

1 VTL Editor infrastructure Components - Set up

1.1 VtlCompiler

The VTLCompiler is a Java web service. It was developed using Java Spring Boot technology. This design choice allows the administrator to execute the web service on every server without the need of an Apache web server. It is already embedded into the VTLCompiler executable file.




 application	10/04/2019 10:44	File PROPERTIES	2 KB
 vtl_compiler_WS	11/04/2019 14:10	File batch Windows	1 KB
 vtl-compiler	15/04/2019 15:16	Executable Jar File	58.442 KB

Fig. 1 – The content of the VTLCompiler folder

First of all, in order to launch the web service the admin has to check the *application.properties* batch file.

```
spring.jpa.hibernate.ddl-auto=create-drop
#spring.jpa.show-sql=true
#logging.level.org.springframework.jdbc.core.JdbcTemplate=DEBUG
#logging.level.org.springframework.jdbc.core.StatementCreatorUtils=TRACE
#spring.jpa.properties.hibernate.format_sql=true
```

HSQL DB

hsqldb.server.port=9001

#Default hsqldb path, it can be modified

hsqldb.database.path=file:C:/hsqldb/mydb

hsqldb.server.dbname=mydb

spring.datasource.url=jdbc:hsqldb:file:C:/hsqldb/mydb

spring.datasource.username=sa

spring.datasource.password=sa

spring.datasource.driver-class-name=org.hsqldb.jdbc.JDBC4Driver

application.default.value.true=TRUE

application.default.value.false=FALSE

application.default.value.domain.code=ITEM_ID

#This statement defines the metadata db type.

sqlServer oracleSql mySql postgresql

db.type= sqlServer

db.datasource.url=<connection string>

db.datasource.username=<db user name>

db.datasource.password=<db user password>

#This part changes profile for test, it does not affect the translation

sqlServer oracleSql mySql postgresql

spring.profiles.active=oracleSql, noExternalDB

spring.profiles.default=oracleSql

sdmx.id=VtlCompiler

sdmx.version=1.0

sdmx.agency.id=VTL

sdmx.agency.name=VTL Source

sdmx.code.list.name=Code List

sdmx.sender=ISTAT

sdmx.locale=en

sdmx.annotation.viral=IS_VIRAL

sdmx.annotation.viral.value=true

sdmx.annotation.measure=IS_MEASURE

sdmx.concept.scheme.measures.id=CS_MS

sdmx.concept.scheme.measures.name=Concept Scheme For Measures

sdmx.concept.scheme.measure.item.name=Measure

sdmx.concept.scheme.identifiers.id=CS_ID_AT

sdmx.concept.scheme.identifiers.agency.id=ESTAT

sdmx.concept.scheme.identifiers.version=1.0

sdmx.concept.scheme.identifiers.name=Concept scheme for Identifiers and Attributes

sdmx.dsd.id.prefix=DSD

sdmx.dsd.name.prefix=DSD for Dataset

Set the internal temporary DB path

Set the connection string to the VTL DB

Set the VTLDB User name

Set the VTLDB password

To add if you want to activate On the Fly mode
(NO DB)

The admin has to set:

1. **hsqldb path:** the VTLCompiler web service requires space on the File System to store its internal temporary DB
2. **VTLDB connection string:** the connection string to the VTL Database.

Connection string sample:

```
jdbc:oracle:thin:@(DESCRIPTION=(ADDRESS_LIST=(LOAD_BALANCE=on)(ADDRESS = (PROTOCOL = TCP)(HOST = localhost)(PORT = 1521)))(CONNECT_DATA=(SERVICE_NAME=MYDB)))
```

3. **VTLDB user name:** the VTL Database user name.
4. **VTLDB password:** the VTL Database password.

Once saved the properties file, in order to run the application the *vtl_compiler_WS* batch file has to be checked.

In this file the admin can change, if needed, the path of the configuration file *application.properties* as shown in the following image

```
java -jar vtl-compiler.jar --spring.config.location=file:<properties file path>
```

Ex.: *java -jar vtl-compiler.jar --spring.config.location=file:C:\java-server\application.properties*

Fig. 2 – *vtl_compiler_WS.bat* sample file

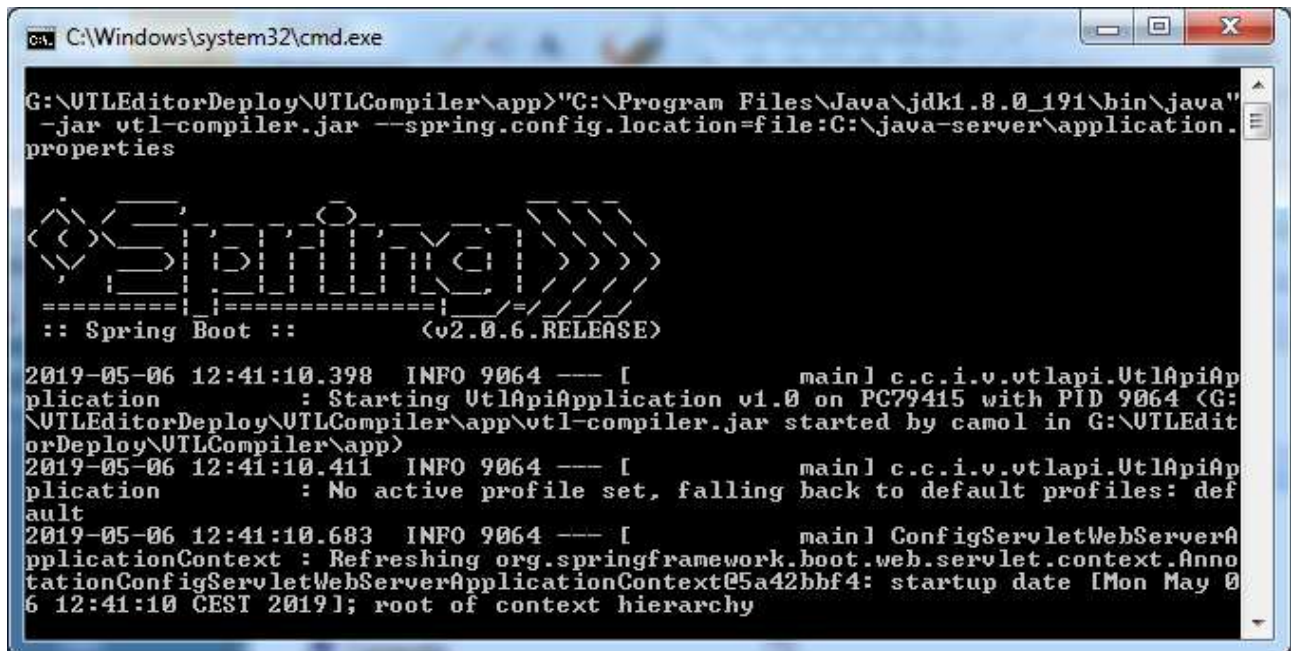


Fig. 3 – Execution of the VTLCompiler

1.2 VTLEditor

In order to interact with the VTLCompiler the VTLEditor infrastructure provides a graphical interface: VTLEditor.

To setup this desktop application the user can launch the *setup.exe* file and follow the step by step installation.

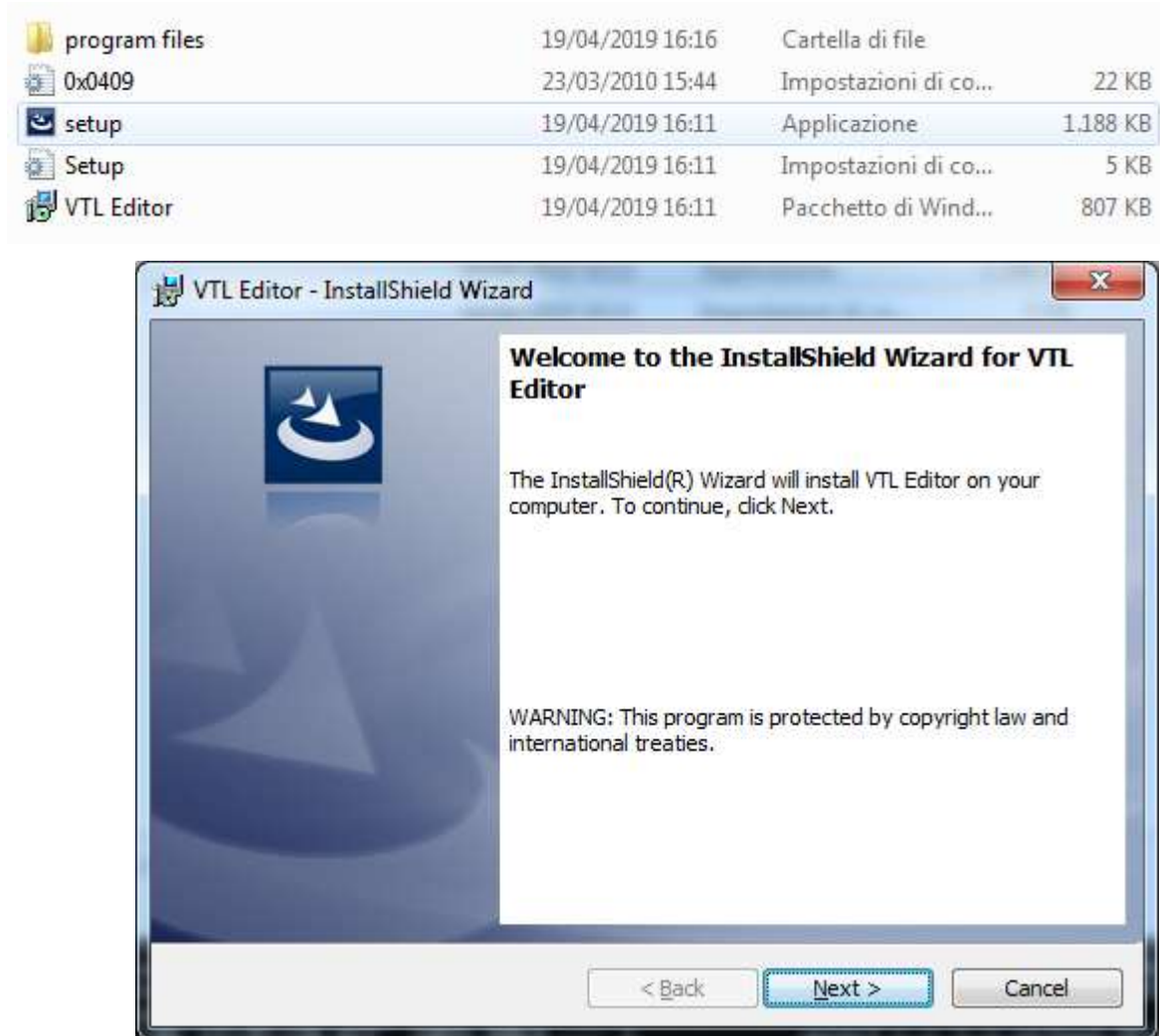


Fig. 4 – VTLEditor installation wizard

Once installed the application the user can launch the application Istat>VTL Editor> VTL Editor in the Windows menù

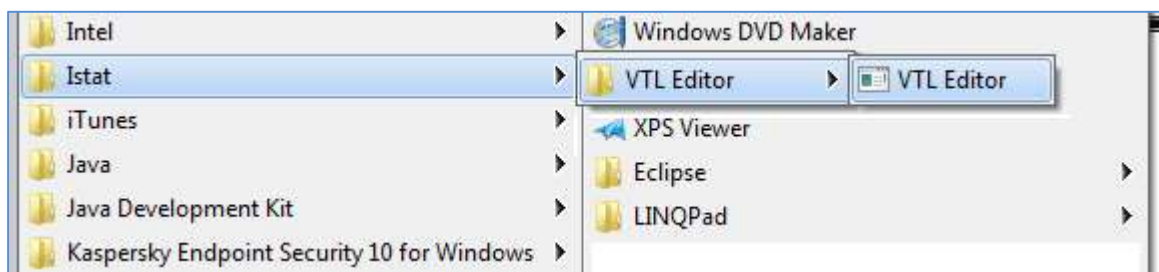


Fig. 5 – VTLEditor link

During the first execution, the VTLEditor will throw the following error due to the lack of the configuration information. The user must click on the *Open settings...* button and set the information related to the web services:

- InteractionWS
- VTL Compiler (validation web service)
- SDMX Webservice (it is not strictly mandatory but required to import structural metadata and perform the semantic validation)

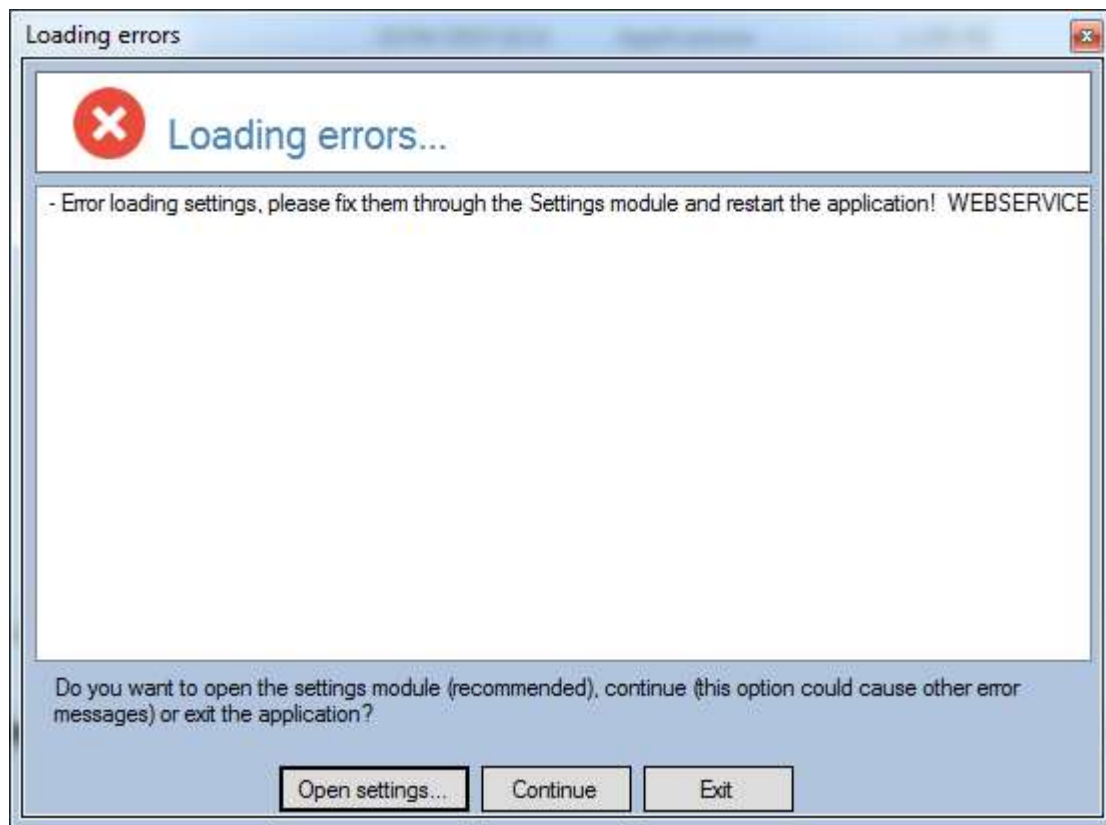


Fig. 6 – Error message at first execution, due to the missing configuration

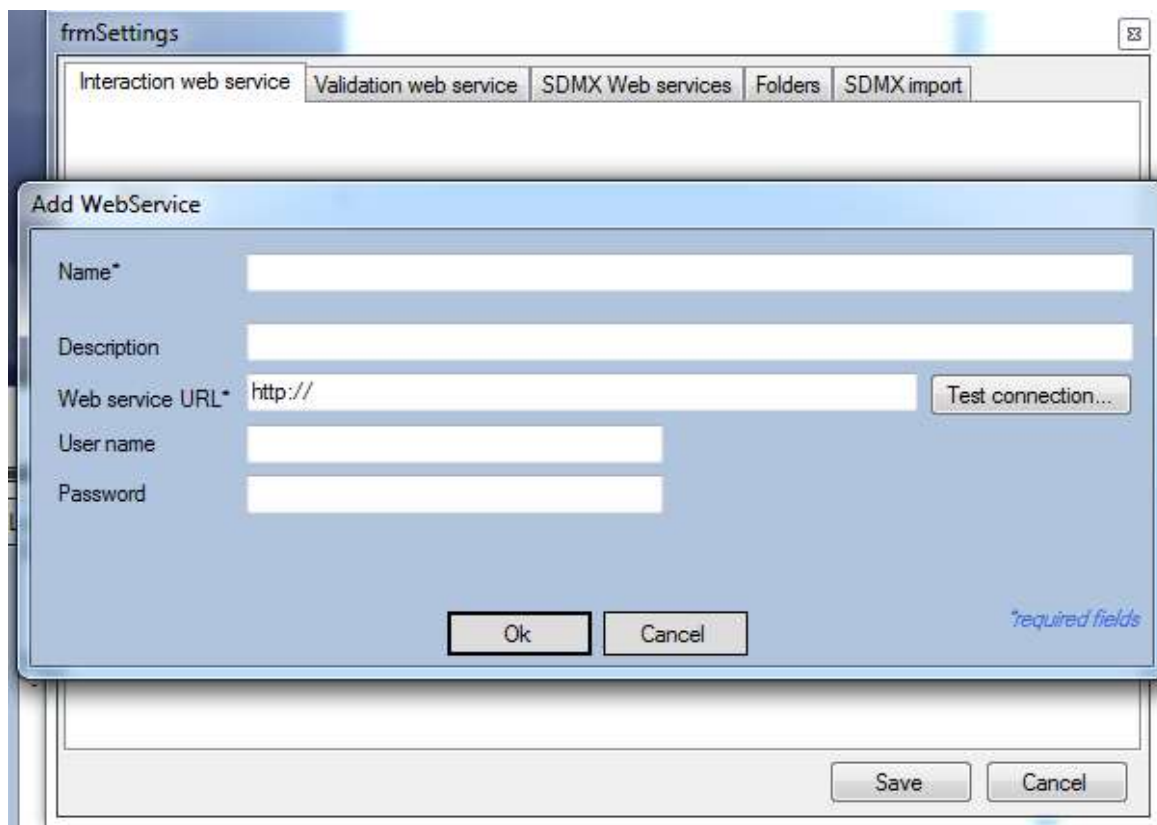


Fig. 7 – Web service configuration

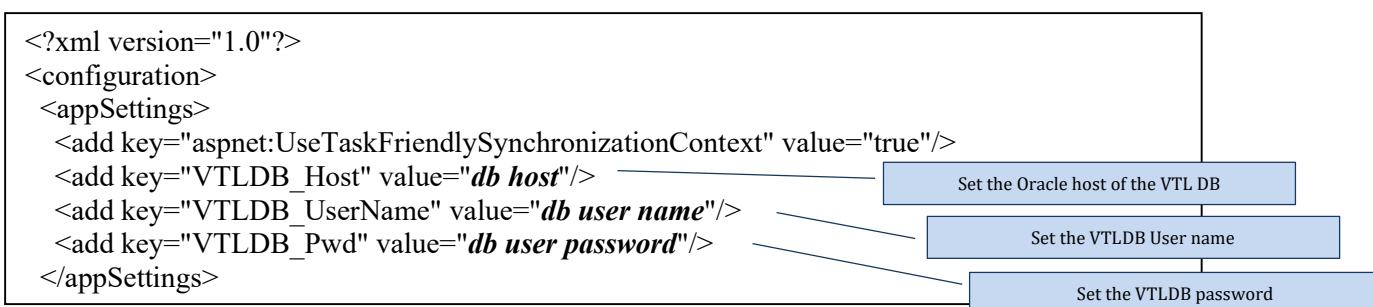
1.3 InteractionWS

In order to install the InteractionWS the admin has to setup the application in IIS.

App_Code	15/04/2019 16:14	Cartella di file	
Bin	15/04/2019 16:14	Cartella di file	
packages	22/10/2018 12:24	XML Configuratio...	1 KB
VTInt_WS	10/09/2018 08:46	WCF Web Service	1 KB
web	09/04/2019 15:59	XML Configuratio...	3 KB


Fig. 8 – InteractionWS files

The admin must customize the information in the *web.config* file



1.4 VTL DB

To create the VTL the DB admin can launch in an Oracle DBMS the script *DB_VTL.sql*

 DB_VTL

19/04/2019 15:32

Microsoft SQL Ser...

73 KB