

# 3d Brain Atlas Reconstructor on-line service

1. Available backend services
  1. getAvailableDatasets
  2. getCaf
  3. getVolume
  4. getCafInfo
  5. getReconstruction
  6. getPreviewReconstruction
  7. getThumbnail
  8. getCafSlide
  9. queryReconstruction
  10. getReconstructionByKey
  11. getThumbnailByKey
2. Available frontend services
  1. getPreview
  2. getCafInfoPage
  3. queryJob

## Available backend services

### **getAvailableDatasets**

Return AJAX data describing CAF datasets (atlases) available to the user in the service. [See details](#).

#### **Example**

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

### **getCaf**

Return zip archive containing requested CAF dataset. [See details](#)

#### **Example**

- [http://www.3dbar.org:8080/getCaf?cafDatasetName=whs\\_0.6.1](http://www.3dbar.org:8080/getCaf?cafDatasetName=whs_0.6.1)

### **getVolume**

Return zipped labeled NifTi? volume containing neuroanatomical information from the requested CAF dataset. [See details](#)

#### **Example**

- [http://www.3dbar.org:8080/getVolume?cafDatasetName=whs\\_0.6.1](http://www.3dbar.org:8080/getVolume?cafDatasetName=whs_0.6.1)

## **getCafInfo**

Return 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. [See details](#).

### **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**

Return a model of a given structure from selected dataset as a zip file containing the reconstruction and a short description. [See details](#).

### **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)

## **getPreviewReconstruction**

Return a lightweight model of a given structure from selected dataset as an x3d mesh. [See details](#).

### **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**

Return a thumbnail of the reconstruction of a given structure available via `getReconstruction` in png format. [See details](#).

### **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)

## **getCafSlide**

Return an SVG image with CAF slide filtered using provided settings. [See details](#).

## 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)

## **queryReconstruction**

Return AJAX data describing reconstructions in the service matching the criteria. [See details.](#)

### Examples

- [http://service.3dbar.org/queryReconstruction?cafDatasetName=sba\\_DB08;structureList=Br;outputFormats=exportToImage](http://service.3dbar.org/queryReconstruction?cafDatasetName=sba_DB08;structureList=Br;outputFormats=exportToImage)
- [http://service.3dbar.org/queryReconstruction?cafDatasetName=whs\\_0.6.1;structureList=Brain;outputFormats=exportToImage](http://service.3dbar.org/queryReconstruction?cafDatasetName=whs_0.6.1;structureList=Brain;outputFormats=exportToImage)
- [http://service.3dbar.org/queryReconstruction?cafDatasetName=sba\\_DB08;structureList=Amg;switches=brainoutline](http://service.3dbar.org/queryReconstruction?cafDatasetName=sba_DB08;structureList=Amg;switches=brainoutline)

## **getReconstructionByKey**

Return reconstruction (stored in the service) of a given service identifier. The identifier can be obtained using 'queryReconstruction' service. [See details.](#)

### Example

- <http://service.3dbar.org/getReconstructionByKey?id=26721>

## **getThumbnailByKey**

Return a thumbnail of reconstruction (stored in the service) of a given service identifier in png format. [See details.](#)

### Example

- <http://service.3dbar.org/getThumbnailByKey?id=12064>

## Available frontend services

### **getPreview**

Display 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. [See details.](#)

### 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**

Display a window containing basic information about CAF dataset. [See details.](#)

### **Examples**

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

## **queryJob**

Display a window containing information about selected reconstruction job - and about other reconstruction jobs requested for the same CAF dataset. [See details.](#)

### **Examples**

- <http://service.3dbar.org/queryJob?id=22>