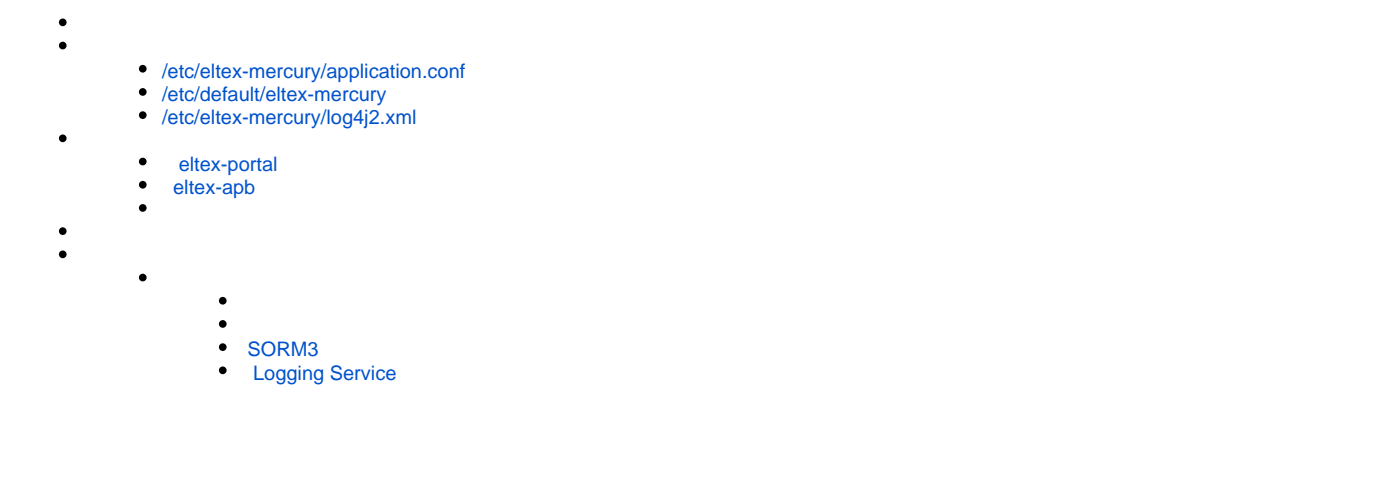


v1.20_Mercury



Hotspot- (eltex-portal eltex-apb). gRPC API.

/etc/eltex-mercury/application.conf

```
application.conf

database {
    host = localhost
    port = 3306
    name = radius
    user = javauser
    password = javapassword

    readOnly = false

    pool {
        maxPoolSize = 20
        minimumIdle = 1
        connectionTimeout = 5000
    }
}

jdbc {
    properties {
        useSSL = false
    }
}

sorm3Enabled = false

logging {
    host = localhost
    port = 9099
}
```

• :

```
database {
  host = localhost
  port = 3306
  name = radius
  user = javauser
  password = javapassword
```

- :

```
readOnly = false
```

- :

```
maxPoolSize = 20
```

- :

```
maxPoolSize = 20
```

- ():

```
connectionTimeout = 5000
```

- radstat logging-service:

```
sorm3Enabled = false
```

- eltex-logging-service:

```
logging      {
  host = localhost
  port = 9099
}
```

/etc/default/eltex-mercury

C, .

eltex-mercury

```
# Eltex-Mercury daemon parameters

# Initial size of Java heap
JAVA_INIT_HEAP=16m
# Maximum size of Java heap
JAVA_MAX_HEAP=256m

# Additional arguments to pass to java
JAVA_OPTS="-XX:+HeapDumpOnOutOfMemoryError -XX:HeapDumpPath=/var/log/eltex-mercury"
```

JAVA_INIT_HEAP	, . JAVA_MAX_HEAP.

JAVA_MAX_HEAP	,
JAVA_OPTS	jvm

/etc/eltex-mercury/log4j2.xml

.

log4j2.xml

```
<?xml version="1.0" encoding="UTF-8"?>

<Configuration monitorInterval="600">
  <Properties>
    <Property name="rootLevel">${env:LOG_LEVEL:-ERROR}</Property>

    <Property name="baseDir">/var/log/eltex-mercury</Property>
    <Property name="maxFileSize">20 MB</Property>
    <Property name="accumulatedFileSize">10 GB</Property>
    <Property name="lastModified">4d</Property>
    <Property name="maxCount">20</Property>
    <Property name="logPattern">%d{ISO8601} [%t] %-5p %logger{12} %C{1}.%M(line:%L). %m%n</Property>

    <Property name="gelfLevel">${env:GELF_LEVEL:-OFF}</Property>
    <Property name="gelfHost">${env:GELF_HOST:-udp:lab3-test.eltex.loc}</Property>
    <Property name="gelfPort">${env:GELF_PORT:-12201}</Property>
  </Properties>
  <Appenders>

    <RollingFile name="RollingFile"
      fileName="${baseDir}/mercury.log"
      filePattern="${baseDir}/log/mercury-%i.log.gz">
      <PatternLayout pattern="${logPattern}"/>
      <Policies>
        <SizeBasedTriggeringPolicy size="${maxFileSize}"/>
      </Policies>
      <DefaultRolloverStrategy max="${maxCount}">
        <Delete basePath="${baseDir}" maxDepth="3">
          <IfFileName glob="*/mercury-*.log.gz">
            <IfLastModified age="${lastModified}"/>
            <IfAny>
              <IfAccumulatedFileSize exceeds="${accumulatedFileSize}"/>
              <IfAccumulatedFileCount exceeds="${maxCount}"/>
            </IfAny>
          </IfFileName>
        </Delete>
      </DefaultRolloverStrategy>
    </RollingFile>

    <Gelf name="Gelf" host="${gelfHost}" port="${gelfPort}" version="1.1" facility="eltex-mercury"
      extractStackTrace="true" originHost="%host{fqdn}" maximumMessageSize="8192">
      <Field name="thread" pattern="%t"/>
      <Field name="level" pattern="%level"/>
      <Field name="severity" pattern="%-5level"/>
      <Field name="logger" pattern="%logger{12}"/>
      <Field name="location" pattern="%C{1}.%M(line:%L)"/>
    </Gelf>
  </Appenders>

  <Loggers>
    <Root level="${rootLevel}">
      <AppenderRef ref="RollingFile"/>
      <AppenderRef ref="Gelf" level="${gelfLevel}"/>
    </Root>

    <Logger name="org.hibernate" level="ERROR"/>
    <Logger name="org.springframework" level="ERROR"/>

    <Logger name="com.zaxxer.hikari" level="WARN"/>
    <Logger name="io.grpc" level="WARN"/>

    <Logger name="io.netty" level="INFO"/>
  </Loggers>
</Configuration>
```

- :

```
<Configuration monitorInterval="600">
```

- :

```
<Property name="rootLevel">${env:LOG_LEVEL:-ERROR}</Property>
```

- :

```
<Property name="baseDir">/var/log/eltex-mercury</Property>
```

- (.):

```
<Property name="maxFileSize">20 MB</Property>
```

- (+). :

```
<Property name="accumulatedFileSize">10 GB</Property>
```

- , :

```
<Property name="lastModified">4d</Property>
```

- , :

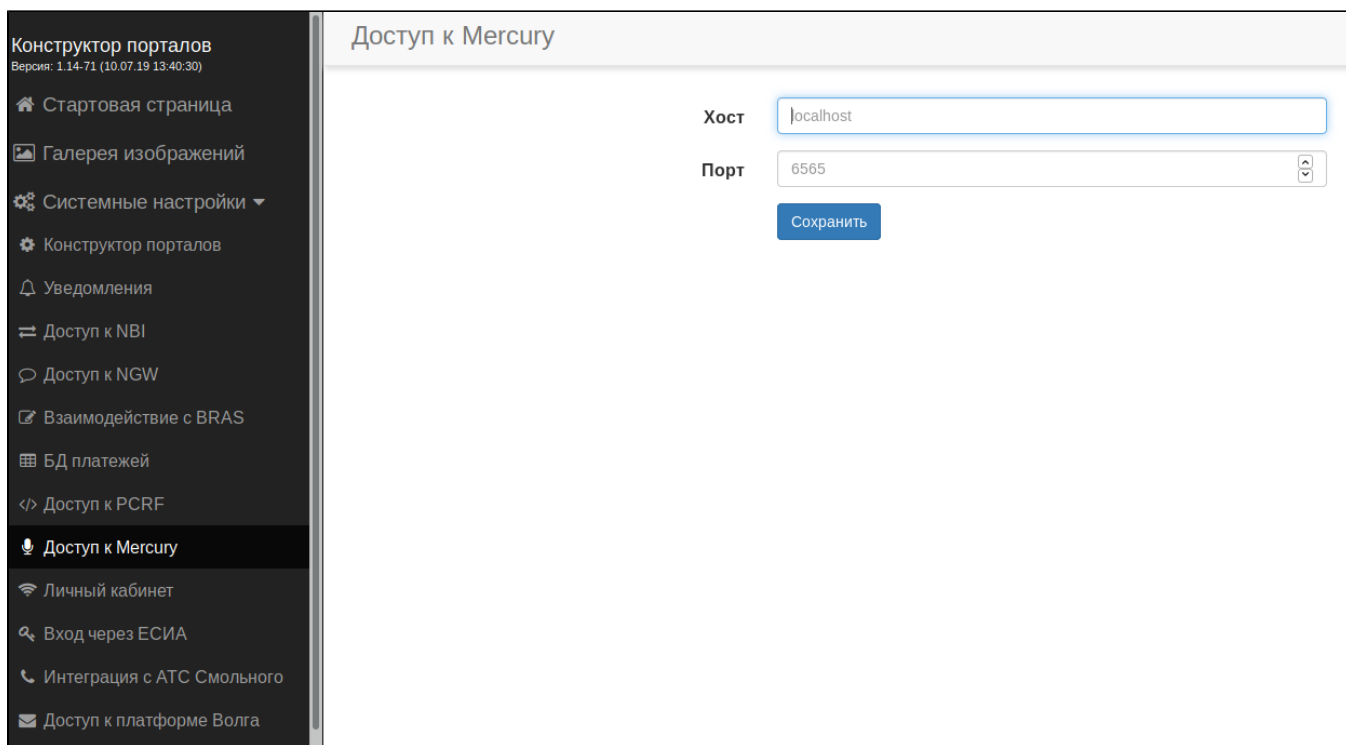
```
<Property name="maxCount">20</Property>
```

- Graylog (, ,):

```
<Property name="gelfLevel">${env:GELF_LEVEL:-OFF}</Property>
<Property name="gelfHost">${env:GELF_HOST:-udp:lab3-test.eltex.loc}</Property>
<Property name="gelfPort">${env:GELF_PORT:-12201}</Property>
```

eltex-portal

- " - " Mercury":



eltex-apb

apb - */etc/eltex-apb/apb.properties*.

```
...
mercury.host=localhost
mercury.port=6565
mercury.pool.size=100
...
```

:

```
java.sql.SQLException: The server time zone value 'MSK' is unrecognized or represents more than one time zone.
You must configure either the server or JDBC driver (via the serverTimezone configuration property) to use a
more specific time zone value if you want to utilize time zone support.
```

/etc/eltex-mercury/application.conf:

```
database {
  ...
  jdbc {
    properties {
      serverTimezone = Europe/Moscow
    }
  }
}
```

APB Prometheus . :

```
http://< Eltex-Mercury>:6564/mercury/prometheus
```

Prometheus :

```
- job_name: 'mercury'
  scrape_interval: 5s
  metrics_path: /mercury/prometheus

  static_configs:
#   Change this to the actual mercury address
  - targets: [' Eltex-Mercury:6564']
```

Grafana Prometheus docker docker-compose.yml .env:
docker-compose.yml

```
version: '3'

services:
  prometheus:
    image: prom/prometheus:v2.25.0
    volumes:
      - ./prometheus:/etc/prometheus/
    command:
      - '--config.file=/etc/prometheus/prometheus.yml'
      - '--storage.tsdb.path=/prometheus'
      - '--web.console.libraries=/usr/share/prometheus/console_libraries'
      - '--web.console.templates=/usr/share/prometheus/consoles'
    ports:
      - ${PROMETHEUS_PORT}:9090

  grafana:
    image: grafana/grafana:7.4.2
    volumes:
      - ./grafana:/etc/grafana/
    ports:
      - 3000:3000
    depends_on:
      - prometheus
    environment:
      - PROMETHEUS_HOST=${PROMETHEUS_HOST}
      - PROMETHEUS_PORT=${PROMETHEUS_PORT}
```

.env

```
# Change this to the actual address
PROMETHEUS_HOST=127.0.0.1
PROMETHEUS_PORT=9090
```

Grafana, Prometheus docker-compose.yml : [monitoring_mercury.zip](#) , :

```
docker-compose up
```

docker-. .env docker-compose.yml

docker-compose.yml

```
version: "3"
services:
  eltex-mercury:
    container_name: eltex-mercury
    image: hub.eltex-co.ru/softwlc/eltex-mercury:1.20-<tag>
    ports:
      - 6565:${MERCURY_PORT}
    environment:
      - grpc.port=${MERCURY_PORT}
      - database.host=${MERCURY_DB_HOST}
      - database.port=${MERCURY_DB_PORT}
      - database.name=${MERCURY_DB_NAME}
      - database.user=${MERCURY_DB_USER}
      - database.password=${MERCURY_DB_PASSWORD}
      - database.readOnly=${MERCURY_DB_READ_ONLY}
      - database.pool.maxPoolSize=${MERCURY_DB_POOL_SIZE}
      - database.pool.minimumIdle=${MERCURY_DB_POOL_MIN_IDLE}
      - database.pool.connectionTimeout=${MERCURY_DB_POOL_TIMEOUT}
      - sorm3Enabled=${MERCURY_SORM}
      - logging.host=${MERCURY_LOGGING_HOST}
      - logging.port=${MERCURY_LOGGING_PORT}
      - LOG_LEVEL=DEBUG
    volumes:
      - /var/log/eltex-mercury:/var/log/eltex-mercury
```



<tag> , .

, Graylog, , .

.env

```
MERCURY_PORT=6565

MERCURY_DB_HOST=<IP-address>
MERCURY_DB_PORT=3306
MERCURY_DB_NAME=radius
MERCURY_DB_USER=javauser
MERCURY_DB_PASSWORD=javapassword

MERCURY_DB_READ_ONLY=false

MERCURY_DB_POOL_SIZE=20
MERCURY_DB_POOL_MIN_IDLE=1
MERCURY_DB_POOL_TIMEOUT=5000

MERCURY_SORM=false

MERCURY_LOGGING_HOST=<IP-address>
MERCURY_LOGGING_PORT=9099

LOG_LEVEL=DEBUG
```

- **MERCURY_PORT** - Grpc, , .
- **JAVA_INIT_HEAP** - Xms JVM .
- **JAVA_MAX_HEAP** - Xmx JVM .
- **JAVA_OPTS** - JVM ().

- **MERCURY_DB_HOST** - .
- **MERCURY_DB_PORT** - .
- **MERCURY_DB_NAME** - .
- **MERCURY_DB_USER** - .
- **MERCURY_DB_PASSWORD** - .
- **MERCURY_DB_READ_ONLY** - " ".
- **MERCURY_DB_POOL_SIZE** - .
- **MERCURY_DB_POOL_MIN_IDLE** - idle .
- **MERCURY_DB_POOL_TIMEOUT** - .

SORM3

- **MERCURY_SORM** - sorm3.

Logging Service

- **MERCURY_LOGGING_HOST** - logging-service.
- **MERCURY_LOGGING_PORT** - logging-service.