

# 3d Brain Atlas Reconstructor on-line service

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## Available backend services

### **getAvailableDatasets**

Returns an AJAX data describing CAF datasets (atlases) available to the user in the service.

#### **Example**

- <http://service.3dbar.org/getAvailableDatasets>

### **getCafInfo**

Returns the index file of selected CAF dataset. Index file contains the list of structures available for reconstruction, their hierarchy and the list of slides within the given dataset.

#### **Examples**

- [http://service.3dbar.org/getCafInfo?cafDatasetName=whs\\_0.51](http://service.3dbar.org/getCafInfo?cafDatasetName=whs_0.51)
- [http://service.3dbar.org/getCafInfo?cafDatasetName=whs\\_0.51;listSlides=False;listStructures=False](http://service.3dbar.org/getCafInfo?cafDatasetName=whs_0.51;listSlides=False;listStructures=False)

### **getReconstruction**

Returns a model of a given structure from selected dataset as a zip file containing the reconstruction and a short description.

#### **Examples**

- [http://service.3dbar.org/getReconstruction?cafDatasetName=whs\\_0.51;structureName=thalamus](http://service.3dbar.org/getReconstruction?cafDatasetName=whs_0.51;structureName=thalamus)
- [http://service.3dbar.org/getReconstruction?cafDatasetName=whs\\_0.51;structureName=thalamus;qualityPreset=high](http://service.3dbar.org/getReconstruction?cafDatasetName=whs_0.51;structureName=thalamus;qualityPreset=high)

## **getReconstructionByKey**

Returns reconstruction (stored in the service) of a given service identifier.

### **Example**

- <http://192.168.10.61:8080/getReconstructionByKey?id=26721>

## **getPreviewReconstruction**

Returns a lightweight model of a given structure from selected dataset as an x3d mesh.

### **Examples**

- [http://service.3dbar.org/getPreviewReconstruction?cafDatasetName=whs\\_0.51;structureName=thalamus](http://service.3dbar.org/getPreviewReconstruction?cafDatasetName=whs_0.51;structureName=thalamus)
- [http://service.3dbar.org/getPreviewReconstruction?cafDatasetName=sba\\_DB08;structureName=Br](http://service.3dbar.org/getPreviewReconstruction?cafDatasetName=sba_DB08;structureName=Br)

## **getThumbnail**

Returns a thumbnail of the reconstruction of a given structure available via `getReconstruction` in png format.

### **Examples**

- [http://service.3dbar.org/getThumbnail?cafDatasetName=whs\\_0.51;structureName=corpus-callosum](http://service.3dbar.org/getThumbnail?cafDatasetName=whs_0.51;structureName=corpus-callosum)
- [http://service.3dbar.org/getThumbnail?cafDatasetName=whs\\_0.51;structureName=thalamus](http://service.3dbar.org/getThumbnail?cafDatasetName=whs_0.51;structureName=thalamus)
- [http://service.3dbar.org/getThumbnail?cafDatasetName=whs\\_0.51;structureName=CNS](http://service.3dbar.org/getThumbnail?cafDatasetName=whs_0.51;structureName=CNS)
- [http://service.3dbar.org/getThumbnail?cafDatasetName=sba\\_DB08;structureName=FL](http://service.3dbar.org/getThumbnail?cafDatasetName=sba_DB08;structureName=FL)
- [http://service.3dbar.org/getThumbnail?cafDatasetName=sba\\_DB08;structureName=LV](http://service.3dbar.org/getThumbnail?cafDatasetName=sba_DB08;structureName=LV)
- [http://service.3dbar.org/getThumbnail?cafDatasetName=sba\\_PHT00;structureName=Brain](http://service.3dbar.org/getThumbnail?cafDatasetName=sba_PHT00;structureName=Brain)

## **getThumbnailByKey**

Returns a thumbnail of reconstruction (stored in the service) of a given service identifier in png format.

### **Example**

- <http://192.168.10.61:8080/getThumbnailByKey?id=12064>

## **getCafSlide**

Returns an SVG image with CAF slide filtered using provided settings.

### **Examples**

- [http://service.3dbar.org/getCafSlide?cafDatasetName=whs\\_0.51;slideNumber=460](http://service.3dbar.org/getCafSlide?cafDatasetName=whs_0.51;slideNumber=460)
- [http://service.3dbar.org/getCafSlide?cafDatasetName=whs\\_0.51;slideNumber=460;showMask=True;showLabels=False](http://service.3dbar.org/getCafSlide?cafDatasetName=whs_0.51;slideNumber=460;showMask=True;showLabels=False)
- [http://service.3dbar.org/getCafSlide?cafDatasetName=whs\\_0.51;slideNumber=460;showLabels=False](http://service.3dbar.org/getCafSlide?cafDatasetName=whs_0.51;slideNumber=460;showLabels=False)
- [http://service.3dbar.org/getCafSlide?cafDatasetName=sba\\_DB08;slideNumber=84;structureList=Cx](http://service.3dbar.org/getCafSlide?cafDatasetName=sba_DB08;slideNumber=84;structureList=Cx)

- [http://service.3dbar.org/getCafSlide?cafDatasetName=sba\\_DB08;slideNumber=84;structureList=Cx.Th](http://service.3dbar.org/getCafSlide?cafDatasetName=sba_DB08;slideNumber=84;structureList=Cx.Th)

## Available frontend services

### **getPreview**

Displays a window allowing to manipulate (rotate, zoom, etc.) lightweight version of the reconstruction. Note that the web browser has to support WebGL in order to use this feature.

#### **Examples**

- [http://service.3dbar.org/getPreview?cafDatasetName=whs\\_0.51&structureName=CNS](http://service.3dbar.org/getPreview?cafDatasetName=whs_0.51&structureName=CNS)
- [http://service.3dbar.org/getPreview?cafDatasetName=whs\\_0.5&structureName=Hc](http://service.3dbar.org/getPreview?cafDatasetName=whs_0.5&structureName=Hc)
- [http://service.3dbar.org/getPreview?cafDatasetName=sba\\_DB08&structureName=FBr](http://service.3dbar.org/getPreview?cafDatasetName=sba_DB08&structureName=FBr)

### **getCafInfoPage**

Displays a window containing basic information about CAF dataset.

#### **Examples**

- [http://service.3dbar.org/getCafInfoPage?cafDatasetName=sba\\_DB08](http://service.3dbar.org/getCafInfoPage?cafDatasetName=sba_DB08)