Migrating an existing On-premise/CCv1 SAP Commerce (Hybris) application to SAP Commerce Cloud (CCv2)
Over the last decade, the rise of e-commerce has made a huge impact on how businesses sell their products. The shift in consumer preference for speed, choice and efficiency has pushed many brands, retailers and shoppers away from retail stores towards online commerce. Many CPG companies are also adopting a D2C model, which caters directly to consumers by bypassing standard distribution channels and gaining direct access to them. These days, any business that wants to be successful in selling products or services online depends on an e-commerce solution. The next step in this evolution is cloud-based e-commerce, which brings up a new critical decision companies need to make to stay ahead of the curve – whether or not to make the switch. An e-commerce cloud solution offers major benefits to those who choose to go with it - Faster speeds, improved server usage, and tighter security just to name a few. On top of that, businesses that go with cloud enjoy great budget savings due to lower setup and maintenance costs.

After the acquisition of Hybris in 2013, SAP has emerged as a popular eCommerce platform. This was branded earlier as SAP Hybris Commerce, while SAP renamed it as SAP Commerce later. With the cloud-based SAP Experience Suite coming together, the older Hybris / SAP Commerce product line does not carry the same weightage. Currently there are two versions of SAP Commerce available: CCv1 and CCv2. CCv1 is a private cloud implementation running on a proprietary SAP infrastructure. CCv2 is a public cloud offering on Microsoft Azure using Kubernetes, which helps in automating application deployment and scaling management. The database in this case is Microsoft Azure SQL DB, which is offered as a service from Azure cloud. SAP released CCv2 to customers in the later part of 2018, and it provides users their own unique subscription in the new platform. They have the ability to fully extend and customize their commerce project to meet their unique business requirements.
Why you should migrate to CCv2:

As SAP Commerce/Hybris 6.7 support is coming to the end of its life in August 2020, more customers are considering whether to remain with their on-premise SAP Commerce/Hybris platform/CCv1 in SAP infrastructure solution or migrate to CCv2. This decision becomes more meaningful if you realize that SAP has stopped licensing CCv1 to new customers. Since 2019, SAP is only licensing CCv2. You should consider the following for making the decision to migrate to SAP Commerce cloud CCv2.

Alignment with SAP Commerce Roadmap

- SAP’s Commerce Cloud architecture is built with the goal to provide SAP Commerce as Software as a Service (SaaS). It is based on a headless commerce concept where the Storefront is decoupled from the commerce platform and is integrated through various microservices, also known as Domain Services.

- SAP Commerce Accelerator-based Storefronts (B2B/B2C/Telco/Travel, etc.) will be discontinued in the near future. SAP recommends using JavaScript-based Storefront Spartacus for any new SAP Commerce Storefront, and not to use legacy JSP-based accelerator Storefronts. You can even use your own JavaScript-based Storefront and then the REST APIs/microservices available in SAP Commerce Cloud to deliver a unique shopping experience to your customers. SAP is making a fundamental shift towards a microservices-based architecture, such that you are not restricted by your commerce platform to provide an engaging experience to your shoppers across all the channels. Core commerce features like Catalog, Pricing, Inventory, Authentication, etc. remain within SAP Commerce Cloud. However, core customer-facing processes such as Store, Search, Shopping Cart, Checkout, Content, and Customer Service are moved to microservices. These Domain Services are offered as SaaS that you can integrate with your JavaScript Storefronts to deliver an engaging Customer Experience (CX).

Simplify Operations & Reduce Operational Costs

- If you run SAP Commerce On-Premise, you have to take care of your own build and deployment process. On the other hand, in CCv1, you have to take care of your own build and deployment process until Development/QA and work with SAP for staging and production. CCv2 makes it easier for customers to build and deploy applications through SAP Commerce Cloud Portal integrated with your GIT repository.

- If you are running CCv1, you need to work with SAP team even for small changes. With CCv2, you enjoy the advantage of automation of the environment setup, deployment, backup and restore, thus helping you significantly reduce operational costs associated with maintaining your application.

- Some of the key features available in CCv2 are automated infrastructure, self-service tools, cloud build platform, automated scaling, disaster recovery, DynaTrace application management, cloud-native technology (Kubernetes), ELK stack to store, parse, and visualize the application log data.
How Mindtree can help?

Mindtree is a SAP partner across various geographies with active partnerships in the US, Australia, MENA and APAC. For a decade, Mindtree has been cohesively working with SAP in various facets ranging from product development, testing, consulting services to co-innovation, with a strong focus on new edge technologies. We have extensive experience in developing and maintaining SAP Commerce/Hybris applications and helped many of our customers migrate their applications from on-premise to cloud infrastructure.

If you are looking for a partner to complete end-to-end migration work, Mindtree’s Commerce Cloud Migration service is right for you. We will lead the project to complete the migration and achieve functional parity with your current on-premise or CCv1 solution. Our SAP Commerce Cloud experts can help you assess the effort, risk, and recommend and plan, basis the requirement.

As a best practice, it is recommended to capture the performance benchmarks as part of the upgrade. This will help you to procure the right cloud infrastructure for your project and this information is also useful later to compare source and target solution application performance benchmark as part of the performance testing in the cloud infrastructure.
Mindtree offers the following services as part of Commerce Cloud Migration service.

1. **Discover & Prepare**
   - Activities:
     - Architecture & Infrastructure review
     - Application / Upgrade Analysis
     - Migration Analysis
     - Performance Benchmark
     - Security & Compliance
     - Integration with SAP/non-SAP Systems analysis
   - Deliverables:
     - Cloud readiness report
     - Scope definition
     - List of improvements
     - Technical constrains of migrating solution to CCv2
     - Non-standard solution design components
     - High-level project plan
   - Timeframe: 3 Weeks

2. **Upgrade**
   - Activities:
     - Upgrade to latest version
     - Environment setup
     - Lift & Shift
     - Build & Deploy
     - System Integration Testing
     - User Accepting Testing
     - Performance Testing
     - Security Testing
     - Cloud readiness check (Stage-1)
   - Deliverables:
     - CCv2 compatible code
     - Finalize CCv2 hardware sizing & contract
     - Migration project plan and cut-over plan
     - Performance benchmark report
   - Timeframe: 2 to 6 Months

3. **Migrate & Go-Live**
   - Activities:
     - Environment setup
     - code adaptions
     - Lift & Shift
     - Build & Deploy
     - Data & Media migration
     - Cloud readiness check
     - System Integration Testing
     - User Accepting Testing
     - Performance Testing
     - Security Testing
     - Go-Live
   - Deliverables:
     - Application running on CCv2
     - Issue List
     - Warranty support
     - Application support and maintenance proposal
   - Timeframe: 8 to 12 Weeks
We also help you with the following activities that are critical for a successful migration:

**Data and Media Migration**

The SAP team will be involved for migrating the contents of the existing database and media to the SAP Commerce Cloud instance. In order to ensure security and privacy, access to SAP Commerce Cloud Azure SQL database is restricted to SAP experts. SAP experts will work according to your individual migration project schedule to ensure a smooth cutover transition. The Mindtree team will co-ordinate with SAP in getting the data and media moved to a production environment securely.

**Cloud Readiness Check**

This package is included in your SAP Commerce Cloud subscription, and is delivered during your project's implementation to ensure that it passes the mandatory quality gates for deploying an SAP Commerce Cloud solution.

In this phase, SAP Commerce cloud experts validate the following

- Architecture review
- Code and application profile review

Mindtree will work with you and SAP to ensure the project passes the mandatory quality gates for deploying an SAP Commerce cloud solution.

**Business benefits delivered:**

The following benefits are delivered to our customers, in addition to agility or responsiveness, which is a fundamental reason for moving to CCv2

- **Savings** of 25% to 30% operational spend
- **Time-to-Market** reduced by 40%
- Experienced and proficient **experts manage systems**
- **Dedicated** and **updated cloud-security** models
- **Redundancy, availability** and **reliability improvements**
Let's Talk About Your Needs

If you are not sure how to migrate from your current SAP Commerce/Hybris on-premise or CCv1 to CCv2, you can take advantage of our Commerce Cloud Migration services.

Do you have any question about our services or solutions? Get in touch with us; we are here to help. For details, please contact mindtree@mindtree.com

About the Author

Prashant Naik has around 23+ years’ experience and works as a Chief Architect at Mindtree’s Digital practice. He specializes in architecture and design of eCommerce solutions using multiple COTS products and microservices platforms. He has been part of the growth path for multiple organizations across industries such as Retail, FMCG and Automotive, Manufacturing, Healthcare, Media, Medical, Education, Distribution and Hi-Tech.

About Mindtree

Mindtree [NSE: MINDTREE] is a global technology consulting and services company, helping enterprises marry scale with agility to achieve competitive advantage. “Born digital,” in 1999 and now a Larsen & Toubro Group Company, Mindtree applies its deep domain knowledge to 300+ enterprise client engagements to break down silos, make sense of digital complexity and bring new initiatives to market faster. We enable IT to move at the speed of business, leveraging emerging technologies and the efficiencies of Continuous Delivery to spur business innovation. Operating in 18 countries and over 40 offices across the world, we’re consistently regarded as one of the best places to work, embodied every day by our winning culture made up of over 21,000 entrepreneurial, collaborative and dedicated “Mindtree Minds.”