Sitecore Experience Commerce 10.1 Release Notes

February 25, 2021 – Released Sitecore Experience Commerce 10.1

March 23, 2021 – Updated Sitecore Experience Commerce 10.1 NuGet packages on sitecore.myget.org to resolve a NuGet dependency issue in the Storefront. No change was needed in the release packages distributed on dev.sitecore.net.

October 15, 2021 – Released an updated XC host file as described in KB1000801, for connecting to Identity Server. This is required to make XC 10.1 compatible with XP 10.1 Update-2.

Contents:

Improvements

Area	Improvements	ID
Entity archiving	Entity archiving allows the Commerce Engine to move eligible, inactive Commerce entities stored in the Shared Environments database, to an archive database. Pruning the Shared Environments database of unnecessary entities prevents the database from expanding to an unmanageable size, and effectively reduces the number of entities that Commerce operations must iterate through when processing requests. For more information, see https://doc.sitecore.com/developers/101/sitecore-experience-commerce/en/entity-archiving.html	401884
Performance	Redis Connection Pooling - The Redis cache provider now uses connection pools to help improve Commerce Engine and Commerce Engine Connect performance when responding to high volume of complex requests for cached data. For more information, see https://doc.sitecore.com/developers/101/sitecore-experience-commerce/en/redis-connection-pooling-configuration.html	441962
Performance	Redis compression - The Redis cache provider compresses cached data at rest in the cache store and during network transport. For more information, see https://doc.sitecore.com/developers/101/sitecore-experience-commerce/en/adding-redis-connection-options-to-commerce-caching-configurations.html	441962
Performance	Implemented an in-memory cache for Redis data, on a per request basis. Then Redis for the same Keys can be retrieved from in-memory cache/copy.	441964
Performance	Improved the speed of implementing cache updates after an incremental indexing operation has completed.	426738

Area	Improvements	ID
Performance	Improved system cold start times in use cases where Storefront Direct Navigation is enabled. This was achieved by reducing the impact of Sitecore needing to make multiple calls to GetItem and GetChildren which in turn results in many GetItemsAllLanguages() calls (which are external service calls from Commerce Engine Connect on the CD to the Commerce Engine). Implemented the *ResolvePath* method within Data Provider in Commerce Engine Connect. The result includes issuing a Fast Query that will return all configured catalog folders, which will be cached, and the *ResolvePath* will therefore know when it needs to resolve the path or not.	438275
Bus Tools	For entity views of UI Hint type 'Flat', resolved the view properties' UI Types so they can be rendered. UI Types include: Custom Entity Link, Custom Item Link, Entity Link, Item Link, Sub Item Link, Html, Multiline, List, Download CSV, and String By Data Type (OriginalType, DateTimeOffset, FullDateTime UI Type will render the time also, Decimal, Sitecore.Commerce.Core.Money, Html, List, String (default).	426628
Bus Tools	Added a "*" indicator after the field title for required data entry fields.	426322
Containers	Moved configuration file patches and transformations, write permission, and LogMonitor configurations to the Resources container, to align with similar structural changes made in the Experience Platform this release. For more information, see https://doc.sitecore.com/developers/101/sitecore-experience-commerce/en/sitecore-commerce-container-sdk.html	457374
SDK	Converted Postman samples to Postman Collection Format to v2.1	459177

Resolved Issues

Area	Resolved Issues	ID
Catalog	A cloned catalog/category incorrectly references ChildrenCategoryList from the master catalog instead of from the source catalog that was cloned. The result was a "The requested document was not found" error page when the user selected it.	431658
Catalog	Associating the sellable item to an imported Catalog creates a duplicated InventoryInformation component.	425909
Catalog	After deleting all of a sellable item's variants, the sellable item continues to display a non-existent variant in the Content Editor, which has the same name as the sellable item.	455615
Bundles	Product Details page throws an error when displaying a bundle (static or dynamic) with products that have no variants.	447915
Promotions	A promotion code gets applied to the order even after promotion has expired.	429695
Promotions	GetPromotionBenefitDetailsViewBlock is missing a confirmation if the Entity is of type Promotion, which causes unnecessary processing to occur. It causes the block to partially execute by running the GetActions method.	418792
Promotions	The promotion qualification "Cart Item is in [specific] Category" does not function correctly when associated with a new category that had just been created.	457972
Orders	OrderDetails in the ExperienceProfile displays empty CartLines, where the SXA Storefront has not been installed.	430771

Area	Resolved Issues	ID
Payments	A Braintree failure occurs when submitting an order; the error may not be properly handled when a connection issue with Braintree occurs.	373422
Engine	Unexpected errors can occur when deriving custom policies from the EntityStoreSqlPolicy, if the derived custom policy does not point to the Global or Shared database. This EntityStoreSqlPolicy is used in native Commerce Engine blocks which work with schemas of Global or Shared databases.	446886
Engine	Invalid artifact sets are included in the EnvironmentInitializationPolicy, pertaining to these environment configuration files: Plugin.AdventureWorks.CommerceAuthoring-1.0.0.json Plugin.AdventureWorks.CommerceShops-1.0.0.json Plugin.Habitat.CommerceAuthoring-1.0.0.json Plugin.Habitat.CommerceShops-1.0.0.json	413635
Engine	The InitializeLanguages method of the CommerceRepository class setting empty values to _languages collection, which caused varying errors and requiring recycling the application pool to resolve.	445589
Commerce Engine Connect	Fetching a product from the cart fetches the product from the wrong catalog, in this scenario: Create a new catalog and category. Associate a sellable Item from a different existing catalog to this new catalog & category. Create a new Storefront site and associate it with this new catalog. Browse the site and add this newly associated sellable item to the cart. Go to the cart page and observe the URL to the sellable item. Result: it incorrectly resolves to the wrong catalog.	429170
Bus Tools	BizFx URLs with encoded entity IDs get re-encoded upon re-authentication, causing blank page content after login due to a redirect to an incorrect URL.	336679
Storefront	The Profile Editor component throws an error upon rendering the Controller in Experience Editor.	313413
Storefront	The Storefront's branded theme broke Sitecore Forms fields when tracking of the form is enabled, resulting in a "SyntaxError: Unexpected end of JSON input" error displayed on the page after typing the text to the form field.	429494
Sitecore integration	The Commerce Editor displays an error due to missing "Sitecore.Annotations" namespace in CommerceAppLayout.aspx.	449603
Indexing	Sitecore Master and Web indexing fails on crawling catalog data when "Switch on rebuild" and "Solr cloud" are used.	458359
Indexing	Catalog items in the Sitecore Master and Web indexes that are marked for deletion do not actually get deleted during incremental indexing.	460511
Indexing	Minions do not successfully rebuild search indexes during deployment - causing price calculation issues.	421490
Indexing	FullIndexRebuild creates corrupted documents with empty values, for example creating empty values.	437031
Indexing	The ItemIncrementalIndexMinion is supposed to remove entities from the index list once they have been indexed, but in some situations it also removes new not yet indexed entities from the index list.	449850
Indexing	Catalog data is unavailable from sitecore_web/master_index during a full rebuild when SwitchOnRebuild is enabled.	452786
Caching	CatalogRepository.DefaultCache does not get updated properly on the CD server, in a scaled deployment. The IndexingCompletedEventHandler did not remove related entries from caches, as expected.	451763

Area	Resolved Issues	ID
Performance	Thread pool starvation and blocking can occur as a result of synchronous code incorrectly calling asynchronous methods.	427065
Performance	Performance may degrade where *SelectListEntitiesByRangeWithoutVersioning* is intended to function without Entity Versions, but in practice is still implementing the sorting of Entity Versions.	435549
Performance	Server Garbage Collection is not enabled by default on the Shops instance. Enabling garbage collection, depending on the environment, could reduce the time paused for Garbage Collection by as much as 90%. There are two main modes: Workstation mode (designed to minimize delays of UI applications) and Server mode (designed for maximum application throughput – e.g. on not multi-core servers with web applications). Implemented Server mode garbage collection, by default.	442628
Performance	Double requests of GetCatalogItemAllLanguages SellableItem are sent from Commerce Engine Connect to the Commerce Engine.	440757
Performance	The Commerce Engine (e.g. Shops) does not always reconnect to the Redis server when the connection is lost after startup. As a result of this issue, performance would decrease after traffic gets redirected from the Redis to the MSSQL server.	435241
Performance	Performance is not optimized in Sitecore.Framework.Caching libraries.	435253
Security	The Journal entity stores the bearer token, which could result in a potential security risk.	424657
Localization	The "Localize Property" dialog does not display existing data from the variant field and is not saving the new data to the variant.	405463
Localization	The EditSellableItemBundleQuantity property name is not viewable in the Control Panel.	420760
Localization	Localize Property pop-ups are not correctly localized in some dropdown lists.	423566
Localization	The localization of some placeholder text within search boxes (light grey guidance text) is displayed only in English.	423567
Localization	The localization of the word "Priority" name and value that is presented in column headers is displayed only in English.	423574
Localization	The localization of the Pricing Option name (e.g. Manual or Automatic) presented on the Dynamic Bundle page is displayed only in English.	423345
Localization	The localization of the MakePurchasable action that is displayed in a dialog box on a Bundle settings page is displayed only in English.	296733
Globalization	Translated keys in the key's xml file were not correctly reflected on the Business Tools UI.	423344

Known Issues

Area	Known Issues	ID
Storefront	When importing CSS changes to the Storefront site, the import can fail depending on how you had opened the Experience Editor. The import fails, changes are not reflected in the site, when the Experience Editor was launched directly from the Sitecore Launchpad.	459169

Area	Known Issues	ID
	The import succeeds when the Experience Editor was instead launched as follows: Open the Content Editor from the Sitecore Launchpad, navigate to /sitecore/Content/Sitecore/Storefront/Home, then right-click on the Home node and select Experience Editor.	
Business Tools	LocalizationEntities cache is not generated if the sellable item is still present in the SellableItems cache	460421
Containers upgrade	During the XC10.0 container to 10.1 container upgrade, some specific item permissions may get lost across the upgrade procedure. These lost permissions would need to be re-established after the upgrade.	385010 453743

Removed, Deprecated, Obsoleted Code

Area	Removed or Deprecated	ID
PaaS	Removed the PaaS deployment option; it is no longer supported as of XC10.1. Deployment via Containers is the recommended deployment option. Configuration and code related to Microsoft Application Insights® for monitoring the Commerce Engine in a PaaS deployment is not supported and will be removed in a future release.	438280
Azure Search	Removed support for Azure Search; it is no longer supported as of XC10.1.	430468
Sample Content Hub Connector	Removed the sample Commerce Engine plugin and related policies that were included in the 10.0 release. This connector provided a sample one way synchronization of product attributes from a specific release of Content Hub's PCM module and product images from Content Hub's DAM module.	430467
Commerce Core	Deprecated Sitecore.Commerce.Core/Components/MessageComponent.cs because it is no longer used.	449711
Catalog	Deprecated Sitecore.Commerce.Plugin.Catalog/Pipelines/Blocks/ItemIndexing/SolrDeleteAllDocumentsByArtifactStoreBlock.cs because it is no longer used.	452786
Commerce Engine Connect	Deprecated the GetSitecoreItemId(string productId, string variantId) method from TranslateCartLineToEntity. This change was made as part of resolution bug 429170 (in the Resolved Issues section above).	429170
Performance – thread safety	Obsoleted and replaced methods as follows: Within Sitecore.Commerce.Core/Components/Component.cs: Obsoleted: public void SetPolicy(Policy policy) public bool HasComponent<T>() where T : Component public T GetComponent<T>() where T : Component public List<T> GetComponents<T>() where T : Component public void SetComponent(Component component) public void RemoveComponent(Type componentType) public void RemoveComponent(string componentId) Replaced with: public void AddOrUpdatePolicy(Policy policy) public bool HasChildComponent<T>() where T : Component public T GetChildComponent<T>() where T : Component public List<T> GetChildComponents<T>() where T : Component public void AddOrUpdateChildComponent(Component component)	449710

Area	Removed or Deprecated	ID
	public void RemoveChildComponent(Type componentType) public void RemoveChildComponent(string componentId) Within Sitecore.Commerce.Core/Models/Model.cs Obsoleted: public void SetPolicy(Policy policy) Replaced with: public void AddOrUpdatePolicy(Policy policy) Sitecore.Commerce.Core/Policies/PolicyContainer.cs Obsoleted: public void SetPolicy(Policy policy) Replaced with: public void AddOrUpdatePolicy(Policy policy) The above methods were refactored as part improving performance related to resolving thread-safety issues.	

Breaking Changes

Area	Breaking Changes	ID
Newtonsoft	If developing with the Commerce Engine Connect module you may experience a NU1605 nuget error detecting a package downgrade of the Newtonsoft.json package, for example from version 12.0.3 down to 11.0.2. This is by design and can be ignored by including a NoWarn="NU1605" value to the PackageReference, for example: <PackageReference Include="Newtonsoft.Json" Version="11.0.2" NoWarn="NU1605" /> There are in fact no breaking changes between versions and this reference will not cause any functional issues.	447090
Type Extensions	Moved TypeExtensions.cs from the Sitecore.Commerce.Plugin.Catalog to Sitecore.Commerce.Core. This change was made as part of the Data Archiving improvement, to avoid an ambiguous reference.	432630
Commerce Entity Class	Within the Sitecore.Commerce.Core/Entities/CommerceEntity.cs class, four methods have been changed: From: public T GetComponent<T>() where T : Component public bool HasComponent<T>() where T : Component public bool HasPolicy<T>() where T : Policy public T GetPolicy<T>() where T : Policy To: public T GetComponent<T>(bool matchBaseType = false) where T : Component public bool HasComponent<T>(bool matchBaseType = false) where T : Component public bool HasPolicy<T>(bool matchBaseType = false) where T : Policy public T GetPolicy<T>(bool matchBaseType = false) where T : Policy	446886

Area	Breaking Changes	ID
	These methods compare types and return true if the result is non-null and can be converted to type T. Problems could occur where an exact type match was expected. Note that the exact type match is expected by default, so that no changes should need to be made in custom code. But in the case where a base type match is expected, the Boolean parameter ‘true’ needs to be passed.	
Commerce Redis Caching	The commerce caching configuration has changed. The configuration value for: /configuration/sitecore/commerceCachingConfiguration/cacheSettings/redis/options@type has changed: From: Microsoft.Extensions.Caching.Redis.RedisCacheOptions, Microsoft.Extensions.Caching.Redis To: Sitecore.Commerce.Engine.Connect.CommerceRedisCacheOptions, Sitecore.Commerce.Engine.Connect.Caching	447090

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