# 3d Brain Atlas Reconstructor on-line service

## Available backend services

### getAvailableDatasets

Return AJAX data describing CAF datasets (atlases) available to the user in the service. <u>See details</u>.

**Example**

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

### getCaf

Return zip archive containing requested CAF dataset. <u>See details</u>

**Example**

- <u>http://www.3dbar.org:8080/getCaf?cafDatasetName=whs_0.6.1</u>

### getVolume

Return zipped labeled NifTi? volume containing neuroanatomical information from the requested CAF dataset. <u>See details</u>

**Example**

- <u>http://www.3dbar.org:8080/getVolume?cafDatasetName=whs_0.6.1</u>

# 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. <u>See details</u>.

### 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. <u>See details</u>.

### 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. <u>See details</u>.

### 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. <u>See details</u>.

### 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. <u>See details</u>.

**Examples**

- 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=Fa
- 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,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=exportTc
- http://service.3dbar.org/queryReconstruction?cafDatasetName=whs_0.6.1;structureList=Brain;outputFormats=expor
- 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

# Availiable frontend services

## getPreview

Display a window allowing to manipulate (rotate, zoom, etc.) lightweight version of the reconstuciton. 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_0.5&structureName=Hc
- http://service.3dbar.org/getPreview?cafDatasetName=sba_DB08&structureName=FBr

## **getCafInfoPage**

Display a window containing basic information about CAF dataset. <u>See details</u>.

**Examples**

- <u>http://service.3dbar.org/getCafInfoPage?cafDatasetName=sba_DB08</u>

## **queryJob**

Display a window containing information about selected reconstruction job - and about other reconstruction jobs requested for the same CAF dataset. <u>See details</u>.

**Examples**

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