

# Running Blaise 5 as Standalone

By Roberto Picha  
& Mecene Desormice

# ■ Why are we doing this?

# Overview

- Current process Blaise 4 standalone
  - Interviewer Laptop
  - Testing environment
    - Internal
    - Stakeholder
  
- Future process Blaise 5 standalone
  - Can we do it
  - The challenges
  - The steps

# Current Process Blaise 4

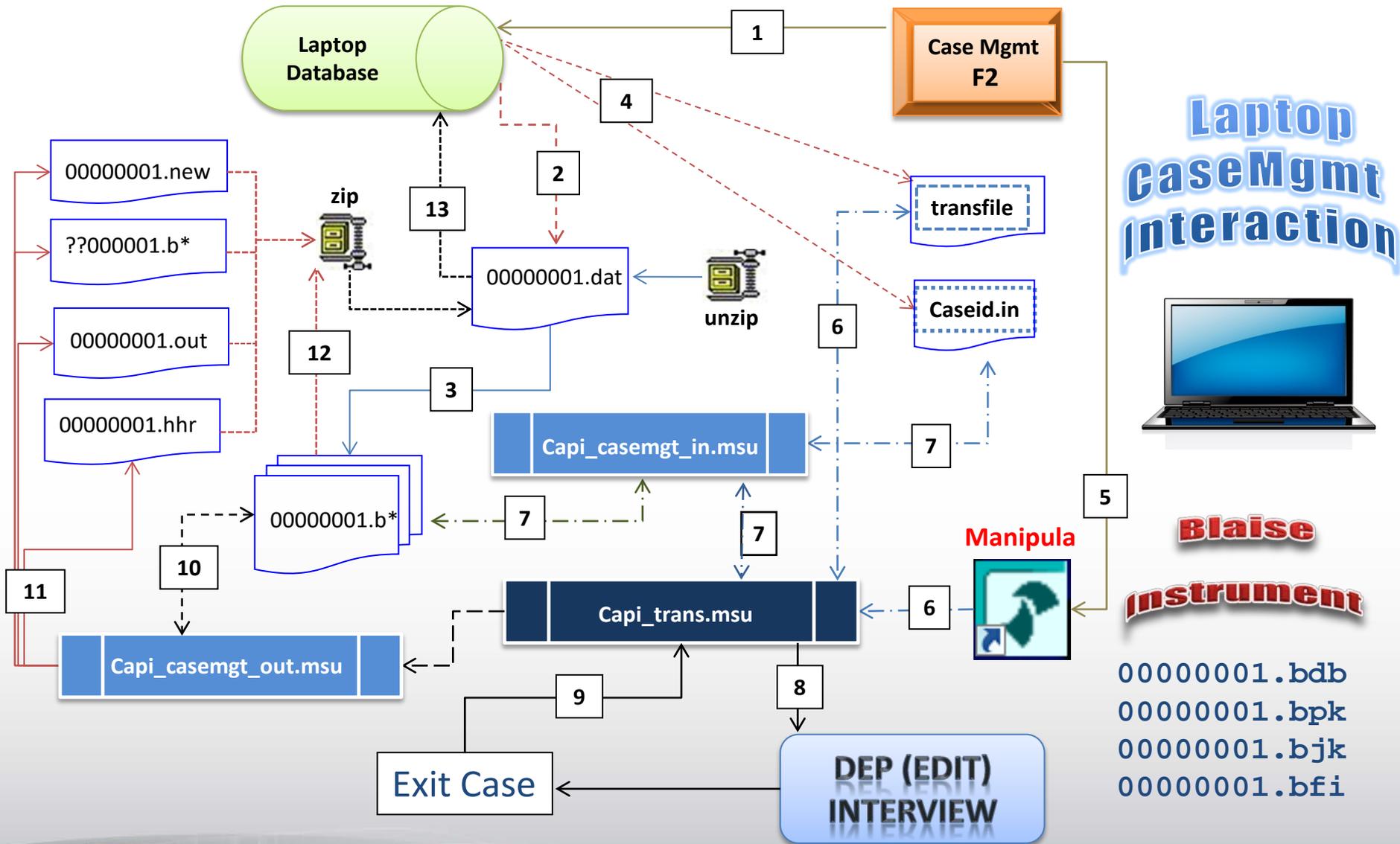
- Laptops configuration
  - Executables location
    - C:\WinCM\App\Blaise\Version
      - Manipula
      - Databrowser
      - Hospital
  - Survey location
    - C:\WinCM\Studies\data\SurveyID\e-inst
      - Metafiles(bmi)
- Blaise bdb as part of the blob in the CM database



# Current Process Cont.

- Testing configuration
  - Over the Network
  - Running local drive
  - Running in VDI
- In house testing environment
  - [\\UNC\TmoBuilds\Blaise\version](#)
  - [\\UNC\TmoBuilds\Survey\survey-version\](#)e-inst
  - Blaise bdb created at runtime
- Stakeholder configuration
  - [C:\<location>\Blaise\version](#)
  - [C:\<location>\Survey\version\](#)e-inst
  - Blaise bdb created at runtime





# Future Process Blaise 5

- We want to keep it the same
- We do **not** want to make changes...  
at least not yet!!!!

# Laptop CaseMgmt Interaction

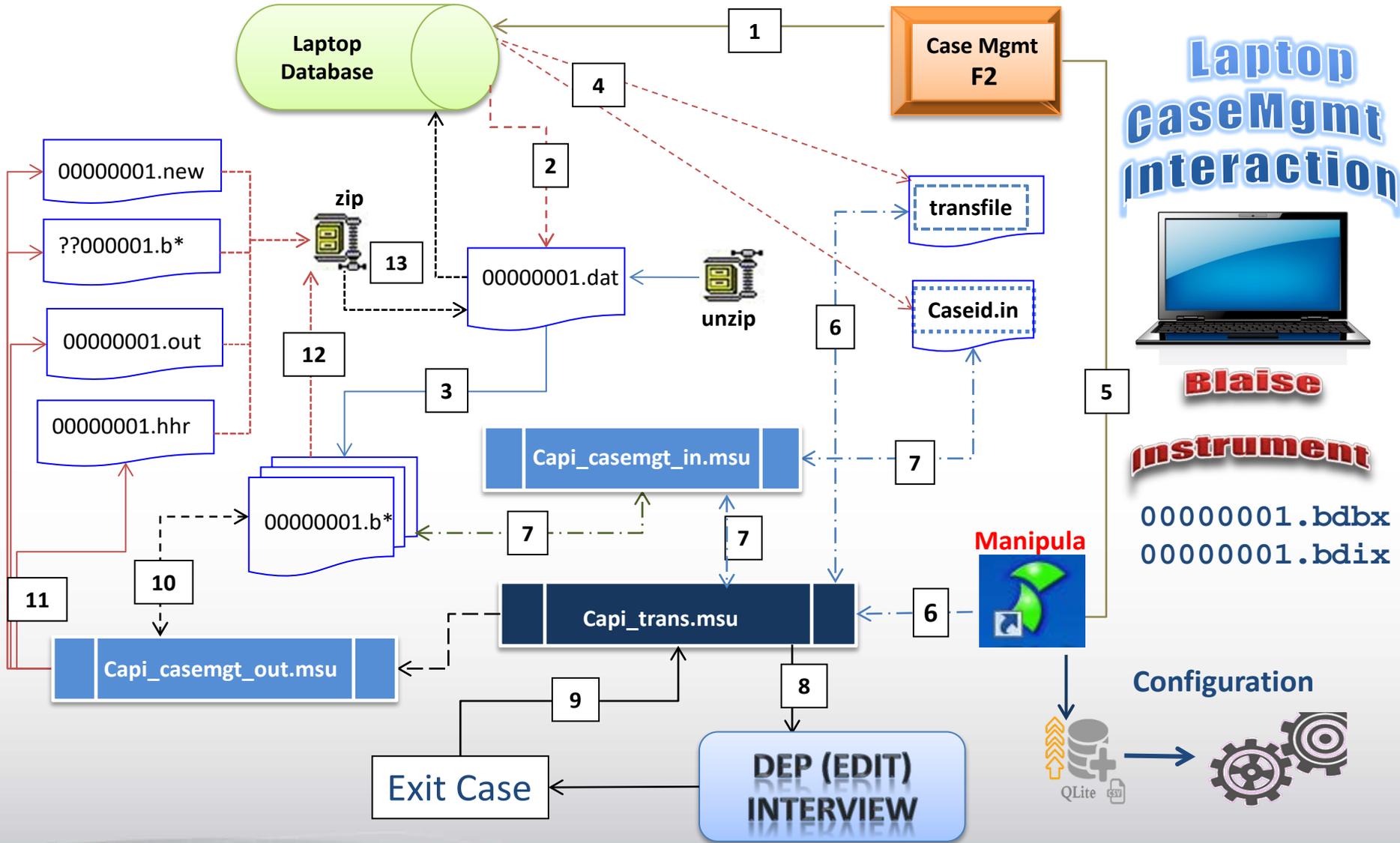


**Blaise**

**Instrument**

00000001.bdbx  
00000001.bdix

Configuration





# First question

- Software required
  - Identify only what is required
  - Server, is it required?
    - Need to run without any services or servers
      - Small simplified configuration



# Second question

- Installing the package
  - Server Manager
    - Too many dependencies
    - The package name differ from project name
      - All our surveys have the same metafile name : Inst.bmi
      - Standardizing to our current naming convention



# The Challenge

- Looking under the hood
  - The software
  - Configuration
- The need of a tool to
  - Deal with Databases and tables
    - The steps for setting the environment
    - The steps for installing the package
  - Reduce the number of dependencies



**CHALLENGE ACCEPTED.**

# Under the Hood

- DEP service

- Dep.exe inst.bpkg**

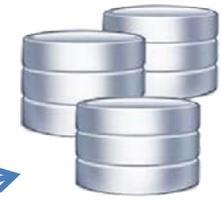
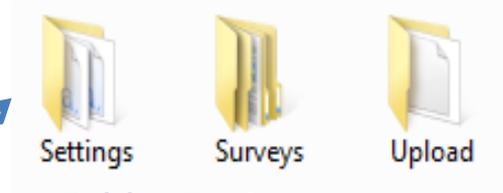
- DEP prepares the environment for running a survey
      - Based on the `dep.exe.config`
    - DEP creates the Qlite databases and tables
    - DEP retrieves information from the metafile and updates table with
      - CheckSum
      - InstrumentID
      - Project name
      - Project location



# Under the Hood cont

DEP.exe US\_Census.bpkg

```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.
C:\Users\picha300>dep.exe US_Census.bpkg
```



Dep.exe.config

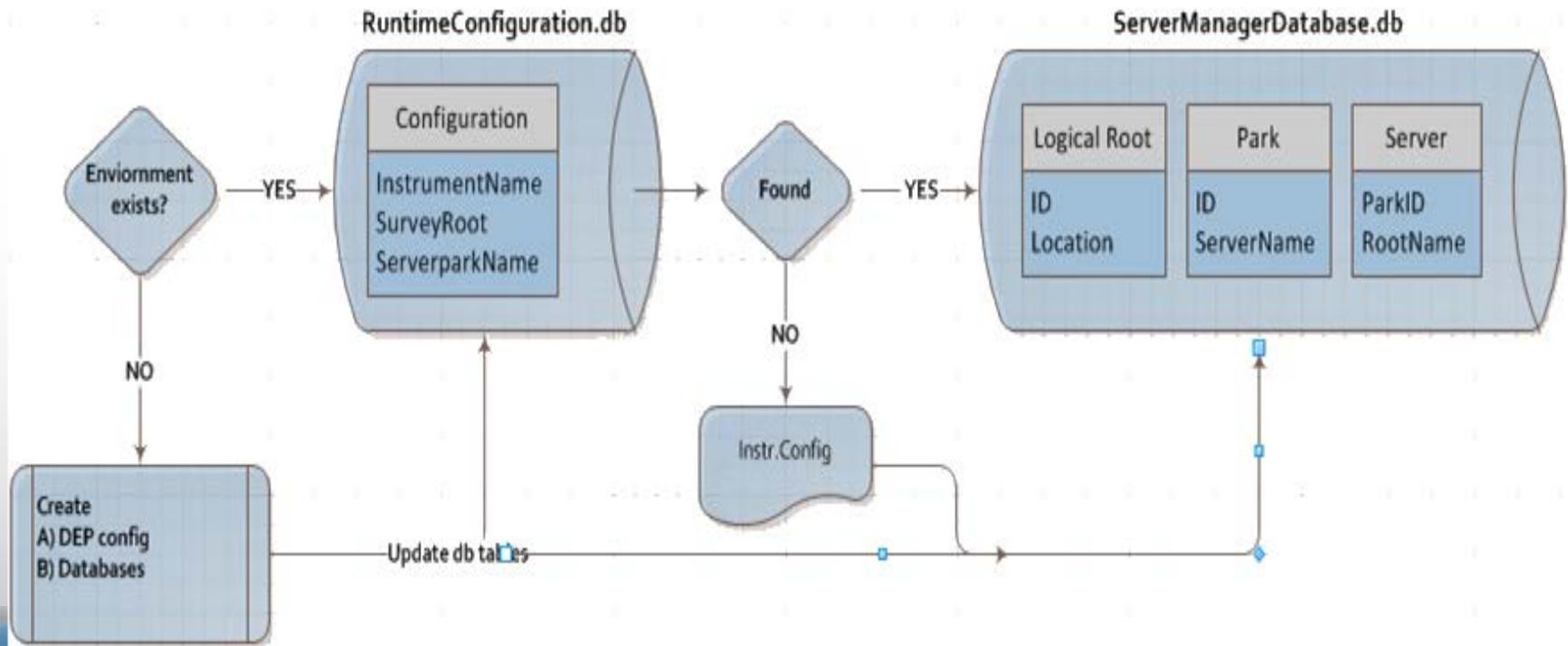
Interviewer Laptop

# Automating the process to run as standalone

- Two things to accomplish
  - Placing the necessary components
    - Software and environment
  - Installing package
    - Driven by a instr.config
    - The package itself
- How to accomplish it
  - Small vb script



# Automating: Environment and the Instrument package



# Steps

- Preparing environment
  - Software
- Configuration
- Databases
- Installing Package
  - Containing the metafile and any required files to run the instrument
- Putting all together
  - Vb script doing it for us



# The steps Cont.

## 1. Preparing environment

- Getting the necessary files
  - DEP Configuration file
  - Executables
    - DEP.exe
    - Manipula.exe
  - Additional libraries
    - Dep.Resources.dll
    - System.Data.SQLite.dll
  - Extra tool
    - QLite\_DbCreator.exe



# The steps Cont.

## 2. Configuration

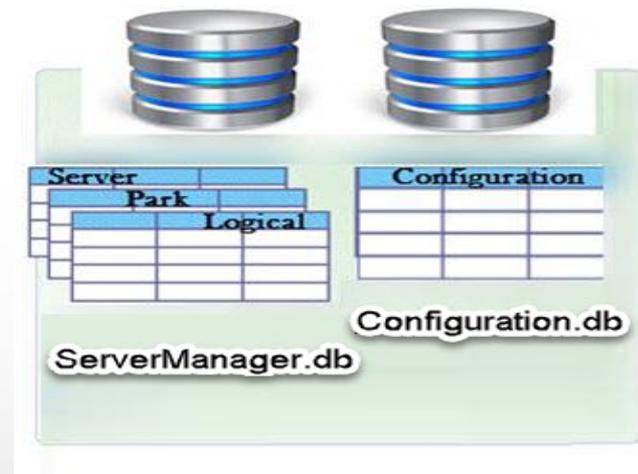
- The Dep.exe.config
  - Indicates where the instrument resides

```
<?xml version="1.0"?>
<configuration>
  <appSettings>
    <add key="ExternalCommunicationAddress" value="http://localhost:8033"/>
    <add key="DeployFolder" value="C:\temp\Standalone\"/>
    <add key="ConfigurationDatabase" value="RuntimeConfiguration.db"/>
    <add key="ManagementCommunicationPort" value="8031"/>
    <add key="InternalCommunicationPort" value="8032"/>
    <add key="ExternalCommunicationPort" value="8033"/>
    <add key="ServerManagerDatabase" value="ServerManagerDatabase.db"/>
    <!--<add key="CertificateStoreName" value="My" />
  <add key="CertificateStoreLocation" value="LocalMachine" />
  <add key="CertificateThumbprint" value="7F94601C4FC2EE71C8AAC02947607F2E2CEEE4D2" />-->
  </appSettings>
  <!--<startup><supportedRuntime version="v4.0" sku=".NETFramework,Version=v4.5.1"/></startup>-->
</configuration>
```

# The steps Cont.

## 3. Creating database and tables

- The databases
  - ServerManager.db
  - Configuration.db
- Tables to load
  - Configuration
  - Server
  - Park
  - Logical



# The steps cont...

## 4. Installing the instrument package

- Using the vbs script to
  - Run QLite\_DbCreator
    - Update tables
    - Instr.config file containing the following information
      - Instrument ID
      - Checksum
      - Server name
      - Project name
      - Instrument location



# The final step

## 5. Launching the instrument

- Hybrid approach
  1. Run Manipula to
    - Read from CM & write to case
  2. To launch the DEP
    - Conduct interview
  3. Run Manipula to
    - Write and update
    - Spawn cases

# The final step cont...

SQLite\_DBCreator



Dep.exe.config



Settings

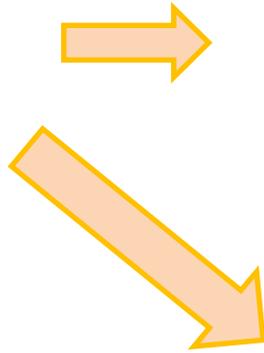


Surveys



Upload

Folder Environment



SQLite file



Qlite databases



Instrument Package



Interviewer



Interviewer Laptop

# Final Remarks

The road was bumpy but...

- We were successful in running as standalone
  - Hybrid approach
  - Places us where we want to be if we ever move to Blaise 5

Found few glitches

- Not all msux are part of the package
- We should be able to have individual bdbx and launch cases as we do for Blasie 4.

We would like to recommend

- The server manager with less dependencies
- Notify if there are changes to the Services databases
- Ability to access the metafile
  - Instrument ID
  - Checksum

**“Absorb what is useful,  
Discard what is not,  
Add what is uniquely your own”  
- Bruce Lee**

# Thank You!

## QUESTIONS

Roberto Picha

Contact info: [Roberto.v.picha@census.gov](mailto:Roberto.v.picha@census.gov)

Mecene Desormice

Contact Info: [Mecene.desormice@census.gov](mailto:Mecene.desormice@census.gov)