

OVERVIEW

These release notes provide a list of changes to the Carbon DLS API. To access new features and bug fixes, please update the carbon3d-client on your system. If you opt not to update at this time, note that previous versions are still supported without any of the changes detailed below.

Overview of changes:

- New Features
 - “ModelProgramRun” endpoint
 - New Build SOP options
- Resolved Issues
 - PrintedParts will no longer be marked as failed under unique conditions
- Infrastructure Updates
 - Changed where uploaded models are sent before they enter automated file prep workflows

You can find API-related documentation on our GitHub repository, located at <https://github.com/carbon3d/carbon3d-api>.

The Carbon DLS API is provided as an OpenAPI spec ([api.yaml](#)). This spec allows you to generate client libraries in many languages. A list of supported OpenAPI generators is available [here](#).

If you have any questions and/or feedback, please contact support@carbon3d.com.

NEW FEATURES

“ModelProgramRun” endpoint

A new “ModelProgramRun” endpoint allows users to apply a “model program” to uploaded models to alter them in some way. In order to use this feature, you will need a Model Program UUID, which will be communicated to you separately if you have an impacted workflow or application. (For example, a program that can hollow and vent orthodontic models is an example of such a “model program.”)

New Build SOP options

New Build SOP options allow you to further customize your automated file prep workflows, as follows:

- **Print with release film:** Indicates whether or not you plan to print with a release film applied to the build platform so the system can apply the appropriate height compensation. The default setting is “off.”
- **Repair parts:** Indicates whether you would like the Carbon system to automatically repair small holes and errors in uploaded parts. Enabling auto-repair will increase processing times for your files. Many files (especially dental models) do not actually require repair, as small holes can often be patched during the slicing step, so we encourage users to try workflows without auto-repair. The default setting is “on.”
- **Slicing algorithm:** Indicates which slicing algorithm should be used to prepare your parts for printing. The Default option is faster, but the Poisson slicer is more robust. The Poisson slicer is recommended for

orthodontic models, and is often successful at slicing files with small, unrepaired holes (see previous bullet). The default setting is “Default.”

Existing Build SOPs will not be impacted, and will continue to function as-is. To use these new options, you will need to create a new Build SOP Profile.

PACKER BUILD SOP

Select parameters to use for API PartOrder Packing requests
Use UUID from table for `build_sop_uuid` parameter

Name	Name
Description	Description
Build Prefix	AutoBuild#
Resin	DPR 10
Print Profile	L1 Aligner Models V2.3
Print with release film	☐
Max Parts per Build	parts
Repair parts	☒
Auto Layout Profile	Denser
Auto Layout Padding	1 mm
Slicing Algorithm	Default

RESOLVED ISSUES

PrintedParts will no longer be marked as failed under unique conditions

We've resolved a bug where PrintedParts were being marked as a failed build when the automatic packer fails, but the parts are fine.

INFRASTRUCTURE UPDATES

Changed where uploaded models are sent before they enter automated file prep workflows

In order to enable the expansion of the types of automated build preparation we can offer, we have altered the infrastructure that holds and transmits model files. There is no change to the security or privacy of your models, nor to processing speed. This change should be invisible to you, but we are sharing this update in the interest of transparency.

FEEDBACK

Please reach out to support@carbon3d.com or file issues on our GitHub repository.