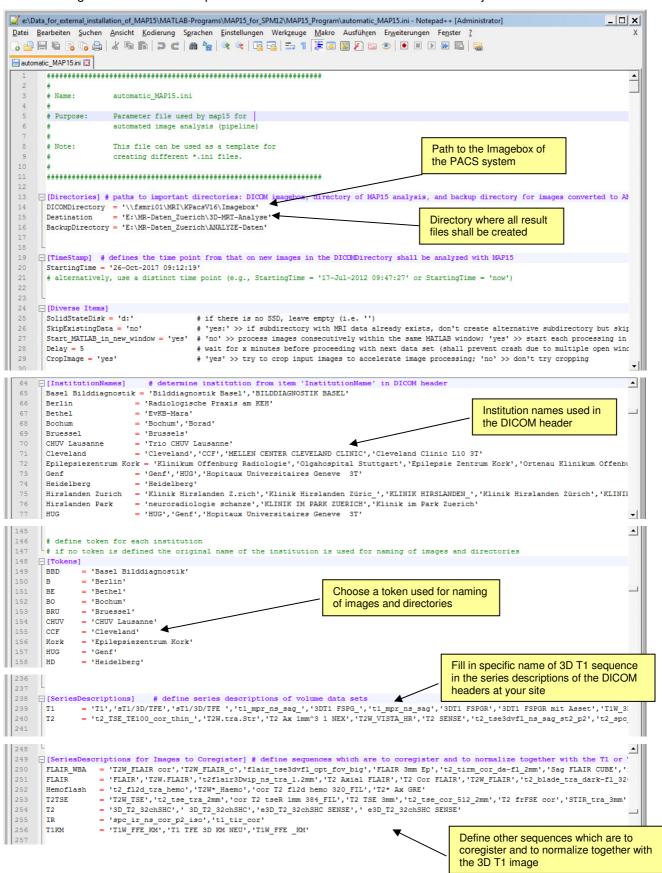# Editing the 'automatic_MAP18.ini' file

This text file (which is found in the directory '**…\MAP18_for_SPM12\MAP18_Program**') controls the automated conversion of DICOM images into ANALYZE format, the detection of different MR sequences, the naming rules for image files, and the subsequent image processing with MAP18.

The following overview shall explain which items have at least to be adjusted for each user site.

```
e:\Data_for_external_installation_of_MAP15\MATLAB-Programs\MAP15_for_SPM12\MAP15_Program\automatic_MAP15.ini - Notepad++ [Administrator]
Datei  Bearbeiten  Suchen  Ansicht  Kodierung  Sprachen  Einstellungen  Werkzeuge  Makro  Ausführen  Erweiterungen  Fenster  ?

automatic_MAP15.ini

  1   ############################################################
  2   #
  3   # Name:        automatic_MAP15.ini
  4   #
  5   # Purpose:     Parameter file used by map15 for
  6   #              automated image analysis (pipeline)
  7   #
  8   # Note:        This file can be used as a template for
  9   #              creating different *.ini files.
 10   #
 11   ############################################################
 12
 13   [Directories] # paths to important directories: DICOM imagebox, directory of MAP15 analysis, and backup directory for images converted to A
 14   DICOMDirectory  = '\\fsmri01\MRI\KPacsV16\Imagebox'
 15   Destination     = 'E:\MR-Daten_Zuerich\3D-MRT-Analyse'
 16   BackupDirectory = 'E:\MR-Daten_Zuerich\ANALYZE-Daten'
 17
 18
 19   [TimeStamp]  # defines the time point from that on new images in the DICOMDirectory shall be analyzed with MAP15
 20   StartingTime = '26-Oct-2017 09:12:19'
 21   # alternatively, use a distinct time point (e.g., StartingTime = '17-Jul-2012 09:47:27' or StartingTime = 'now')
 22
 23
 24   [Diverse Items]
 25   SolidStateDisk = 'd:'              # if there is no SSD, leave empty (i.e. '')
 26   SkipExistingData = 'no'           # 'yes:' >> if subdirectory with MRI data already exists, don't create alternative subdirectory but skip
 27   Start_MATLAB_in_new_window = 'yes' # 'no' >> process images consecutively within the same MATLAB window; 'yes' >> start each processing in
 28   Delay = 5                         # wait for x minutes before proceeding with next data set (shall prevent crash due to multiple open wind
 29   CropImage = 'yes'                 # 'yes' >> try to crop input images to accelerate image processing; 'no' >> don't try cropping
 30

 64   [InstitutionNames]     # determine institution from item 'InstitutionName' in DICOM header
 65   Basel Bilddiagnostik = 'Bilddiagnostik Basel','BILDDIAGNOSTIK BASEL'
 66   Berlin          = 'Radiologische Praxis am KEH'
 67   Bethel          = 'EvKB-Mara'
 68   Bochum          = 'Bochum','Borad'
 69   Bruessel        = 'Brussels'
 70   CHUV Lausanne   = 'Trio CHUV Lausanne'
 71   Cleveland       = 'Cleveland','CCF','MELLEN CENTER CLEVELAND CLINIC','Cleveland Clinic L10 3T'
 72   Epilepsiezentrum Kork = 'Klinikum Offenburg Radiologie','Olgahospital Stuttgart','Epilepsie Zentrum Kork','Ortenau Klinikum Offenbu
 73   Genf            = 'Genf','HUG','Hopitaux Universitaires Geneve  3T'
 74   Heidelberg      = 'Heidelberg'
 75   Hirslanden Zurich = 'Klinik Hirslanden Z.rich','Klinik Hirslanden Züric_','KLINIK HIRSLANDEN_','Klinik Hirslanden Zürich','KLINI
 76   Hirslanden Park = 'neuroradiologie schanze','KLINIK IM PARK ZUERICH','Klinik im Park Zuerich'
 77   HUG             = 'HUG','Genf','Hopitaux Universitaires Geneve  3T'

145
146   # define token for each institution
147   # if no token is defined the original name of the institution is used for naming of images and directories
148   [Tokens]
149   BBD    = 'Basel Bilddiagnostik'
150   B      = 'Berlin'
151   BE     = 'Bethel'
152   BO     = 'Bochum'
153   BRU    = 'Bruessel'
154   CHUV   = 'CHUV Lausanne'
155   CCF    = 'Cleveland'
156   Kork   = 'Epilepsiezentrum Kork'
157   HUG    = 'Genf'
158   HD     = 'Heidelberg'

236
237
238   [SeriesDescriptions]    # define series descriptions of volume data sets
239   T1    = 'T1','sT1/3D/TFE','sT1/3D/TFE ','t1_mpr_ns_sag_','3DT1 FSPG_','t1_mpr_ns_sag','3DT1 FSPGR','3DT1 FSPGR mit Asset','T1W_3
240   T2    = 't2_TSE_TE100_cor_thin_','T2W.tra.Str','T2 Ax 1mm^3 1 NEX','T2W_VISTA_HR','T2 SENSE','t2_tse3dvfl_ns_sag_st2_p2','t2_spc

248
249   [SeriesDescriptions for Images to Coregister] # define sequences which are to coregister and to normalize together with the T1 or
250   FLAIR_WBA  = 'T2W_FLAIR cor','T2W_FLAIR_c','flair_tse3dvfl_opt_fov_big','FLAIR 3mm Ep','t2_tirm_cor_da-fl_2mm','Sag FLAIR CUBE','
251   FLAIR      = 'FLAIR','T2W.FLAIR','t2flair3Dwip_ns_tra_1.2mm','T2 Axial FLAIR','T2 Cor FLAIR','T2W_FLAIR','t2_blade_tra_dark-fl_32
252   Hemoflash  = 't2_fl2d_tra_hemo','T2W*_Haemo','cor T2 fl2d hemo 320_FIL','T2* Ax GRE'
253   T2TSE      = 'T2W_TSE','t2_tse_tra_2mm','cor T2 tseR 1mm 384_FIL','T2 TSE 3mm','t2_tse_cor_512_2mm','T2 frFSE cor','STIR_tra_3mm'
254   T2         = '3D_T2_32chSHC',' 3D_T2_32chSHC','e3D_T2_32chSHC SENSE',' e3D_T2_32chSHC SENSE'
255   IR         = 'spc_ir_ns_cor_p2_iso','t1_tir_cor'
256   T1KM       = 'T1W_FFE_KM','T1 TFE 3D KM NEU','T1W_FFE _KM'
257
```

Path to the Imagebox of the PACS system

Directory where all result files shall be created

Institution names used in the DICOM header

Choose a token used for naming of images and directories

Fill in specific name of 3D T1 sequence in the series descriptions of the DICOM headers at your site

Define other sequences which are to coregister and to normalize together with the 3D T1 image

```
268
269    # determine several input arguments for MAP07 (i.e., mode,norm,space,sensitivity,ROI_mode,viewer)
270    # from a combination of different image items (i.e., 'Institution', 'Manufacturer', 'SeriesDescription' / 'ProtocolName', Manufacture
271    #
272    # Parameters left of the identity sign (= input arguments for MAP07):
273    #    first item: mode (of action; please, cf. map07('help'))
274    #    second item: norm (database; please, cf. map07('help'))
275    #    third item: space (i.e., 'standard', 'native', or 'both')
276    #    fourth item: sensitivity (for detection of FCDs; i.e., 'high', 'medium', or 'low')
277    #    fifth item: ROI_mode (i.e., 'full', 'closed', or 'dotted')
278    #    sixth item: viewer (i.e., 'MRIcro', 'MRIcron', or 'none')
279    #
280    # Parameters right of the identity sign (= items defining the image type):
281    #    first item: 'Institution'
282    #    second item: 'Manufacturer'
283    #    third item: 'SeriesDescription' / 'ProtocolName' (one expression for both items)
284    #    fourth item: 'ManufacturersModelName' (optionally)
285    #    Combinational logic 'Institution' AND 'Manufacturer' AND ('SeriesDescription' OR 'ProtocolName') AND ManufacturersModelName (opt.
286
287  [MAP07 Parameters]
288    'all','B_Symphony_T1','standard','medium','closed','MRIcro'      = 'Berlin','Siemens','T1'
289    'all','BE_Symphony_T1','standard','medium','closed','MRIcro'     = 'Bethel','Siemens','T1'
290    'all','AVG_T1','standard','medium','closed','MRIcro'             = 'Bochum','Siemens','T1'
291    'all','BRU_Achieva_T1','standard','medium','closed','MRIcro'     = 'Bruessel','Philips','T1'
292    'all','AVG_T1','standard','medium','closed','MRIcro'             = 'CHUV Lausanne','Siemens','T1'              # not sure :
293    'all','BO_Trio_T2','standard','medium','closed','MRIcro'         = 'CHUV Lausanne','Siemens','T2'
294    'all','CC_Trio_T1','standard','medium','closed','MRIcro'         = 'Cleveland','Siemens','T1'
295    'all','AVG_T1','standard','medium','closed','MRIcro'             = 'Epilepsiezentrum Kork','Siemens','T1','Symphony'
```

> Define on the left side the parameters (i.e. mode of action, viewer etc) with which MAP18 shall be started when an image as defined on the right side of the equation sign is found.

MS ini file | 23164 chars 23882 bytes 360 lines | Ln : 267   Col : 1   Sel : 0 (0 bytes) in 0 ranges | Dos\Windows | ANSI | INS

To start the automatic mode of MAP18 call **automatic_MAP18('automatic_MAP18.ini')** from the MATLAB command window. You may define different 'ini' files for different modes of action. In this case the command **map18('automatic')** opens a menu for the selection of the desired 'ini' file.

After calling the automatic mode of MAP18 the program waits for the arrival of new images in the image directory of the local PACS system. If an appropriate MRI with a 3D T1 image arrives, the DICOM images are converted to ANALYZE format and transferred to the destination directory. Then, MAP18 is automatically started and does the analysis on the new image(s).