## Requirements

sudo add-apt-repository ppa:webupd8team/java

sudo apt-get update

sudo apt-get install oracle-java7-installer

wget <http://apache.panu.it/karaf/2.3.8/apache-karaf-2.3.8.tar.gz>

wget http://mirror.nohup.it/apache/zookeeper/stable/zookeeper-3.4.6.tar.gz

wget http://apache.fastbull.org/maven/maven-3/3.2.3/binaries/apache-maven-3.2.3-bin.tar.gz

tar zxvf apache-karaf-2.3.8.tar.gz

tar zxvf apache-maven-3.2.3-bin.tar.gz

tar zxvf zookeeper-3.4.6.tar.gz

## Config Zookepeer

mv zookeeper-3.4.6/conf/zoo\_sample.cfg zookeeper-3.4.6/conf/zoo.cfg

## Config Karaf

## vim apache-karaf-2.3.8/etc/config.properties

|  |
| --- |
| *….*  #  # Framework selection properties  #  karaf.framework=equinox  …. |

## Edit Maven settings.xml

vim apache-maven-3.2.3/conf/settings.xml

|  |
| --- |
| *<server>*  *<id>betaas-obr</id>*  *<username>betaas-dev</username>*  *<password>B3t4s$</password>*  *</server>*  <server>  <id>thirdparty</id>  <username>betaas-dev</username>  <password>B3t4s$</password>  </server> |

## Configure PATH

vim .bashrc

|  |
| --- |
| export PATH=$PATH:/home/ubuntu/apache-karaf-2.3.8/bin:/home/ubuntu/apache-maven-3.2.3/bin:/home/ubuntu/pache-log4j-1.2.17:/home/ubuntu/zookeeper-3.4.6/bin  export JAVA\_HOME=/usr/lib/jvm/java-7-oracle |

## Download BETaaS

svn co <http://www.betaas.eu:8081/svn/BETaaS>

## Configure Security Certificate

cp BETaaS/trunk/betaas/betaas-taas/betaas-taas-securitymanager/betaas-taas-securitymanager-certificate/src/main/resources/AppStoreCertInter.p12 apache-karaf-2.3.8/

cp BETaaS/trunk/betaas/betaas-service/betaas-service-securitymanager/condition1.xml apache-karaf-2.3.8/

# GW1 – 10.0.3.106

## Karaf configurations

cp BETaaS/trunk/betaas/betaas-configuration/configuration/betaas.\* apache-karaf-2.3.8/etc/

vim apache-karaf-2.3.8/etc/betaas.endpoints.cfg

|  |
| --- |
| serviceDatabaseBDMAddress = http://10.0.3.106:18001/bdmdb  serviceADSAddress = http://10.0.3.106:18002/ads  analyticTaskAddress = http://10.0.3.106:19050/analyticTask  databaseTaskAddress = http://10.0.3.106:19051/databaseTask  contextManagerTaaSAddress=http://10.0.3.106:17001/cmtaas  contextManagerAdaptationAddress=http://10.0.3.106:17002/cmadaptation  qosMonitoringTaaSAddress=http://10.0.3.106:17003/qosmonitoringtaas  serviceManagerAddress=http://10.0.3.106:9304/sm-service  dependabilityManagerAddress=http://10.0.3.106:9521/dm-service  instanceManagerAddress=http://10.0.3.106:9302/im-service  qosManagerTaaSAddress=http://10.0.3.106:16001/qosmanagertaas  certificateManagerAddress=http://10.0.3.106:18901/certtaas  authManagerTaasAddress=http://10.0.3.106:18902/authtaas  taasResourcesManagerAddress=http://10.0.3.106:9330/taasrm  traffickTaskAddress=http://10.0.3.106:19052/traffickTask |

vim apache-karaf-2.3.8/etc/betaas.gateway.cfg

|  |
| --- |
| # Gatewaay configuration  gwId=1  # TaaS Database settings  taasdb\_jdbc = jdbc:h2:file:/home/ubuntu/betaas/data/taasbdmdb;DB\_CLOSE\_DELAY=-1  taasdb\_user = sa  taasdb\_pwd = sa  # Service SQL Database settings  bdm\_jdbc\_driver = org.h2.Driver  bdm\_url = jdbc:h2:file:/home/ubuntu/betaas/data/bdmdata/  bdm\_db\_name = servicedb  bdm\_db\_user = sa  bdm\_db\_pwd = sa  bdm\_db\_mode = test  bdm\_db\_DBSetup = keep  # Hadoop BDM Components  sqoopUrl = http://betaashadoop:12000/sqoop/  hiveUrl = jdbc:hive2://betaashadoop:10000/default  hiveUser = hive  hivePwd = hive  uploadToHDFSFrequency = 60000  # PrestoDB for analytics tasks  prestoJdbc = jdbc:presto://betaashadoop:18080/hive/default  prestoUser = test  # Simulator settings  sensors = /home/ubuntu/betaas/sensors/  # Things Adaptor settings  sensorsContext = /home/ubuntu/betaas/context/  # Instance Manager  credentials=na  instanceDescription=Low Emission Zone Gateway  adminAddress=http://10.0.3.106:8080/InstanceManager/  automaticJoin = 0  trackerWaitTime=30000  # BETaaS Bus layer  busenabled = false  busmode = direct  busendpoint = localhost  busendexchange = betaas\_bus  bussubkey = betaasbus  # Info for GW certificates  countryCode=DK  state=Nordjylland  location=Aalborg  orgName=BETaaS |

vim apache-karaf-2.3.8/etc/org.ops4j.pax.logging.cfg

|  |
| --- |
| ################################################################################  #  # Licensed to the Apache Software Foundation (ASF) under one or more  # contributor license agreements. See the NOTICE file distributed with  # this work for additional information regarding copyright ownership.  # The ASF licenses this file to You under the Apache License, Version 2.0  # (the "License"); you may not use this file except in compliance with  # the License. You may obtain a copy of the License at  #  # http://www.apache.org/licenses/LICENSE-2.0  #  # Unless required by applicable law or agreed to in writing, software  # distributed under the License is distributed on an "AS IS" BASIS,  # WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.  # See the License for the specific language governing permissions and  # limitations under the License.  #  ################################################################################  # Root logger  log4j.rootLogger=DEBUG, out, osgi:\*  log4j.throwableRenderer=org.apache.log4j.OsgiThrowableRenderer  # To avoid flooding the log when using DEBUG level on an ssh connection and doing log:tail  log4j.logger.org.apache.sshd.server.channel.ChannelSession = INFO  # CONSOLE appender not used by default  log4j.appender.stdout=org.apache.log4j.ConsoleAppender  log4j.appender.stdout.layout=org.apache.log4j.PatternLayout  log4j.appender.stdout.layout.ConversionPattern=%d{ISO8601} | %-5.5p | %-16.16t | %-32.32c{1} | %-32.32C %4L | %X{bundle.id} - %X{bundle.name} - %X{bundle.version} | %m%n  # File appender  log4j.appender.out=org.apache.log4j.RollingFileAppender  log4j.appender.out.layout=org.apache.log4j.PatternLayout  log4j.appender.out.layout.ConversionPattern=%d{ISO8601} | %-5.5p | %-16.16t | %-32.32c{1} | %-32.32C %4L | %X{bundle.id} - %X{bundle.name} - %X{bundle.version} | %m%n  log4j.appender.out.file=${karaf.data}/log/karaf.log  log4j.appender.out.append=true  log4j.appender.out.maxFileSize=1MB  log4j.appender.out.maxBackupIndex=10  # Sift appender  log4j.appender.sift=org.apache.log4j.sift.MDCSiftingAppender  log4j.appender.sift.key=bundle.name  log4j.appender.sift.default=karaf  log4j.appender.sift.appender=org.apache.log4j.FileAppender  log4j.appender.sift.appender.layout=org.apache.log4j.PatternLayout  log4j.appender.sift.appender.layout.ConversionPattern=%d{ISO8601} | %-5.5p | %-16.16t | %-32.32c{1} | %-32.32C %4L | %m%n  log4j.appender.sift.appender.file=${karaf.data}/log/$\\{bundle.name\\}.log  log4j.appender.sift.appender.append=true  log4j.logger.betaas=INFO, betaasfilelog  log4j.appender.betaasfilelog=org.apache.log4j.RollingFileAppender  log4j.appender.betaasfilelog.layout=org.apache.log4j.PatternLayout  log4j.appender.betaasfilelog.threshold=INFO  log4j.appender.betaasfilelog.layout.ConversionPattern=%d{ISO8601} | %d{yyyy-MM-dd HH:mm:ss} | %X{bundle.id} - %X{bundle.name} - %X{bundle.version} | %m%n  log4j.appender.betaasfilelog.file=${karaf.data}/log/karaf\_betaas.log  log4j.appender.betaasfilelog.append=true  log4j.appender.betaasfilelog.maxFileSize=1MB  log4j.appender.betaasfilelog.maxBackupIndex=10  log4j.logger.betaas.taas=INFO, betaastaasfilelog  log4j.appender.betaastaasfilelog=org.apache.log4j.RollingFileAppender  log4j.appender.betaastaasfilelog.layout=org.apache.log4j.PatternLayout  log4j.appender.betaastaasfilelog.threshold=INFO  log4j.appender.betaastaasfilelog.layout.ConversionPattern=%d{ISO8601} | %d{yyyy-MM-dd HH:mm:ss} | %X{bundle.id} - %X{bundle.name} - %X{bundle.version} | %m%n  log4j.appender.betaastaasfilelog.file=${karaf.data}/log/karaf\_betaas\_taas.log  log4j.appender.betaastaasfilelog.append=true  log4j.appender.betaastaasfilelog.maxFileSize=1MB  log4j.appender.betaastaasfilelog.maxBackupIndex=10  log4j.logger.betaas.service=INFO, betaasservicefilelog  log4j.appender.betaasservicefilelog=org.apache.log4j.RollingFileAppender  log4j.appender.betaasservicefilelog.layout=org.apache.log4j.PatternLayout  log4j.appender.betaasservicefilelog.threshold=INFO  log4j.appender.betaasservicefilelog.layout.ConversionPattern=%d{ISO8601} | %d{yyyy-MM-dd HH:mm:ss} | %X{bundle.id} - %X{bundle.name} - %X{bundle.version} | %m%n  log4j.appender.betaasservicefilelog.file=${karaf.data}/log/karaf\_betaas\_service.log  log4j.appender.betaasservicefilelog.append=true  log4j.appender.betaasservicefilelog.maxFileSize=1MB  log4j.appender.betaasservicefilelog.maxBackupIndex=10  log4j.logger.betaas.adaptation=INFO, betaasadaptationfilelog  log4j.appender.betaasadaptationfilelog=org.apache.log4j.RollingFileAppender  log4j.appender.betaasadaptationfilelog.layout=org.apache.log4j.PatternLayout  log4j.appender.betaasadaptationfilelog.threshold=INFO  log4j.appender.betaasadaptationfilelog.layout.ConversionPattern=%d{ISO8601} | %d{yyyy-MM-dd HH:mm:ss} | %X{bundle.id} - %X{bundle.name} - %X{bundle.version} | %m%n  log4j.appender.betaasadaptationfilelog.file=${karaf.data}/log/karaf\_betaas\_adaptation.log  log4j.appender.betaasadaptationfilelog.append=true  log4j.appender.betaasadaptationfilelog.maxFileSize=1MB  log4j.appender.betaasadaptationfilelog.maxBackupIndex=10  log4j.logger.betaas.thingsadaptor=INFO, betaastafilelog  log4j.appender.betaastafilelog=org.apache.log4j.RollingFileAppender  log4j.appender.betaastafilelog.layout=org.apache.log4j.PatternLayout  log4j.appender.betaastafilelog.threshold=INFO  log4j.appender.betaastafilelog.layout.ConversionPattern=%d{ISO8601} | %d{yyyy-MM-dd HH:mm:ss} | %X{bundle.id} - %X{bundle.name} - %X{bundle.version} | %m%n  log4j.appender.betaastafilelog.file=${karaf.data}/log/karaf\_betaas\_ta.log  log4j.appender.betaastafilelog.append=true  log4j.appender.betaastafilelog.maxFileSize=1MB  log4j.appender.betaastafilelog.maxBackupIndex=10 |

## Configure Simulator and Context

mkdir betaas

mkdir betaas/sensors

mkdir betaas/context

vim betaas/sensors/1.csv

|  |
| --- |
| deviceID,output,digital,maximumResponseTime,memoryStatus,batteryLevel,measurement,protocol,type,unit,environment,latitude,longitude,altitude,floor,locationKeyword,LocationIdentifier,BatteryCost,ComputationalCost  000001,1,1,1,12,100, ,etsi,GPSPOSITION,,1,43.654987380589200,10.436325073242100,7.0,0,car,usr001,20,0.1 |

vim betaas/sensors/2.csv

|  |
| --- |
| deviceID,output,digital,maximumResponseTime,memoryStatus,batteryLevel,measurement,protocol,type,unit,environment,latitude,longitude,altitude,floor,locationKeyword,LocationIdentifier,BatteryCost,ComputationalCost  000010,1,1,1,12,100,9,etsi,TRAFFIC,cars/min,1,43.654987380589200,10.436325073242100,7.0,0,Pisa,FagianoI,20,0.1 |

vim betaas/sensors/3.csv

|  |
| --- |
| deviceID,output,digital,maximumResponseTime,memoryStatus,batteryLevel,measurement,protocol,type,unit,environment,latitude,longitude,altitude,floor,locationKeyword,LocationIdentifier,BatteryCost,ComputationalCost  00009,1,1,1,12,100,9,etsi,TRAFFIC,cars/min,1,43.654987380589200,10.436325073242100,7.0,0,Pisa,Tiberio,20,0.1 |

vim betaas/sensors/4.csv

|  |
| --- |
| deviceID,output,digital,maximumResponseTime,memoryStatus,batteryLevel,measurement,protocol,type,unit,environment,latitude,longitude,altitude,floor,locationKeyword,LocationIdentifier,BatteryCost,ComputationalCost  00011,1,1,1,12,100,9,etsi,TRAFFIC,cars/min,1,43.654987380589200,10.436325073242100,7.0,0,Pisa,Giannessi,20,0.1 |

vim betaas/sensors/5.csv

|  |
| --- |
| deviceID,output,digital,maximumResponseTime,memoryStatus,batteryLevel,measurement,protocol,type,unit,environment,latitude,longitude,altitude,floor,locationKeyword,LocationIdentifier,BatteryCost,ComputationalCost  00006,1,1,1,12,100,9,etsi,TRAFFIC,cars/min,1,43.652425728383600,10.439994335174500,7.0,0,Pisa,Calabresi,20,0.1 |

vim betaas/sensors/6.csv

|  |
| --- |
| deviceID,output,digital,maximumResponseTime,memoryStatus,batteryLevel,measurement,protocol,type,unit,environment,latitude,longitude,altitude,floor,locationKeyword,LocationIdentifier,BatteryCost,ComputationalCost  00007,1,1,1,12,100,9,etsi,TRAFFIC,cars/min,1,43.652425728383600,10.439994335174500,7.0,0,Pisa,FortiIII,20,0.1 |

vim betaas/sensors/7.csv

|  |
| --- |
| deviceID,output,digital,maximumResponseTime,memoryStatus,batteryLevel,measurement,protocol,type,unit,environment,latitude,longitude,altitude,floor,locationKeyword,LocationIdentifier,BatteryCost,ComputationalCost  00008,1,1,1,12,100,9,etsi,TRAFFIC,cars/min,1,43.652425728383600,10.439994335174500,7.0,0,Pisa,FortiII,20,0.1 |

vim betaas/sensors/8.csv

|  |
| --- |
| deviceID,output,digital,maximumResponseTime,memoryStatus,batteryLevel,measurement,protocol,type,unit,environment,latitude,longitude,altitude,floor,locationKeyword,LocationIdentifier,BatteryCost,ComputationalCost  00005,1,1,1,12,100,9,etsi,TRAFFIC,cars/min,1,43.659159534717900,10.437424778938200,7.0,0,Pisa,FortiI,20,0.1 |

vim betaas/sensors/9.csv

|  |
| --- |
| deviceID,output,digital,maximumResponseTime,memoryStatus,batteryLevel,measurement,protocol,type,unit,environment,latitude,longitude,altitude,floor,locationKeyword,LocationIdentifier,BatteryCost,ComputationalCost  00004,1,1,1,12,100,9,etsi,TRAFFIC,cars/min,1,43.659159534717900,10.437424778938200,7.0,0,Pisa,FagianoII,20,0.1 |

cp -r ~/BETaaS/trunk/betaas-trials/LEZ-extended-service/src/main/resources/context/GPS betaas/context

cp -r ~/BETaaS/trunk/betaas-trials/LEZ-extended-service/src/main/resources/context/traffic betaas/context

## Compile BETaaS

cd BETaaS/trunk/betaas

mvn clean install

## Install BETaaS

karaf

features:addurl mvn:eu.betaas/betaas-features/0.0.1-SNAPSHOT/xml

features:install betaas-demo-gateway

features:chooseurl cxf-dosgi 1.5.0

config:propset -p org.apache.cxf.dosgi.discovery.zookeeper.server clientPort 2181

config:propset -p org.apache.cxf.dosgi.discovery.zookeeper zookeeper.host 10.0.3.106

config:propset -p org.apache.cxf.dosgi.discovery.zookeeper zookeeper.port 2181

features:install cxf-dosgi-discovery-distributed

# GW2 – 10.0.3.33

## Karaf configurations

cp BETaaS/trunk/betaas/betaas-configuration/configuration/betaas.\* apache-karaf-2.3.8/etc/

vim apache-karaf-2.3.8/etc/betaas.endpoints.cfg

|  |
| --- |
| serviceDatabaseBDMAddress = http://10.0.3.33:18001/bdmdb  serviceADSAddress = http://10.0.3.33:18002/ads  analyticTaskAddress = http://10.0.3.33:19050/analyticTask  databaseTaskAddress = http://10.0.3.33:19051/databaseTask  contextManagerTaaSAddress=http://10.0.3.33:17001/cmtaas  contextManagerAdaptationAddress=http://10.0.3.33:17002/cmadaptation  qosMonitoringTaaSAddress=http://10.0.3.33:17003/qosmonitoringtaas  serviceManagerAddress=http://10.0.3.33:9304/sm-service  dependabilityManagerAddress=http://10.0.3.33:9521/dm-service  instanceManagerAddress=http://10.0.3.33:9302/im-service  qosManagerTaaSAddress=http://10.0.3.33:16001/qosmanagertaas  certificateManagerAddress=http://10.0.3.33:18901/certtaas  authManagerTaasAddress=http://10.0.3.33:18902/authtaas  taasResourcesManagerAddress=http://10.0.3.33:9330/taasrm  traffickTaskAddress=http://10.0.3.33:19052/traffickTask |

vim apache-karaf-2.3.8/etc/betaas.gateway.cfg

|  |
| --- |
| # Gatewaay configuration  gwId=2  # TaaS Database settings  taasdb\_jdbc = jdbc:h2:file:/home/ubuntu/betaas/data/taasbdmdb;DB\_CLOSE\_DELAY=-1  taasdb\_user = sa  taasdb\_pwd = sa  # Service SQL Database settings  bdm\_jdbc\_driver = org.h2.Driver  bdm\_url = jdbc:h2:file:/home/ubuntu/betaas/data/bdmdata/  bdm\_db\_name = servicedb  bdm\_db\_user = sa  bdm\_db\_pwd = sa  bdm\_db\_mode = test  bdm\_db\_DBSetup = keep  # Hadoop BDM Components  sqoopUrl = http://betaashadoop:12000/sqoop/  hiveUrl = jdbc:hive2://betaashadoop:10000/default  hiveUser = hive  hivePwd = hive  uploadToHDFSFrequency = 60000  # PrestoDB for analytics tasks  prestoJdbc = jdbc:presto://betaashadoop:18080/hive/default  prestoUser = test  # Simulator settings  sensors = /home/ubuntu/betaas/sensors/  # Things Adaptor settings  sensorsContext = /home/ubuntu/betaas/context/  # Instance Manager  credentials=na  instanceDescription=Low Emission Zone Gateway  adminAddress=http://10.0.3.106:8080/InstanceManager/  automaticJoin = 0  trackerWaitTime=30000  # BETaaS Bus layer  busenabled = false  busmode = direct  busendpoint = localhost  busendexchange = betaas\_bus  bussubkey = betaasbus  # Info for GW certificates  countryCode=DK  state=Nordjylland  location=Aalborg  orgName=BETaaS |

vim apache-karaf-2.3.8/etc/org.ops4j.pax.logging.cfg

|  |
| --- |
| ################################################################################  #  # Licensed to the Apache Software Foundation (ASF) under one or more  # contributor license agreements. See the NOTICE file distributed with  # this work for additional information regarding copyright ownership.  # The ASF licenses this file to You under the Apache License, Version 2.0  # (the "License"); you may not use this file except in compliance with  # the License. You may obtain a copy of the License at  #  # http://www.apache.org/licenses/LICENSE-2.0  #  # Unless required by applicable law or agreed to in writing, software  # distributed under the License is distributed on an "AS IS" BASIS,  # WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.  # See the License for the specific language governing permissions and  # limitations under the License.  #  ################################################################################  # Root logger  log4j.rootLogger=DEBUG, out, osgi:\*  log4j.throwableRenderer=org.apache.log4j.OsgiThrowableRenderer  # To avoid flooding the log when using DEBUG level on an ssh connection and doing log:tail  log4j.logger.org.apache.sshd.server.channel.ChannelSession = INFO  # CONSOLE appender not used by default  log4j.appender.stdout=org.apache.log4j.ConsoleAppender  log4j.appender.stdout.layout=org.apache.log4j.PatternLayout  log4j.appender.stdout.layout.ConversionPattern=%d{ISO8601} | %-5.5p | %-16.16t | %-32.32c{1} | %-32.32C %4L | %X{bundle.id} - %X{bundle.name} - %X{bundle.version} | %m%n  # File appender  log4j.appender.out=org.apache.log4j.RollingFileAppender  log4j.appender.out.layout=org.apache.log4j.PatternLayout  log4j.appender.out.layout.ConversionPattern=%d{ISO8601} | %-5.5p | %-16.16t | %-32.32c{1} | %-32.32C %4L | %X{bundle.id} - %X{bundle.name} - %X{bundle.version} | %m%n  log4j.appender.out.file=${karaf.data}/log/karaf.log  log4j.appender.out.append=true  log4j.appender.out.maxFileSize=1MB  log4j.appender.out.maxBackupIndex=10  # Sift appender  log4j.appender.sift=org.apache.log4j.sift.MDCSiftingAppender  log4j.appender.sift.key=bundle.name  log4j.appender.sift.default=karaf  log4j.appender.sift.appender=org.apache.log4j.FileAppender  log4j.appender.sift.appender.layout=org.apache.log4j.PatternLayout  log4j.appender.sift.appender.layout.ConversionPattern=%d{ISO8601} | %-5.5p | %-16.16t | %-32.32c{1} | %-32.32C %4L | %m%n  log4j.appender.sift.appender.file=${karaf.data}/log/$\\{bundle.name\\}.log  log4j.appender.sift.appender.append=true  log4j.logger.betaas=INFO, betaasfilelog  log4j.appender.betaasfilelog=org.apache.log4j.RollingFileAppender  log4j.appender.betaasfilelog.layout=org.apache.log4j.PatternLayout  log4j.appender.betaasfilelog.threshold=INFO  log4j.appender.betaasfilelog.layout.ConversionPattern=%d{ISO8601} | %d{yyyy-MM-dd HH:mm:ss} | %X{bundle.id} - %X{bundle.name} - %X{bundle.version} | %m%n  log4j.appender.betaasfilelog.file=${karaf.data}/log/karaf\_betaas.log  log4j.appender.betaasfilelog.append=true  log4j.appender.betaasfilelog.maxFileSize=1MB  log4j.appender.betaasfilelog.maxBackupIndex=10  log4j.logger.betaas.taas=INFO, betaastaasfilelog  log4j.appender.betaastaasfilelog=org.apache.log4j.RollingFileAppender  log4j.appender.betaastaasfilelog.layout=org.apache.log4j.PatternLayout  log4j.appender.betaastaasfilelog.threshold=INFO  log4j.appender.betaastaasfilelog.layout.ConversionPattern=%d{ISO8601} | %d{yyyy-MM-dd HH:mm:ss} | %X{bundle.id} - %X{bundle.name} - %X{bundle.version} | %m%n  log4j.appender.betaastaasfilelog.file=${karaf.data}/log/karaf\_betaas\_taas.log  log4j.appender.betaastaasfilelog.append=true  log4j.appender.betaastaasfilelog.maxFileSize=1MB  log4j.appender.betaastaasfilelog.maxBackupIndex=10  log4j.logger.betaas.service=INFO, betaasservicefilelog  log4j.appender.betaasservicefilelog=org.apache.log4j.RollingFileAppender  log4j.appender.betaasservicefilelog.layout=org.apache.log4j.PatternLayout  log4j.appender.betaasservicefilelog.threshold=INFO  log4j.appender.betaasservicefilelog.layout.ConversionPattern=%d{ISO8601} | %d{yyyy-MM-dd HH:mm:ss} | %X{bundle.id} - %X{bundle.name} - %X{bundle.version} | %m%n  log4j.appender.betaasservicefilelog.file=${karaf.data}/log/karaf\_betaas\_service.log  log4j.appender.betaasservicefilelog.append=true  log4j.appender.betaasservicefilelog.maxFileSize=1MB  log4j.appender.betaasservicefilelog.maxBackupIndex=10  log4j.logger.betaas.adaptation=INFO, betaasadaptationfilelog  log4j.appender.betaasadaptationfilelog=org.apache.log4j.RollingFileAppender  log4j.appender.betaasadaptationfilelog.layout=org.apache.log4j.PatternLayout  log4j.appender.betaasadaptationfilelog.threshold=INFO  log4j.appender.betaasadaptationfilelog.layout.ConversionPattern=%d{ISO8601} | %d{yyyy-MM-dd HH:mm:ss} | %X{bundle.id} - %X{bundle.name} - %X{bundle.version} | %m%n  log4j.appender.betaasadaptationfilelog.file=${karaf.data}/log/karaf\_betaas\_adaptation.log  log4j.appender.betaasadaptationfilelog.append=true  log4j.appender.betaasadaptationfilelog.maxFileSize=1MB  log4j.appender.betaasadaptationfilelog.maxBackupIndex=10  log4j.logger.betaas.thingsadaptor=INFO, betaastafilelog  log4j.appender.betaastafilelog=org.apache.log4j.RollingFileAppender  log4j.appender.betaastafilelog.layout=org.apache.log4j.PatternLayout  log4j.appender.betaastafilelog.threshold=INFO  log4j.appender.betaastafilelog.layout.ConversionPattern=%d{ISO8601} | %d{yyyy-MM-dd HH:mm:ss} | %X{bundle.id} - %X{bundle.name} - %X{bundle.version} | %m%n  log4j.appender.betaastafilelog.file=${karaf.data}/log/karaf\_betaas\_ta.log  log4j.appender.betaastafilelog.append=true  log4j.appender.betaastafilelog.maxFileSize=1MB  log4j.appender.betaastafilelog.maxBackupIndex=10 |

## Configure Simulator and Context

mkdir betaas

mkdir betaas/sensors

mkdir betaas/context

vim betaas/sensors/10.csv

|  |
| --- |
| deviceID,output,digital,maximumResponseTime,memoryStatus,batteryLevel,measurement,protocol,type,unit,environment,latitude,longitude,altitude,floor,locationKeyword,LocationIdentifier,BatteryCost,ComputationalCost  000002,0,1,1,12,100,0,etsi,STREETLAMP,int,1,43.655253,10.437969,7.0,0,Pisa,Tiberio,20,0.1 |

vim betaas/sensors/11.csv

|  |
| --- |
| deviceID,output,digital,maximumResponseTime,memoryStatus,batteryLevel,measurement,protocol,type,unit,environment,latitude,longitude,altitude,floor,locationKeyword,LocationIdentifier,BatteryCost,ComputationalCost  000003,0,1,1,12,100,0,etsi,STREETLAMP,int,1,43.656998,10.437418,7.0,0,Pisa,IntecsParking,20,0.1 |

vim betaas/sensors/12.csv

|  |
| --- |
| deviceID,output,digital,maximumResponseTime,memoryStatus,batteryLevel,measurement,protocol,type,unit,environment,latitude,longitude,altitude,floor,locationKeyword,LocationIdentifier,BatteryCost,ComputationalCost  000012,1,1,1,12,100,false,etsi,PRESENCE,boolean,1,43.656714,10.437342,7.0,0,Pisa,IntecsParking,20,0.1 |

vim betaas/sensors/13.csv

|  |
| --- |
| deviceID,output,digital,maximumResponseTime,memoryStatus,batteryLevel,measurement,protocol,type,unit,environment,latitude,longitude,altitude,floor,locationKeyword,LocationIdentifier,BatteryCost,ComputationalCost  000013,1,1,1,12,100,false,etsi,PRESENCE,boolean,1,43.656998,10.437418,7.0,0,Pisa,IntecsParking,20,0.1 |

cp -r ~/BETaaS/trunk/betaas-trials/parking-extended-service/src/main/resources/context/PIR betaas/context

cp -r ~/BETaaS/trunk/betaas-trials/parking-extended-service/src/main/resources/context/traffic betaas/context

cp -r ~/BETaaS/trunk/betaas-trials/parking-extended-service/src/main/resources/context/street\_lamp betaas/context

## Compile BETaaS

cd BETaaS/trunk/betaas

mvn clean install

## Compile parking App

cd BETaaS/trunk/betaas-trials/parking-extended-service

mvn clean install

## Install BETaaS

karaf

features:addurl mvn:eu.betaas/betaas-features/0.0.1-SNAPSHOT/xml

features:install betaas-demo-second-gateway

features:chooseurl cxf-dosgi 1.5.0

config:propset -p org.apache.cxf.dosgi.discovery.zookeeper.server clientPort 2181

config:propset -p org.apache.cxf.dosgi.discovery.zookeeper zookeeper.host 10.0.3.106

config:propset -p org.apache.cxf.dosgi.discovery.zookeeper zookeeper.port 2181

features:install cxf-dosgi-discovery-distributed

## Install Parking application

osgi:install mvn:eu.betaas/parking-extended-service/0.0.1-SNAPSHOT

## Running BETaaS

Start zookeper on GW1

Start karaf on GW1

Wait until all the devices are discovered.

Start karaf on GW2

After the devices are discovered start the application bundle (261 in my environment)