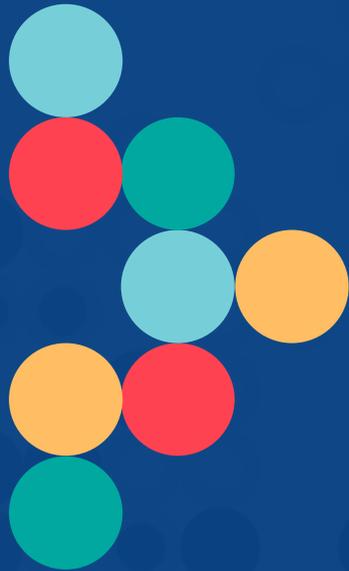
**Date modified**  
5/5/2023 12:10 PM

**Publish status**  
Not published

**Shared from**

# Demonstration

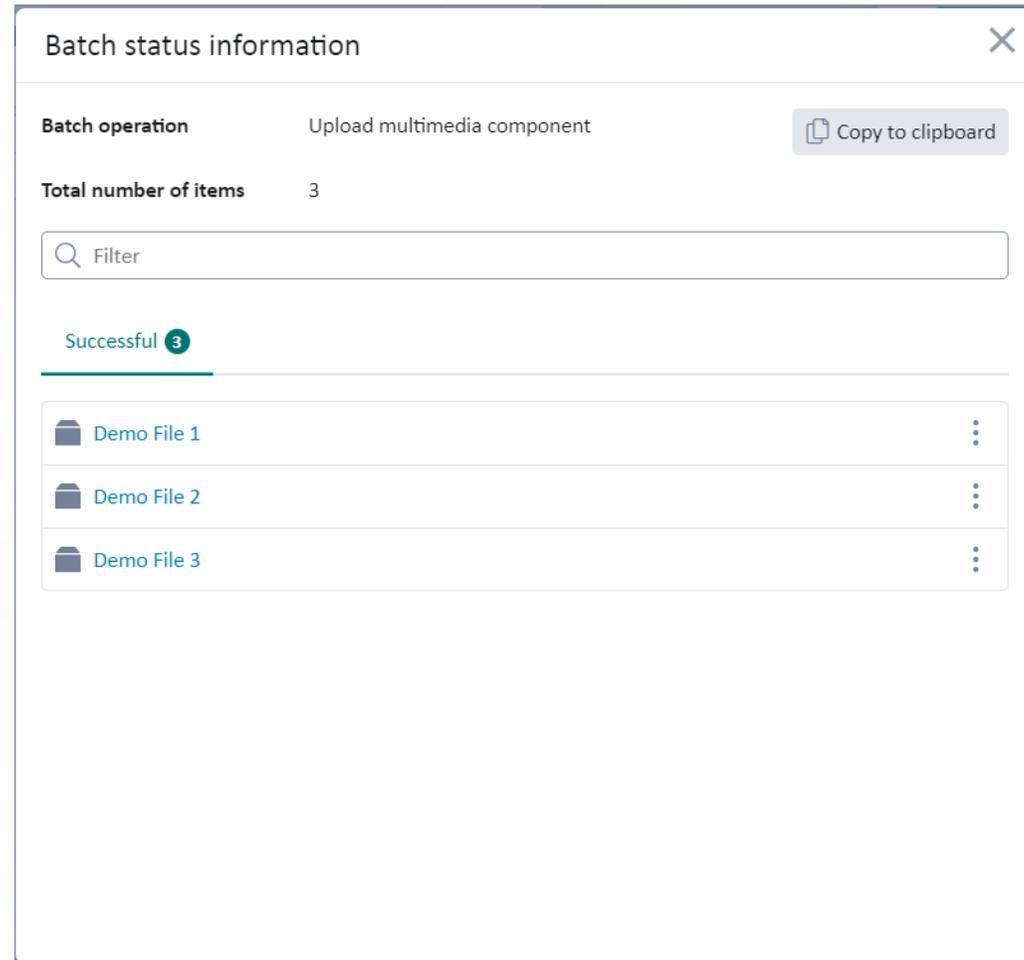
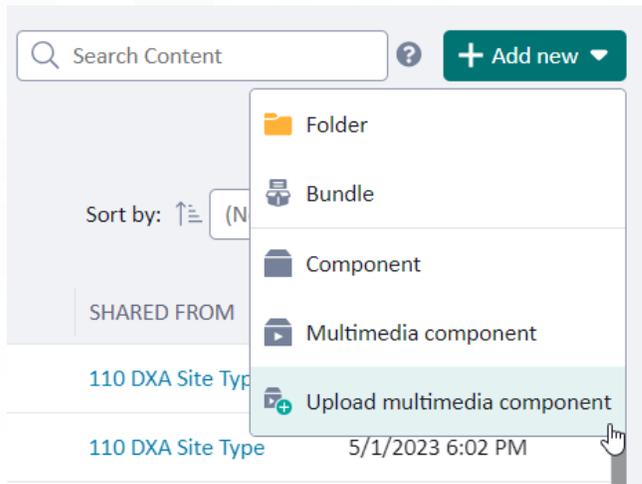


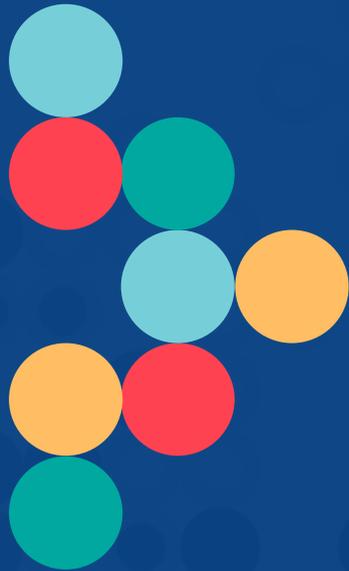


# Multiple file Upload

# Multiple file Upload

- Deprecated WebDav
- Queuing mechanism
- Batch report





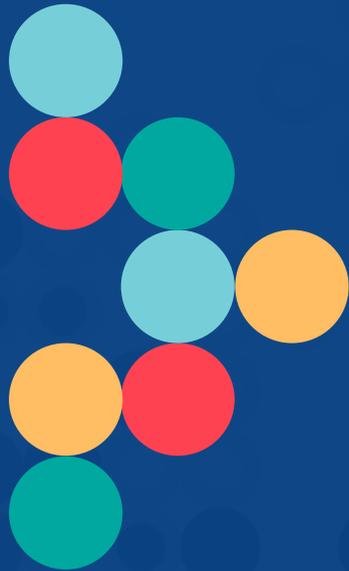
# Configurable Lists

# Configurable Lists

- Column Configurator
- Added additional columns
- Filtering
- Sorting
- Activities

The screenshot displays a web interface for managing a list of folders. At the top, there are filter buttons for 'Filters', 'Modified by', 'Schema', 'Shared from', and 'Status'. A 'Sort by' dropdown is set to '(None)'. Below these are buttons for 'Type' and 'URI'. The main area contains a table with two columns: 'NAME' and 'DATE CREATED'. A dropdown menu is open on the right, showing a search bar and several filter options: 'Approval status', 'Date created' (which is selected with a checkmark), 'Date modified', 'Locale', and 'Locked by'.

<input type="checkbox"/>	NAME	DATE CREATED
<input type="checkbox"/>	📁 Bootcamp	5/4/2023 1:09 PM
<input type="checkbox"/>	📁 Bootcamp Mihai	5/9/2023 2:18 PM
<input type="checkbox"/>	📁 Content	5/1/2023 6:00 PM
<input type="checkbox"/>	📁 Default Templates	5/1/2023 6:00 PM
<input type="checkbox"/>	📁 Framework	5/1/2023 6:00 PM
<input type="checkbox"/>	📁 Modules	5/1/2023 6:00 PM
<input type="checkbox"/>	📁 Modules Content	5/1/2023 6:00 PM
<input type="checkbox"/>	📁 Schemas	5/9/2023 12:12 PM
<input type="checkbox"/>	📁 Settings	5/1/2023 6:00 PM
<input type="checkbox"/>	📁 Stubs	5/8/2023 12:35 PM



# UX Improvements

# Data request configurator

- Items in progress
- Activities View

Items in progress preferences ✕

**User scope**

Show only my items in progress

Show items in progress by all users

**Maximum number of items**

500 ▾

Confirm Cancel

Workflow activity preferences ✕

**User scope**

Show only my activities

Show activities for all users

**Included activity states**

Assigned

In progress

Completed

Waiting for workflow agent

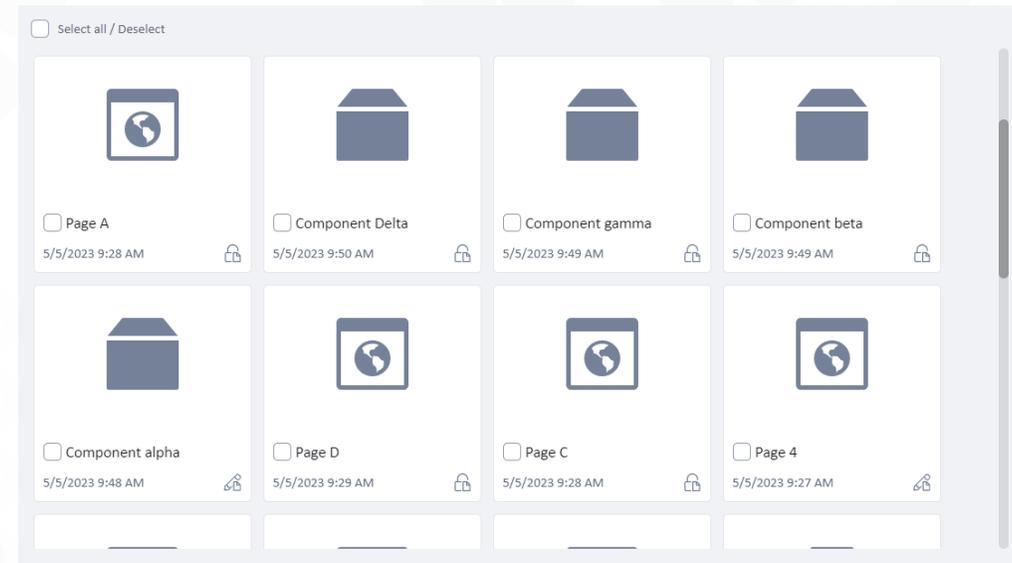
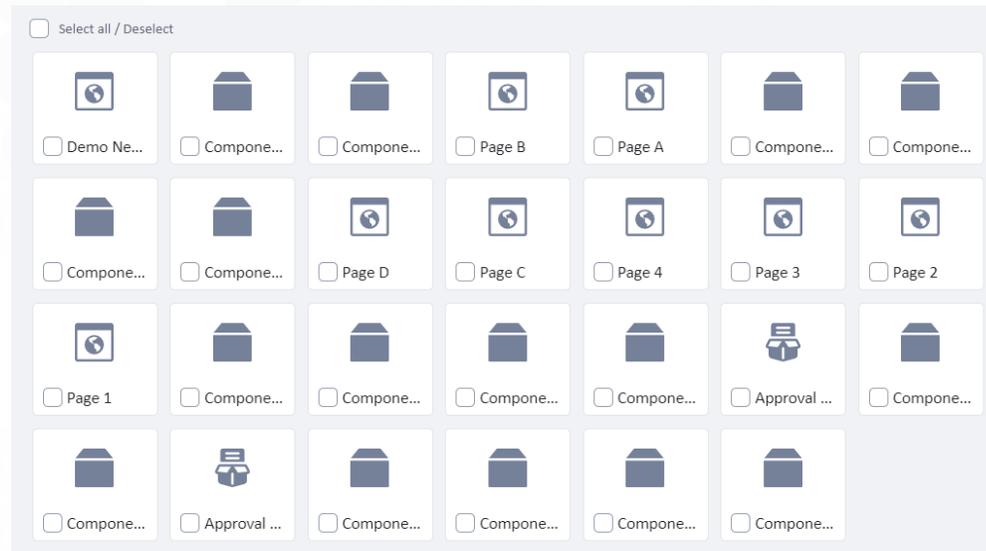
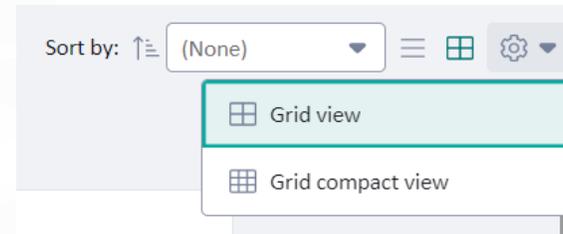
Failed

Suspended

Confirm Cancel

# Thumbnail view in explorer

- Grid View
- Grid Compact View



# Demonstration



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# Tridion Sites 10 Bootcamp Experience Space UI Extensions

Egor Chikunov

11 May 2023



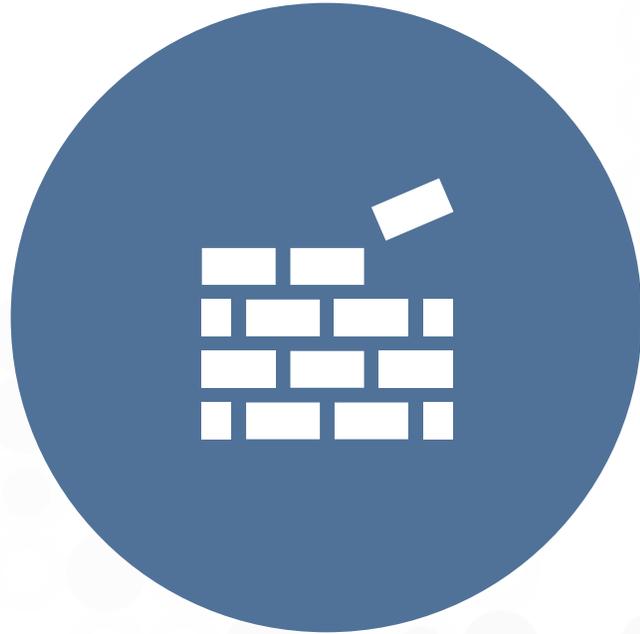
# Requirements

- Support most common extension scenarios
- Have well defined and documented API
- Based on industry standards
- Make it easy to create an extension from scratch
- Provide fast feedback during the development process
- Allow usage of the third-party dependencies
- Customization of the build process

# Limitations

- React-based extensions
- Versions of third-party packages shared from the host application are fixed

# Experience Space UI Extensions



Framework



Extension points



Command-line  
interface

# Framework



# Framework

- Extensions format
- Loading of extensions into the host application
- Communication between an extension and the host application
- Data loading
- Reusable components and functionality available for extensions

# Extensions format

- Add-ons Service package
- Can contain multiple backend and frontend extensions
- Each frontend extension is a standalone React library

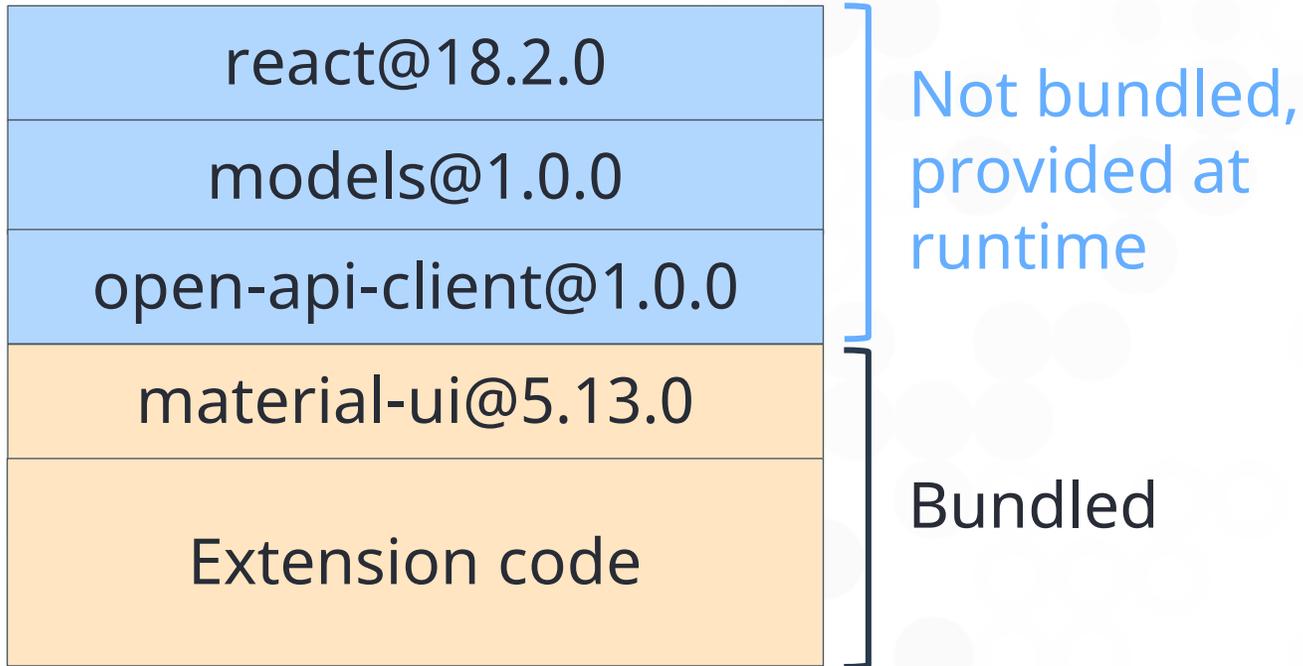
```
"id": "addon-example",
"name": "Addon example",
"author": "RWS",
"description": "Addon example for Tridion Experience Space",
"manifestVersion": "1.0.0",
"requireConfiguration": "optional",
"version": "1.0.0",
"extensions": [
  {
    "name": "extension-example",
    "type": "ExperienceSpaceExtension",
    "properties": {
      "main": "dist\\extension-example\\main.js",
      "files": [
        "dist\\extension-example\\main.js",
        "dist\\extension-example\\main.css"
      ]
    }
  }
]
```

# Loading of extensions

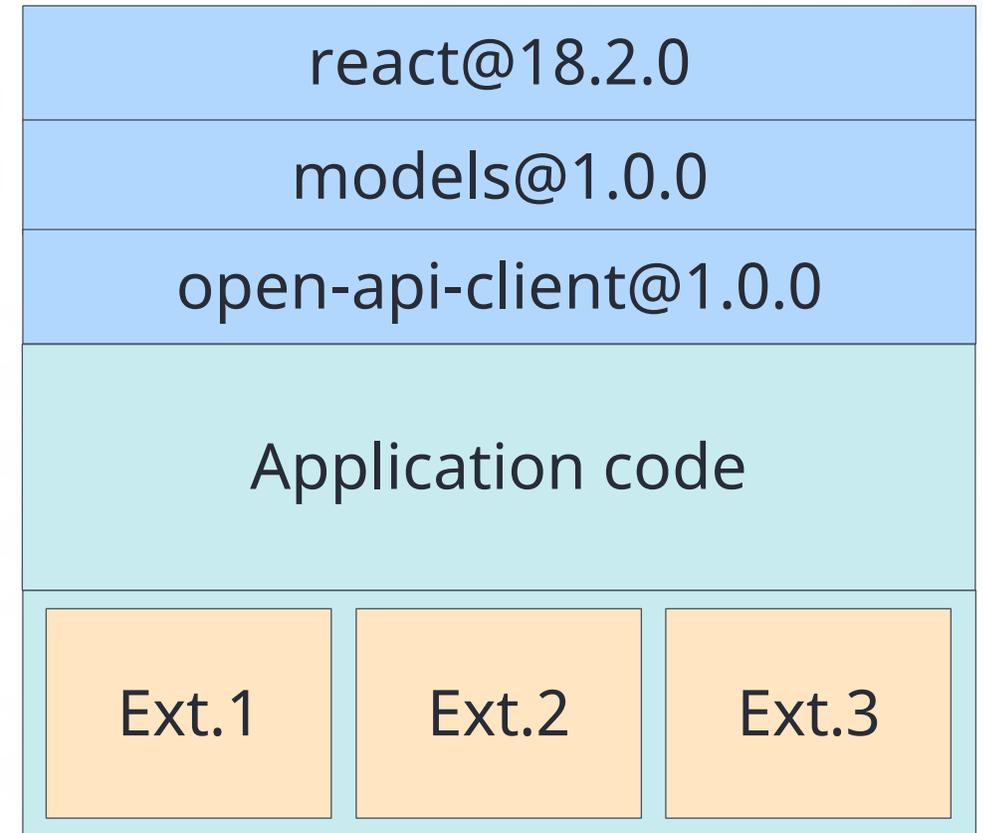
- SystemJS format
  - Provides cross-browser support for dynamically loaded JS modules
  - Natively supported by Webpack and Rollup
  - Commonly used for the micro-frontends
  - Standardized and stable

# Loading of extensions

Extension



Host application



Shared libraries versions are **validated** on loading

# Data contexts

- Each context provides the data and functionality available at the corresponding level
- Data contexts can be nested
- An extension has access to all parent data contexts
- Extension point API is not affected by new functionality in data contexts

# Data contexts

The screenshot shows the Tridion Sites interface with the following components:

- Header:** Tridion Sites, Content, Activities, Test User, notification, and help icons.
- Content Explorer Tree context (left, pink box):** A sidebar showing a tree view of content. The 'Building Blocks' folder is selected and highlighted.
- Content Explorer Table context (center, blue box):** A table listing folders within 'Building Blocks'. The table has columns for 'Name', 'Shared From', and 'Date Modified'.

	HEMA	SHARED FROM	DATE MODIFIED
<input type="checkbox"/>	Content	100 Master	4/10/2023 6:02 PM
<input type="checkbox"/>	Default Templates	000 Empty	4/10/2023 4:51 PM
<input type="checkbox"/>	Framework	100 Master	4/10/2023 4:51 PM
<input type="checkbox"/>	Modules	100 Master	4/10/2023 4:51 PM
<input type="checkbox"/>	Modules Content	100 Master	4/10/2023 4:52 PM
<input type="checkbox"/>	New Folder		4/21/2023 1:53 PM
<input type="checkbox"/>	Schemas	000 Empty	4/10/2023 6:00 PM
<input type="checkbox"/>	Settings	100 Master	4/10/2023 4:52 PM
- Content Explorer context (right, orange box):** A panel showing metadata for the selected 'Content' folder.

**Information**

**URI**  
tcm:3-130-2

**Name**  
Component Examples

**Type**  
Folder

**Location**  
\\110 DXA Site Type\Building Blocks

**Date created**  
4/10/2023 6:00 PM

**Date modified**  
4/10/2023 6:02 PM

**Publish status**  
Not published

Navigation breadcrumb: Publications > 110 DXA Site Type > Building Blocks

# Data loading

- Host application exposes a large number of query and mutation hooks to extensions
- The cache used by queries is shared across the host application and extensions
- They return backend data already converted into application models
- OpenAPI client package is provided for direct access to all backend endpoints

# Reusable components and functionality

- Components

- Text
- Button
- Icon
- Link

- Hooks

- useConfirmation
- useNotification
- useUserProfile

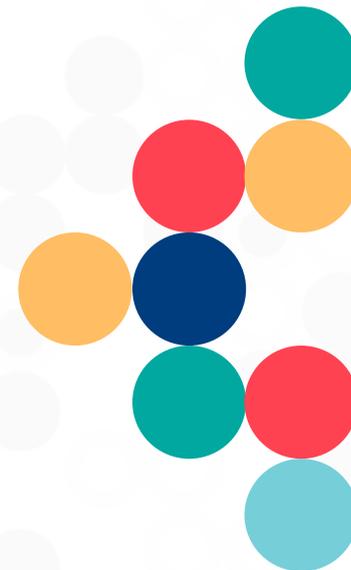
- Queries

- useItem
- useItemBlueprint
- useSystemSearch
- ...

- Mutations

- useCopyItems
- useFinishActivities
- useStartWorkflow
- ...

# Extension points



# Extension points

Primary navigation config

The screenshot shows the Tridion Sites Content Manager interface. The top navigation bar includes 'Tridion Sites', 'Activities', 'Administrator only', 'Help', 'Users list', and 'Content'. The 'Content' tab is active. The main area displays a list of content items with columns for NAME, STATUS, SCHEMA, and SHARED FROM. A context menu is open over the 'BundleTestContent' folder, showing options like 'Open', 'Open editor', 'Publish', 'Copy', and 'Say hello'. A 'COPY ID TO CLIPBOARD' column is visible on the right side of the table. The left sidebar shows a tree view of publications, with 'Building Blocks' selected. The right sidebar shows the 'Information' panel for 'BundleTestContent', including details like URI, Name, Type, Location, Date created, Date modified, and Publish status.

Content Manager

Search Building Blocks + Add new

Filter publications

BundleTestContent

Information

URI  
tcm:4-186-2

Name  
BundleTestContent

Type  
Folder

Location  
\200 Example Content\Building Blocks

Date created  
4/10/2023 7:07 PM

Date modified  
4/10/2023 7:07 PM

Publish status  
Not published

NAME	STATUS	SCHEMA	SHARED FROM	COPY ID TO CLIPBOARD
BundleTestContent				Copy
Componer			100 Master	Copy
Componer			100 Master	Copy
Content			100 Master	Copy
Default Te			000 Empty	Copy
Framework			100 Master	Copy
Modules			100 Master	Copy
Modules C			100 Master	Copy
Multimedi		Default Multimedia Schema		Copy
New Folders			110 DXA Site Type	Copy
Nick				Copy
Schemas			(Local copy)	Copy
Settings			100 Master	Copy

Context menu config

Custom primary navigation

Action bar config

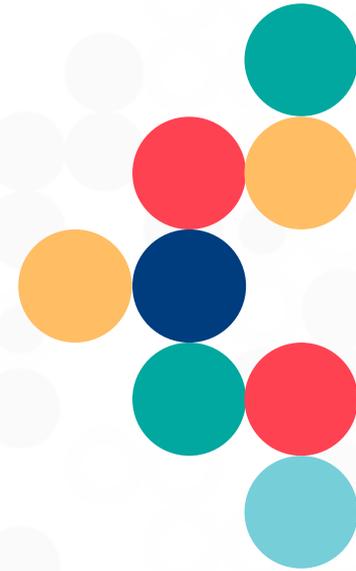
Custom actions

Custom columns

# Extension points

- Primary navigation
- Localization
- Item editors
  - Fields extensions
  - Rich Text fields extensions
- Activities Explorer
  - Custom action
  - Action bar configuration
  - Context menu configuration
- Content Explorer
  - Custom action
- Content Explorer Table
  - Action bar configuration
  - Context menu configuration
  - Custom column
- Content Explorer Tree
  - Context menu configuration

# Command-line interface



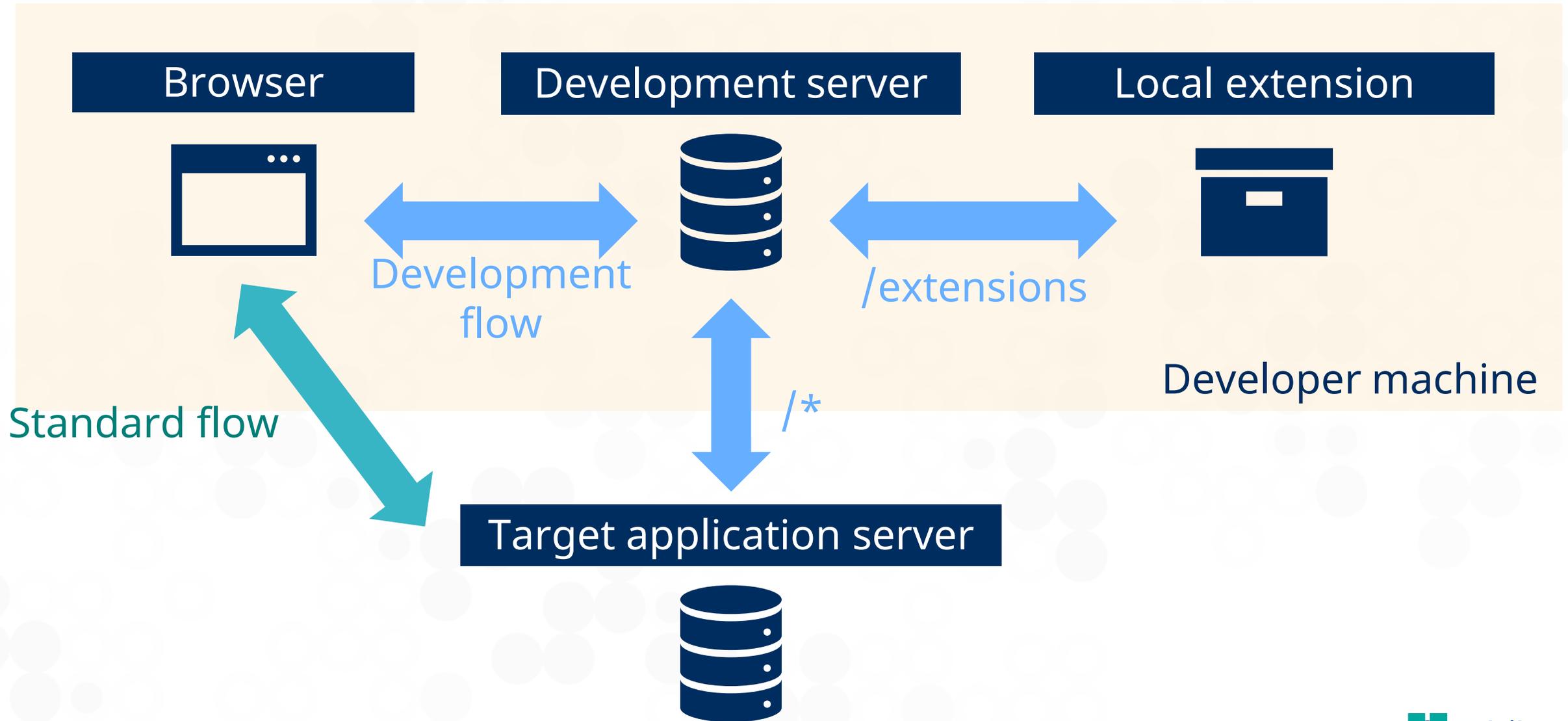
# Command-line interface

- Simplifies creating an add-on from scratch
- Provides an environment to develop and test extensions locally
- Prepares and creates an Add-ons Service package ready for deployment
- Designed as a scaffolding tool rather than a black-box that hides implementation

# Create command

- Creates a basic structure for an add-on with a frontend extension
- Requires an environment URL that would be used as a target for development
- Generates a frontend project with Webpack, linting and a development server
- The development server allows to run a local extension against any compatible target environment

# Development server



# Pack command

- Creates an Add-ons Service package based on the manifest file
- Works seamlessly with the output of Create command of CLI
- Package is ready for deployment after the execution of this command

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