B2C Commerce On-Demand Sandboxes FAQ - Customers

The purpose of this document is to enable B2C merchants with details related to B2C Commerce On-Demand Sandboxes.

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Background

What is a sandbox?

A sandbox is an isolated instance of the B2C infrastructure. Developers can develop and test their code in these environments before promoting to staging or production.

What types of sandboxes are currently available?

Salesforce B2C Commerce currently offers “POD Sandboxes” that are part of the overall Commerce Cloud POD infrastructure. Customers that purchase B2C Commerce - GMV or B2C Commerce - PPO subscriptions are entitled to 5 POD sandboxes as part of their subscription. Customers who want more sandboxes may purchase additional POD Sandboxes as add-on subscriptions to their B2C Commerce GMV or B2C Commerce PPO subscriptions which are coterminous with the B2C Commerce subscription.

On-Demand Sandboxes Overview

What are On-Demand Sandboxes?

The new On-Demand Sandboxes are able to be spun-up and spun-down quickly and easily. There is separate pricing and usage requirements with On-Demand Sandboxes compared to the existing POD Sandboxes.

How do Customers purchase On-Demand Sandboxes?

Customers that want On-Demand Sandboxes purchase an entitlement of credits which are sold as add-on subscriptions to a Customer’s existing B2C Commerce GMV or PPO subscription. Like other

add-on subscriptions, the term of the credits subscription is coterminous with the existing B2C Commerce - GMV/PPO subscription. The customer uses their credits to spin up one or more On-Demand Sandboxes.

What is the difference between the POD sandboxes and On-Demand Sandboxes?

On-Demand Sandboxes offer greater flexibility, such as:

- **Get a sandbox in minutes.** Once On-Demand Sandbox credits are purchased, Customers can acquire an On-Demand Sandbox in minutes using an API call or a command line.
- **Create as many sandboxes as needed.** With credits being a usage based pricing model, Customers can create as many On-Demand Sandboxes as needed.
- **Easy to use in a CI/CD process.** On-Demand Sandboxes are by definition short-lived. They have been constructed with the idea that the majority of users will acquire them, use them for a short period of time then remove them.
- **Flexible.** This is at the heart of what we have created. We want the customer to be able to expand their sandbox usage when they need it, and roll it back when they don't.
- **Better value.** Customers are in control of how many On-Demand Sandboxes they have and when they are active and when they are non-active. The customer only pays for their usage until they are removed.

What customers are eligible to use On-Demand Sandboxes?

On-Demand Sandbox credits are available for purchase by all SFDC B2C Commerce customers in all regions who have purchased their B2C Commerce (or Commerce Cloud Digital) subscriptions from salesforce.com. They are not available to customers who are still using Ditigal subscriptions that were purchased under order forms with Demandware, Inc.

What is the performance of the new On-Demand Sandboxes?

On-Demand Sandboxes have the same configuration as POD Sandboxes but with more memory assigned to them. Some of our beta customers reported speed increases in storefront performance and back end process performance. While performance was not the focus of the new sandboxes, performance tests show On-Demand Sandboxes perform in a manner that is comparable to that of POD Sandboxes.

POD Sandboxes vs. On-Demand Sandboxes

Will On-Demand Sandboxes replace POD based Sandboxes?

No. Customers will still have the POD Sandboxes they purchased as part of their B2C Commerce - GMV/PPO subscriptions or as add-on sandbox subscriptions.

If a customer owns POD Sandboxes are they going away?

No. There will be no changes to customer's existing POD sandboxes with the availability of On-Demand Sandbox credits.

Will customer POD Sandboxes “convert” to On-Demand Sandboxes?

There is no POD to On-Demand Sandbox conversion process. In other words, it is not possible to transform an existing POD Sandbox in to an On-Demand Sandbox (maintaining all the sites, data, etc of the POD Sandbox). Customers will need to export their sites, data, etc from their POD Sandboxes and import it into the new On-Demand Sandboxes. On-Demand Sandbox credits are a separate SKU that can be purchased by customers to be used in addition to their existing contracted POD Sandboxes.

Can you trade in POD Sandboxes for On-Demand Sandbox credits?

Yes, swaps may be permitted in certain cases. Please reach out to your Salesforce account representative for details.

Can a customer still buy POD sandboxes?

Yes. Customers can still purchase POD Sandboxes.. While we encourage all customers that request new sandboxes to consider purchasing On-Demand Sandbox credits as a viable alternative to purchasing POD Sandboxes, it will not be mandated that customers must purchase only On-Demand Sandbox credits.

Roll-Out Schedule and Timeline

Was there a beta program?

A beta program for the On-Demand Sandboxes started in April of 2018 and ran through July 2019. The beta program was closed to new participants at the end of May 2019. The program was very successful with over 50 customers and partners participating.

What enablement materials are available?

A customer webinar was held on August 16, 2019. There is a list of resources at the end of this document that can also be reviewed.

Pricing Model

Are these sandboxes free for customers?

No. On-Demand Sandbox credits are a new paid service that customers can electively purchase from Salesforce. The credits may be applied to set up one or more On-Demand Sandboxes.

What is the pricing model for On-Demand Sandboxes?

On-Demand Sandboxes will be sold on a usage-based model, similar to what Marketing Cloud does with their Super Messages. Credits are sold to pay for the sandbox usage. This gives customers

complete control over how many sandboxes they use and when they use them. They can use their credits to keep just a few sandboxes running over an extended period of time, or they could run many sandboxes over short periods of time (ie. in a Continuous Integration (CI) use case).

How do credits work?

Credits are a means to consume time on the On-Demand Sandboxes service. For GA there are two sandbox modes that consume credits: uptime and downtime. When a sandbox is created or started it is consuming uptime. When it is stopped it is consuming downtime. Only when a sandbox is removed does it stop consuming credits.

Credits will be sold in blocks of 50,000. Why 50k? Because that is roughly equivalent to running a single sandbox nonstop for a month.

Customer 50k Pricing: **USD 500** (same as current price for POD Sandbox for one month)

What is considered “uptime” vs. “downtime” for a sandbox?

Uptime means a sandbox is consuming CPU and memory. When a sandbox is created or started it is consuming uptime. When it is stopped, but not removed, it is consuming downtime. When the sandbox is removed it no longer consumes anything. Using the API users can create, start, stop, and remove sandboxes:

- **sandbox:create** - Creates and initiates the startup of a sandbox. Uptime begins once the sandbox starts.
- **sandbox:start** - Starts up a sandbox that was already created and stopped. Uptime begins once the sandbox starts.
- **sandbox:stop** - Stops a running sandbox. Downtime begins once the sandbox stops running.
- **sandbox:remove** - Stops and removes a sandbox (destroys it). Once this is called that particular sandbox cannot be started again. Consumption stops when the sandbox stops running.

Are there different rates for uptime vs. downtime?

Yes. Sandboxes that are consuming uptime will consume 1 credit for each minute (or portion thereof) that the sandbox is in uptime. Sandboxes that are consuming downtime will consume 0.3 credits for each minute (or portion thereof) that the sandbox is in downtime.

How do I calculate how many credits are needed?

The quick and easy way

There are just over 500k minutes in a year. Ordering ten 50k blocks is essentially a single sandbox running non-stop for a year.

Using the credits calculator

With the flexibility of the new sandboxes they can be used for various short-lived tasks (example: use them in a Continuous Integration process) and any number of them can be created. As these

capabilities are used the simple “x number of sandboxes per year” calculation may be too much or too little. To help with this we have created a spreadsheet that can be copied and used to calculate credits required based on different usage scenarios.

Is there a limit to how many sandboxes can be created?

No, there is not a limit. Create as many sandboxes as needed. Each sandbox will consume credits based on uptime or downtime at the rates described above.

Note: There are some practical upper limits. These are to prevent runaway processes or gross misuse of the system.

Is there visibility into minutes used? Where?

Customers are able to see sandbox data (what sandboxes currently exist, who created them, how long they have existed and how many minutes they have consumed) via the Sandbox API. For example, the GET /realms/usage API can be used to retrieve the full details for usage in a realm. It shows the minutes of uptime and downtime that have been consumed over a specified time period.

What are the terms for purchase? Is there an annual contract?

On-Demand Sandboxes are purchased in 50k credit blocks against the end date of an existing Commerce Cloud GMV contract using the same utilization of the GMV contract (“shared” vs. “term”).

Shared Contract Purchase

> Example: If a customer has a 3 year "shared" GMV contract, they must co-term their On-Demand Sandbox add-on. If they add sandboxes 8 months into their contract, they would get X 50k credit blocks to use for the next 28 months.

Term Contract Purchase

> Example: If a customer has a 3 year "termed" GMV contract, they must purchase their On-Demand Sandbox add-on along the same terms. If they add sandboxes 8 months into their contract, they would purchase X 50k credits for the remaining 4 months of the first year, Y 50k credits for year two, and Z 50k credits for year 3.

Do credits roll over from one year to the next?

Sandbox credits do not rollover beyond the utilization of the contract (“shared” vs. “term”).

Shared Contract Purchase

> Example: Customer has a 3 year contract. If they added sandboxes 8 months into their GMV contract they would have purchased X 50k credit blocks to use for the remaining 28 months. The entire allotment of credits can be used anytime during the remaining 28 months of the contract. Unused credits at the end of the contract do not roll over to a renewal.

Term Contract Purchase

Example: Customer has a 3 year contract. If they add sandboxes 8 months into their GMV contract, they would have purchased X 50k credits for the remaining 4 months of the first year, Y 50k credits for year two, and Z 50k credits for year 3. These credits would not rollover from year to year, ie. X does not roll into Y, and Y does not roll into Z. Unused credits are lost at the end of each year. Unused credits at the end of the contract do not roll over to a renewal.

What happens if a customer goes over their credits within the time allotted? Are there overage charges?

Yes there are overage charges. Overage is billed at 125% of the rate the customer paid for their credits. Overage is calculated on the first day of the month and invoiced. Overage invoices are separate and new orders for sandbox credits will not automatically pay for overage invoices.

Will the sandboxes stop working when a customer consumes their credits?

No. The sandboxes continue to function and continue to consume credits. Customers are billed for overage on the credits used (see above).

Can a customer buy additional minutes during the contract?

Yes, additional 50k credits can be purchased at any time during the contract. They become part of the existing contract length and the same rollover rules apply as mentioned above.

Provisioning

How does a customer purchase and get access?

All purchasing for customers is done through placing an order for On-Demand Sandbox credits. Please reach out to your Salesforce account representative for details.

After an order is placed, when does the customer receive access?

At this time there are no notifications that are sent out when the provisioning has been completed. The Salesforce account representative can check on the order and notify the customer when the realm provisioning has been completed. Once the order is completed, the customer can begin creating sandboxes with the APIs or SFCC-CI as mentioned in the Usage and Administration section.

Features and Functionality

Can I access import data from a staging instance?

On-Demand Sandboxes cannot currently import data from the staging environment as they run on a different infrastructure and are not connected at all to the POD environments. All data operations rely on the standard import/export processes. You can get the data exported first form staging, cleaned up, then transfer the file to the On-Demand Sandboxes and import it there.

What is the TTL (Time to Live) configuration?

TTL (Time to Live) is an On-Demand Sandbox configuration that tells the Sandbox system how many hours a specific sandbox should live before it is *automatically removed*. It can be set when creating a new sandbox (POST /sandboxes) and it can also be updated for existing sandboxes (PATCH /sandboxes/{sandboxId}). If TTL is set to 0, the sandbox will have an infinite lifetime. The maximum allowed value is 2160 (90 days).

Important: If a TTL value is not set in the Sandbox API call (or via SFCC-CI), the TTL value defaults to whatever is set in the realm configuration. Realm configurations can be viewed with the GET /realms/{realm} API and can be updated with the PATCH /realms/{realm}/configuration API.

Can I migrate a POD sandbox to a new On-Demand Sandbox?

There is not a direct migration from a POD sandbox to an On-Demand Sandbox. However, data and code can be exported from your POD sandbox and then imported into an On-Demand Sandbox using the same tools that are available for sandboxes today.

Can I configure my sandbox with different CPU or Memory settings?

Not currently. The sandboxes are fixed with their current footprints. Allowing for larger sandboxes in terms of memory and CPU is something on the roadmap for after the GA release.

Can I schedule jobs on these sandboxes?

Similar to current POD sandboxes, the On-Demand Sandboxes do not allow the scheduling of jobs. Jobs can be run manually, or can be run using the SFCC-CI tool in a scripted form.

Can I use the Digital Image Service (DIS)?

Yes. DIS support is available and can be used with On-Demand Sandboxes.

Can I use Einstein?

No. The On-Demand Sandboxes are the same as the POD sandboxes in regards to Einstein. Only the new Einstein REST APIs (currently in beta) can be used. Integrated Einstein is not yet available for sandboxes.

Can I use Page Designer?

Yes. Page Designer is available for use in the new sandboxes.

Is there a CDN in front of the new sandboxes?

A CDN is not currently available for the On-Demand Sandboxes. This means that using things such as SEO routing and data caching are not available for these new sandboxes.

When I stop a sandbox do I have to recreate it and import my settings every time?

You can stop a sandbox (using the sandbox:stop API) which will stop the sandbox from using CPU and memory and will switch to "downtime" consumption. The sandbox can be restarted and will have all of its previous data. However, if a sandbox is removed (using the sandbox:remove API) then all data is deleted.

Is it possible to use On-Demand Sandboxes to run a load test?

No. It is not advisable to use them for load testing. On-Demand Sandboxes are not as performant as a primary instance group environment (Dev, Staging, Production). In the future we are looking at adding features to allow sandboxes with more memory, CPU, storage, etc. to be created.

Can I create hostname aliases for On-Demand Sandboxes?

Yes, On-Demand Sandboxes support the setup and usage of local as well as global aliases. For details please refer to the documentation at Define a Local Alias for an On-Demand Sandbox**.** Also the community based command line tool SFCC-CI supports this feature.

Can an On-Demand Sandbox be created with a pre-existing dataset?

No. Similar to POD sandboxes, when On-Demand Sandboxes are created, they are empty. However, you can use all of the same import/export tools to import a predefined data set and upload it to the sandbox.

Are there changes to allowed job run times or file import sizes?

On-Demand Sandboxes have the same behavior as POD Sandboxes for job execution. The same limits for upload files and job execution are in place.

Usage and Administration

What happens after provisioning of a realm for a customer is complete?

Once a realm is enabled for On-Demand Sandboxes it does not automatically have sandboxes that are available. Account Manager users with the appropriate permissions can then use APIs or the SFCC-CI command line tool to begin creating the sandbox environments that they need.

For full details on the usage of On-Demand sandboxes, refer to the Commerce Cloud InfoCenter Documentation.

How do I create, start, stop, and remove sandboxes?

All interactions with the On-Demand Sandboxes are done through either an API call or via the community based SFCC-CI command line tool (see below). The full documentation for the API and methods that can be used can be found here.

What Account Manager role is required to use the API?

Any user that is going to use the On-Demand Sandbox APIs or use the SFCC-CI tool for administering the On-Demand Sandboxes will need the *Sandbox API User* role added to their Account Manager user profile and applied to the sandbox scope in their realm.

Developer access to any sandbox (POD based or On-Demand Sandboxes) also requires the roles for *Business Manager Administrator* (for access to developer options in Business Manager) and *LogCenter User* (for access to see environment log files) to be added and applied to the sandbox scope in their realm.

In order to assign these roles, do the following:

1. Log into Account Manager and navigate to “User”
2. Click the user you want to assign the role to
3. In “Roles” section of the page click “Add”, in the dialog search for the role (e.g. “Sandbox API User”) and click “Add”
4. Back in the user detail page click the filter icon in the newly assigned role (e.g. “Sandbox API User”), in the dialog select your organization, realm and instance group (e.g. All sandboxes) and click “Add”.
5. Back in the user detail page, press “Save”

What is a Client ID and do I need one?

All API usage within Commerce Cloud require a Client ID value to indicate the application that is using the API. Since On-Demand Sandboxes are administered using APIs you will need a client ID to use them. Many current developers will already have one of these values for their organization. However, if the user doesn't have a Client ID, the organization’s administrator can create one using the Account Manager. For automation usage, users will need the Client ID as well as the Client Secret for authentication.

For full details on Client IDs, including how to obtain one, refer to the Commerce Cloud InfoCenter Documentation.

Is there a UI for administering these sandboxes?

Not at this time. For the GA release all administration of the new sandboxes will need to be done with the APIs and/or the SFCC-CI tool.

Can I manage these sandboxes using Control Center?

Since the On-Demand Sandboxes are in a separate infrastructure from PODs, they are not currently visible within Control Center. All administration of these new sandboxes needs to be done with the APIs and/or the SFCC-CI tool.

Is there a regular maintenance window that B2C Commerce will use to make updates to the On-Demand Sandbox system?

In order to best support On-Demand Sandboxes and to keep the environment stable and reliable, we plan for a fixed maintenance window for deployments and maintenance operations in case a small interruption of operation is required. The current maintenance window is set for Thursdays, from 7am - 9am CET (Central European Time).

Can I recover data if a sandbox is mistakenly removed?

No. The sandbox:remove command is a data destroying activity. Once executed the sandbox system will proceed with removing the environment and all of its data in accordance with Salesforce data privacy and trust rules.

What is the SFCC-CI Command Line Tool?

SFCC-CI is a community-based project that the Commerce Cloud Customer Success Group have created in GitHub. This tool is built on top of the OCAPI and Sandbox APIs and provides a command line interface (CLI) for interacting with Commerce Cloud instances from the command line / shell of various operating systems in order to facilitate Continuous Integration practices using Commerce Cloud. Interacting with the On-Demand Sandboxes is a part of what this tool can do. Using this tool for On-Demand Sandbox creation still requires the user to have the *Sandbox API User* role that is mentioned in the paragraphs above.

For full details, please see the SFCC-CI GitHub repository and it's Readme file.

What about "Local" Users vs. "Account Manager" users?

POD Sandboxes have "local users" that can be created within them. This would mean that once a sandbox is created, someone would need to enter Business Manager and create users that were allowed to access and use the sandbox as a "local" user. This is not a requirement (and not directly supported) with On-Demand Sandboxes. Instead, all authentication to an On-Demand Sandbox is done with Account Manager users. This actually makes the management of and access to

On-Demand Sandboxes much easier to use, especially with frequent removing and creation of new sandboxes.

Troubleshooting and Escalation

What is the process of escalating an issue with On-Demand Sandboxes?

Customers should log issues with Commerce Cloud Support.

Resources

The following are additional resources to review:

XChange

- FAQ
- Customer Webinar Slides & Video
- SFCC-CI & Sandbox API Swagger UI Demo Videos
- Credit Usage Calculator
- URL: SFCC-CI Command Line Tool
- URL: Sandbox API Swagger UI

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