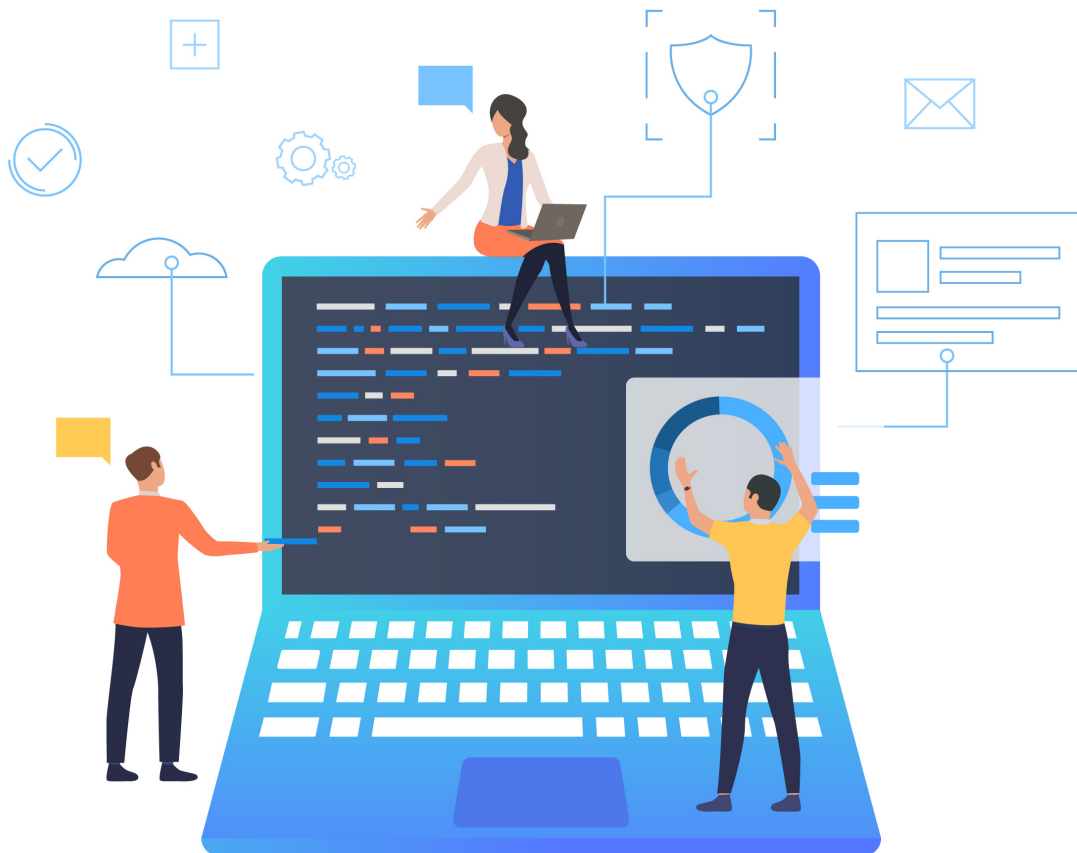




# MIGRATE TO SAP COMMERCE CLOUD

White paper on migrating the SAP Commerce on-premise, CCV1 to CCV2

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## What is cloud?

Cloud has been the crush in the technology world for some amount of time but the technical world understood its beauty in recent times only and along with others SAP also fell in love with it. So basically this cloud computing is nothing but storing and accessing data and programs over the Internet instead of the local computer's hard drive and thus accessing it over the internet anywhere, anytime.

### Cloud provides three types of solutions:

#### 1. Software as a Service (SaaS)

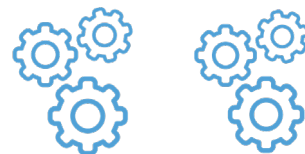
In this model, the third party provider hosts applications and make them available to customers over the internet. A majority of the SaaS applications run directly through the web browser, which means they don't need any local installations etc.

Eg: JIRA, Dropbox



#### 2. Platform as a Service (PaaS)

It refers to cloud-based platform services that provide developers with a framework they can use to build custom applications. Thus PaaS isn't delivering software over the internet, but it is providing an online platform that's accessible to different developers to create softwares that then delivered over the internet. Eg: Google App Engine, Heroku



#### 3. Infrastructure as a Service (IaaS)

It refers to cloud-based infrastructure resources that are delivered to organizations via virtualization technology. So IaaS customers can control their own infrastructure without having to physically manage in onsite, instead use a dashboard or an API.

Eg: AWS, Microsoft Azure





## What is SAP Commerce Cloud?

SAP Commerce Cloud is one among the various aspects of SAP C/4 Hana, which expands to SAP's 4th generation CRM named Hana. It already been a couple of years since SAP launched the SAP Commerce Cloud, which is nothing but the SAP Commerce Hybris Platform but also supports to be deployed into the cloud infrastructure.

SAP Commerce Cloud is one of the solutions that is driving the digital transformation, thus it simplifies the digital transformation, reduces the total cost of ownership and accelerates time to value. It assists in building B2B, B2C and B2B2C with its single stack architecture. It can integrate all digital and physical customer touchpoints onto a single, robust platform- including online, mobile, point of sale, call centre, social media and print, creating a seamless customer experience. It also offers maximum flexibility for extension and customization. Thus it has everything in it to help its customers win the global digital marketplace.

### **SAP Commerce cloud supports the following modes to help the customers to bring their version of commerce to the end users:**

- On premise Installation
- Sap Commerce Cloud in SAP infrastructure (CCV1)
- Sap Commerce Cloud in the public cloud (CCV2)



## Why CCV2?

The Sap Commerce Cloud in the public cloud is a SaaS Solution provided by SAP. It is also referred as CCV2, which expands to SAP Commerce Cloud Version 2. There are a lot of advantages that make the CCV2 a very good deal, the below image shows the key differences of CCV2 with its predecessors.



**On Premise**



**CCV1**



**CCV2**

	On Premise	CCV1	CCV2
<b>Total Cost of Ownership</b>	High	Medium	Low
<b>Onboarding</b>	Process need to be followed for the creation of environment	Process need to be followed for the creation of environment	Immediate access to the environments
<b>VPN</b>	Need to access the environment	Need to access the environment	Can be accessed over internet anytime, from anywhere
<b>Recovery and Backup</b>	Need help from hosting partner	Need help from SAP	Customer or Parnter can do it
<b>Self Service Portal</b>	–	–	Yes
<b>Scaling</b>	Manual	Manual	Automatic
<b>Patch Level Software Update</b>	Manual work is needed	Manual work is needed	Automatic



## How to migrate from On-Premise, CCV1 to CCV2

A customer can migrate their projects that are currently running in on-premise and CCV1 to CCV2 with the help of a good partner. SAP will also assist in this process in order to ensure the quality of the solution that they will be hosting. The best proven approach for this migration is to divide the project into multiple phases:



### Discover

- Introduction of SAP Commerce Cloud
- Workshop with SAP, partner and Customer
- Migration Assessments
- Estimation and Planning

### Develop

- Env setup DEV, STG, PROD
- Code Adaptation
- Database and media migration (DEV & STG)
- Lift and shift (DEV STG)
- Build and deploy (DEV STG)
- Cloud Readiness Check Milestone 1

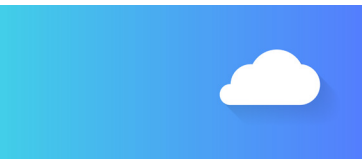
### Test

- Performance testing
- User acceptance
- Bug fixing
- Cloud Readiness Check Milestone 2

### Live

- Database and media migration (PROD)
- Lift and shift (PROD)
- Build and deploy
- Smoke Testing





## Duration

Starting with the assessment, which will take a max of 7 to 10 days, then the detailed plan will be presented to the customer. Once the customer agrees to the plan, it would ideally take 2 to 4 months to finish the successful migration to go live with the new cloud solution.

**The detailed recommended phases for the migration are follows:**

### Discover

This is the initial phase in which, the introduction of sap commerce cloud will take place and also workshop along with the customer, partner and the SAP will also be conducted.

The next main objective of this phase is the migration assessments for the existing solution and the estimate created based on this assessment.

- **Migration Assessment**

The partner with some assistance from SAP will assess the current solution and will create a detailed plan, effort and cost level estimate for the migration project. Ideally it will take 2 or more months to migrate a project based on the complexity of the customization already done to it. **Some of the core assessment topics that are directly proportional to the timeline are:**

- **GIT**

The CCV2 only support GIT versioning at the moment. So if the current project is not in GIT, we need to migrate it to GIT first or use a job to move the changes to GIT every time for a deployment and take it from there, the solution totally depends upon the infrastructure needed by the customer.



- **SAP Commerce Version**

The solution needs to be first migrated to a SAP Commerce version that the CCV2 is compatible with. The recommended version is 1905, but CCV2 is supported from version 6.7 onwards.

- **PCI Compliance**

Currently, SAP Commerce Cloud in the Public Cloud is not certified for PCI-DSS 3.2. If this is blocking the project, then it needs to be taken up with SAP.

- **Solr Customization**

If the current solution is using a highly customizable search engine or a third party other than solr, then one needs to consider what the CCV2 can offer for this.

- **SMTP server**

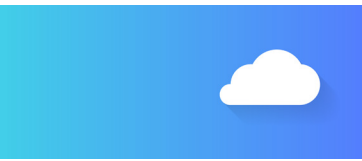
SAP Commerce Cloud does not currently ship with an SMTP-server or service. But there are solutions for it, that need to be considered.

- **Hot folder**

If there is an in-place hot folders/NFS/SFTP based integrations, then it need to be moved to the Cloud Hot Folder which is using the blob storage of Azure.

- **Integrations / Datahub / DAM**

Most solutions will have some integrations with a third party or a middleware. So this need to be treated with respect in case of the migration. SAP Cloud supports these integration with SCPI, Hot-folders, Datahub, etc



- **Build Customization**

If the current solution is highly customized on the build part, then a special treatment is needed to move that solution to a more specific way which is supported by the cloud.

### **And more...**

The assessment needs to be thorough and thus will lead to a high level effort and cost estimate.

- **Planning**

Next comes the planning phase, the partner need to come up with a strategy that will not affect the live solution. So that we can migrate it in parallel with the current development approach in an effective way so that the customer thinks that's apt for them.

## **Develop**

This is the execution phase where the partner will create the environments, and then start with the customization of the code. In this phase SAP will do the data and media migration, which the customer will need to give SAP the access to the current solutions database, SAP will use their predefined connectors to migrate the data into cloud. Once that is successful, the partner will lift and shift the existing environments to the cloud.

- **Recommendations**

- It is recommended to migrate the development environment first and then the staging environment. The recommended solution has only 3 environments DEV, STG and PROD. PROD migration will happen on the last phase.
- It is recommended to stop pushing major feature releases to the current solution after the start of the develop phase.

At the end of this phase, SAP can do the readiness check Milestone 1





- **Cloud Readiness Check Milestone 1**

This check-up is also included in the cloud package, in which SAP will do a review on the project setup, including a high-level review of code and solution design

## **Test**

The customer along with the partner will do the performance and user acceptance testing in this phase, along with the bug fixes if needed. Then at the end SAP will do the Cloud Readiness Check Milestone 2 for the go-live.

- **Cloud Readiness Check Milestone 2**

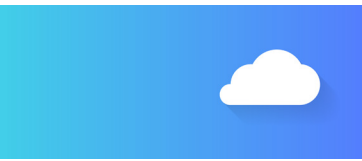
Same as milestone 1, but this will be more like a pre-go-live review focused on a SAP Commerce Cloud application-level security check, basic application and client-side profiling.

## **Deploy**

The final phase in which the reviewed, customer approved solution will be moved to production along with the database and media migration with the help of SAP. Then customer along with the partner need to do a smoke test, then go live and monitoring of the new cloud system will be happening.

- **Recommendations**

Once this phase is started we need to closely monitor the operations which are happening in the current on-premise production, if possible minimize them. After the successful migration these changes will need to be synchronized periodically with the cloud production until the go-live of the cloud.



## Success factors

For the customers thinking about the migration of on-premise, CCV1 SAP solution to the CCV2, there are a lot of factors that need to be taken into account – from the benefits and the risks to the cost and duration that is right for your business.

The main factor that makes this migration truly successful is choosing an expert level partner with a customer-centric focus and the collaboration with them throughout the entire project.



**Let's get this done.**

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