

CESTO

IP Key LA workshop at INDECOPI, Lima, Peru

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Agenda

Project overview

- Features and functionalities
- Architecture
- CESTO
- OSA 2 – Search algorithm

Development

- Framework, Servers and Tools
- Technology stack
- CESTO/OSA 2 – Data Design Model
- ESPEAK & LAME
- CESTO UI, WS, Batch Process & Persistence

Deployment

- CESTO – Deployment models

Overview

CESTO – Purpose

Tool enabling automated searches to provide support on **Absolute / Relative Grounds** to examiners by presenting all the relevant information and knowledge dispersed in several databases on one screen.



CESTO = Common Examiner Support Tool

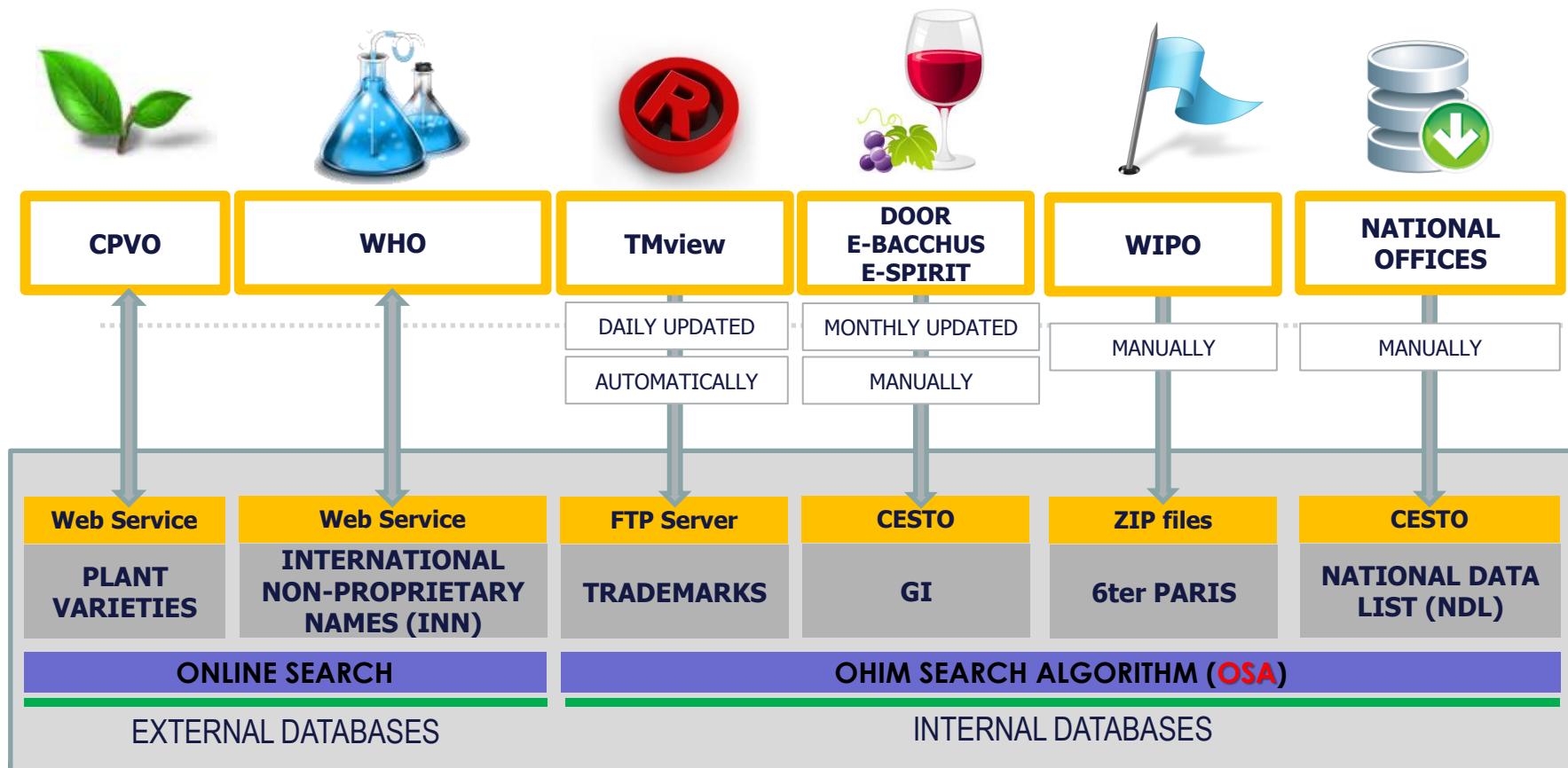
CESTO – Main features

- Free search
- Pre-generated reports for examiners
- Configuration per Office
- Detailed TM comparison



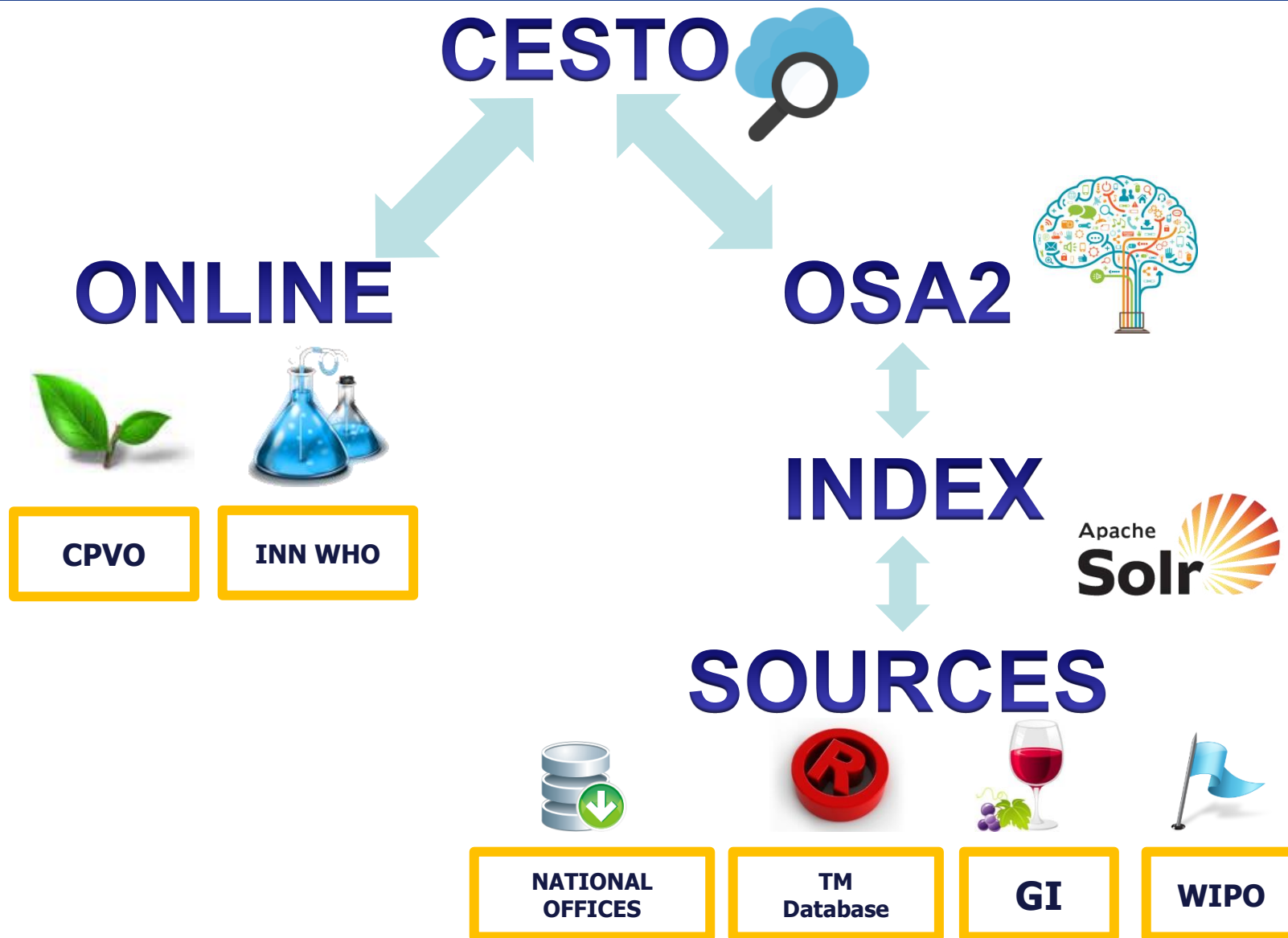
- Statistics generation
- Traffic light configuration
- Customize data sources
- Report management
- Administration functionalities

CESTO – Data sources and updates



Searches in CESTO

CESTO – Architecture



CESTO – General

View/Request
CESTO Reports
Web UI

Trade Marks
periodically uploaded
to TM DB by POs

CESTO

OSA Trade Marks
connection to TM
DB

OSA2

TM
Database

View/Request
CESTO Reports
Web Services

OSA 2 indexes

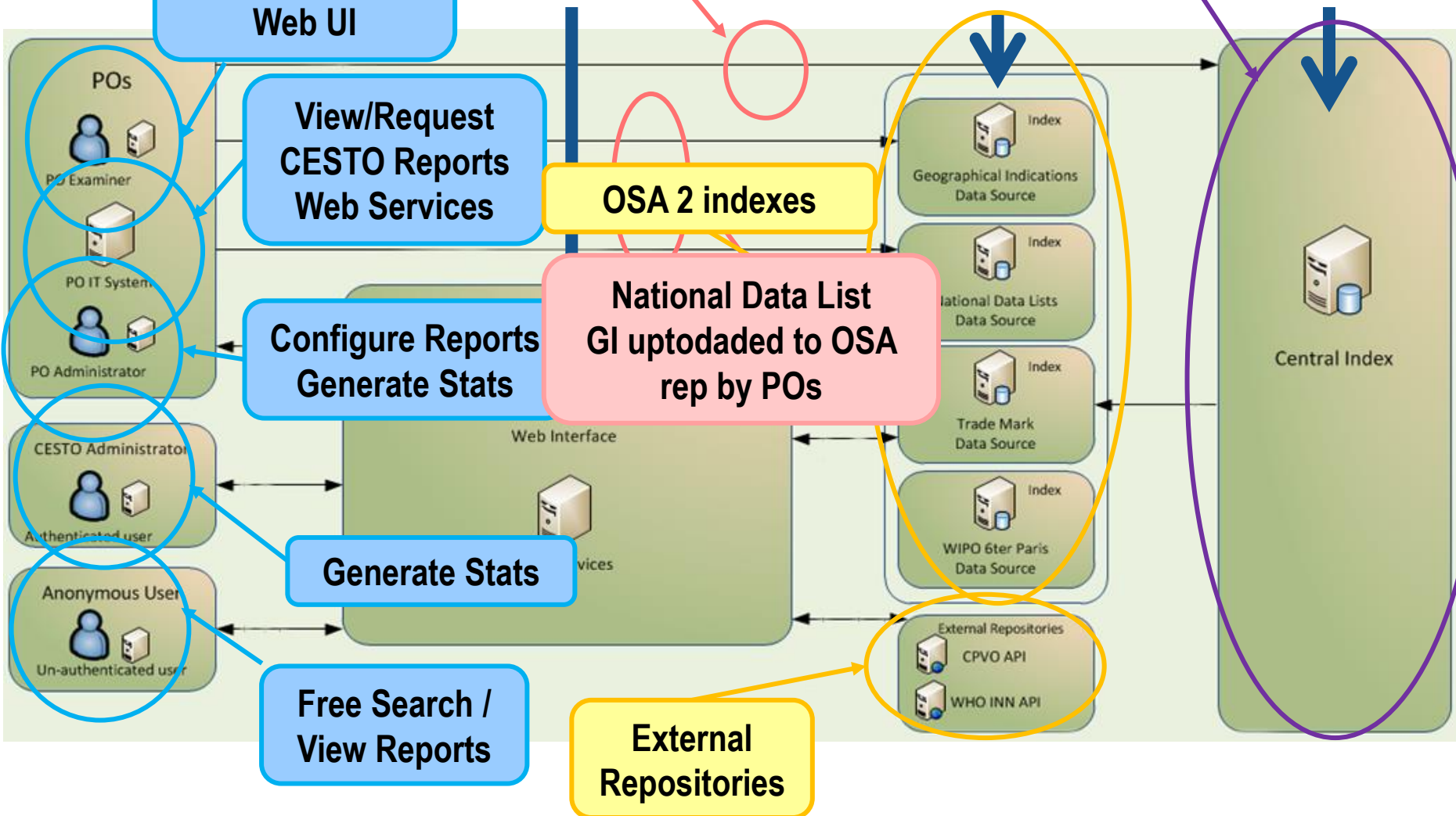
Configure Reports
Generate Stats

National Data List
GI uptodaded to OSA
rep by POs

Generate Stats

Free Search /
View Reports

External
Repositories



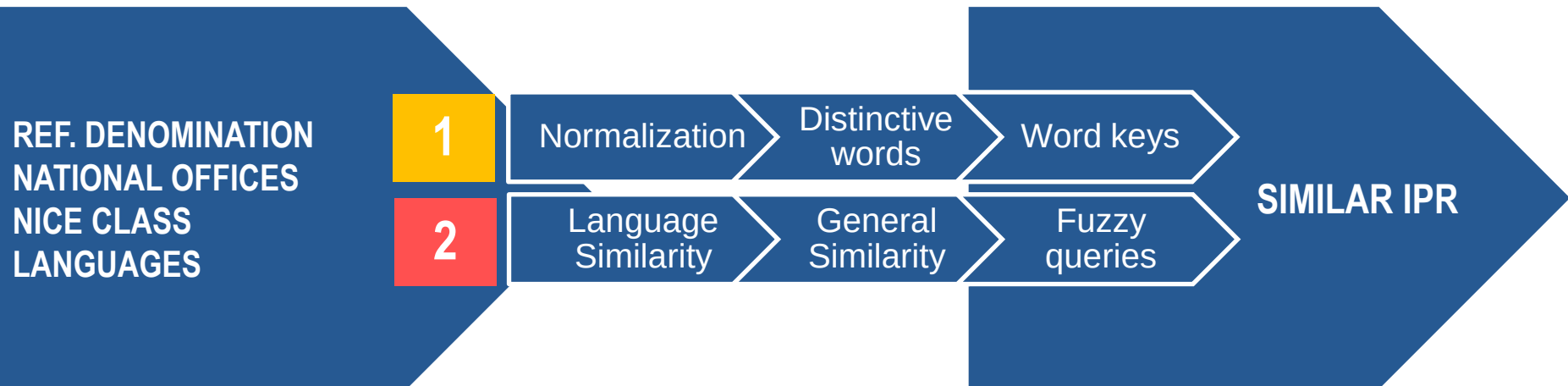
OSA 2 – OHIM Search Algorithm 2

OSA 2 is the underlying search algorithm behind CESTO, assessing the similarity between two expressions.



- **Literal element similarity:** finding part/modifications of the searched expressions
- **Phonetics similarity:** potential similar results based on pronunciation
- **Conceptual similarity:** it is capable of searching for “symbols” (5,\$, etc) both ways

OSA 2 – OHIM Search Algorithm 2



OSA 2 – OHIM Search Algorithm 2

1

Normalization

Distinctive
words

Word keys

CAPITALISE
RID OF DIACRITICS
WORD SPLITTING

OCCURENCES
WITH DIFFERENT
OWNER + RULES

MINIMUM
SIMILARITY
(CUTTING POINT DISTANCE)



2

Language
Similarity

General
Similarity

Fuzzy
queries

ALPHABETS
LATIN, GREEK, CYRILLIC
LITERAL
SIGNS + TRANSLITERATION
PHONETIC
23 LANGUAGES

WORD DISTANCE AND
DISTINCTIVENESS

WEIGHT VALUE
BASED ON LANGUAGE
SIMILARITY

POSSIBLE
MATCHING TERMS
WITH A MAXIMUM
EDIT DISTANCE



OSA 2 – Calculating Minimum Similarity % for each Word Key

1. $\text{lengthDeflactor} = 2 * \text{numberOfWordsOfMark}$
2. $\text{partialDF} = (1 / (1 - \text{wordDistinctiveness} / 2) - 1) / \text{lengthDeflactor}$
3. $\text{cuttingPointDistance} = 4 * \text{partialDF} * \log_2(\text{wordLength})$
4. $\text{luceneCuttingPoint} = 10 - \text{round}(\text{cuttingPointDistance})$

These exceptional cases are dealt at this point:

- If wordLength is 3 or 4 and $\text{luceneCuttingPoint}$ greater than 7 then the $\text{luceneCuttingPoint}$ is set to 6
- If $\text{ipaTranscription length}$ of the word is greater than 10 and $\text{luceneCuttingPoint}$ is less than 8 then the $\text{luceneCuttingPoint}$ is set to 8

5. $\text{minimumSimilarity \%} = \text{luceneCuttingPoint} * 10$

CESTO – Package

- **INCLUDED**

- CESTO Source Code (Standalone version)
 - CESTO
 - OSA2
- Tools (eSpeak, Lame)
- Development, Deployment & Server configuration

- **NOT INCLUDED**

- Data Sources: Trademarks, GI, WIPO 6ter
- External Web Services: Plant Varieties (CPVO) and INN WHO
- Bilateral Agreements for Web Services: CPVO, WHO

Development

Development – Frameworks



3.1.1

1.6 & 1.8



1.1

4



3.5

2.0



1.7.1

Development – Servers



8.2

11g



ORACLE



Apache
Tomcat



7.0.x

5.7.*



2.2.3

Development – Tools

maven



3.0.4

1.46



eSpeak

 **eclipse**



Oxygen

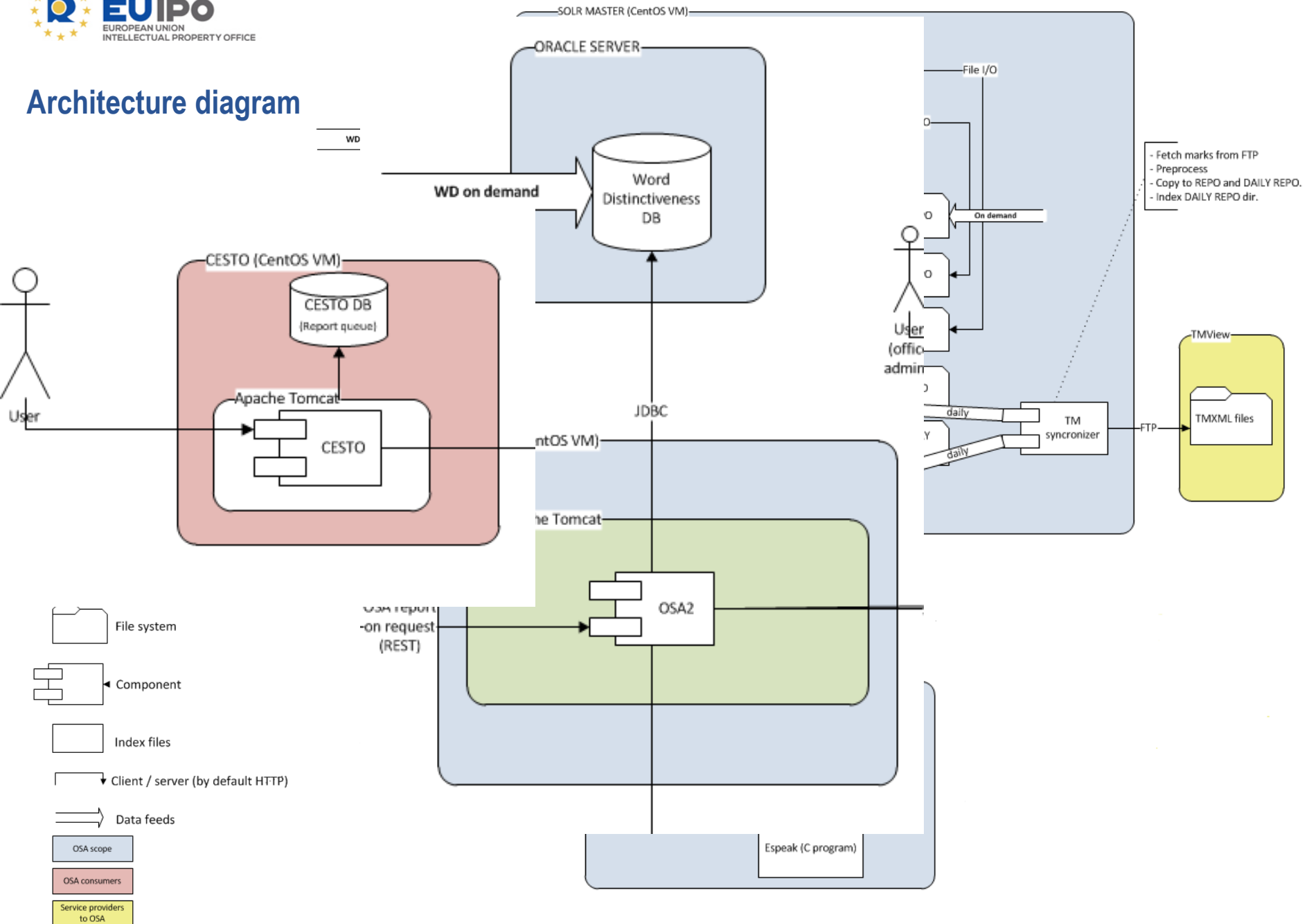
3.99



Development – Technology stack

	System	Product	Specification / Framework
Presentation Tier	Web Server	Apache HTTP Server	jQuery 1,7,1 Bootstrap Backbone
	Servlet Container	Apache Tomcat 7	Spring: MVC, Security Java Servlet / JSP
Service Tier	Application Server	Apache Tomcat 7 Wildfly 8.2 Apache HTTP Server 2	JEE6 Full-Profile (EJB 3.1)
Information Tier	Database	MySQL 5.7 Oracle 11g	JPA 2.0 Hibernate 4
	Search Engine	Apache Lucene	Solr 3.5

Architecture diagram



Development – CESTO Data Model Design



CESTO batch

DBatch		
<u>IDBATCH</u>	INTEGER	<pk>
DtGeneration	TIMESTAMP	
StBatch	SMALLINT	
NbTmvMarks	INTEGER	
NbNewMarks	INTEGER	
NbCompletedReports	INTEGER	

CESTO reports

POffice			
<u>IdOffice</u>	CHAR(2)		<pk>
IsActive	CHAR(1)		
IsParticipant	CHAR(1)		
DefaultLang	VARCHAR2(10)		
LogCreatedBy	VARCHAR2(30)		
DtCreate	DATE		
DtUpdate	DATE		
LogUpdatedBy	VARCHAR2(30)		

DReport			
<u>IdReport</u>	INTEGER		<pk>
IdOffice	CHAR(2)		<fk1>
IdApplication	VARCHAR2(20)		
StReport	SMALLINT		<fk2>
DtGeneration	TIMESTAMP		
DtRegeneration	TIMESTAMP		
NbRetries	INTEGER		
TmLight	VARCHAR2(20)		
TmApplLight	VARCHAR2(20)		
TmRepLight	VARCHAR2(20)		
TmOppLight	VARCHAR2(20)		
GiLight	VARCHAR2(20)		
SixterLight	VARCHAR2(20)		
NdlLight	VARCHAR2(20)		
InnLight	VARCHAR2(20)		
CpvoLight	VARCHAR2(20)		
DtRead	TIMESTAMP		
DtRequest	TIMESTAMP		

SReport			
<u>IdSReport</u>	INTEGER		<pk>
IdOffice	CHAR(2)		<fk>
DtReport	DATE		
NbFreeSearch	INTEGER		
NbRegenerations	INTEGER		
NbRequestedBatch	INTEGER		
NbGeneratedBatch	INTEGER		
NbGreyTm	INTEGER		
NbGreyTmOwner	INTEGER		
NbGreyTmRepr	INTEGER		
NbGreyTmOpp	INTEGER		
NbGreyGi	INTEGER		
NbGreyInn	INTEGER		
NbGreySixter	INTEGER		
NbGreyNdl	INTEGER		
NbGreyCpvo	INTEGER		
NbGreenTm	INTEGER		
NbGreenTmOwner	INTEGER		
NbGreenTmRepr	INTEGER		
NbGreenTmOpp	INTEGER		
NbGreenGi	INTEGER		
NbGreenInn	INTEGER		
NbGreenSixter	INTEGER		
NbGreenNdl	INTEGER		
NbGreenCpvo	INTEGER		
NbOrangeTm	INTEGER		
NbOrangeTmOwner	INTEGER		
NbOrangeTmRepr	INTEGER		
NbOrangeTmOpp	INTEGER		
NbOrangeGi	INTEGER		
NbOrangeInn	INTEGER		
NbOrangeSixter	INTEGER		
NbOrangeNdl	INTEGER		
NbOrangeCpvo	INTEGER		
NbRedTm	INTEGER		
NbRedTmOwner	INTEGER		
NbRedTmRepr	INTEGER		
NbRedTmOpp	INTEGER		
NbRedGi	INTEGER		
NbRedInn	INTEGER		
NbRedSixter	INTEGER		
NbRedNdl	INTEGER		
NbRedCpvo	INTEGER		

PReportStatus			
<u>IdReportStatus</u>	SMALLINT		<pk>
DscReportStatus	VARCHAR2(50)		

Development – OSA2 Data Model Design

DWorddist		
<u>IdWorddist</u>	CHAR(32)	<pk>
NmWord	VARCHAR2(255)	
NbOccur	INTEGER	
NbOccurOwn	INTEGER	
DistFactor	BINARY_DOUBLE	
OfficeCode	CHAR(2)	



DNationalDataList		
<u>IdNationalDataList</u>	NUMBER(30)	<pk>
IdList	CHAR(10)	<ak>
IdOffice	CHAR(2)	<ak>
DscList	VARCHAR2(255)	
DscShortList	VARCHAR2(255)	
IsPublic	CHAR(1)	
DtCreate	DATE	
DtUpdate	DATE	
LogCreatedBy	VARCHAR2(30)	
LogUpdatedBy	VARCHAR2(30)	

DNationalDataListTerm		
<u>IdNationalDataListTerm</u>	INTEGER	<pk>
IdTerm	CHAR(32)	<ak>
IdNdl	INTEGER	<ak, fk>
DTerm	VARCHAR2(255)	
DscTerm	VARCHAR2(255)	
TxtComment	VARCHAR2(255)	
DtCreate	DATE	
DtUpdate	DATE	
LogCreatedBy	VARCHAR2(30)	
LogUpdatedBy	VARCHAR2(30)	

DGiAgreement		
<u>IdGiAgreement</u>	INTEGER	<pk>
IdAgreement	CHAR(10)	<ak>
IdOffice	CHAR(2)	<ak>
DscAgreement	VARCHAR2(255)	
DscShortAgreement	VARCHAR2(255)	
DtCreate	DATE	
DtUpdate	DATE	
LogCreatedBy	VARCHAR2(30)	
LogUpdatedBy	VARCHAR2(30)	

DGiDenomination		
<u>IdGiDenomination</u>	INTEGER	<pk>
IdDenomination	CHAR(32)	<ak>
IdGiAgreement	INTEGER	<ak, fk>
Denomination	VARCHAR2(255)	
Transliteration	VARCHAR2(255)	
Country	VARCHAR2(255)	
TyDenomination	CHAR(3)	
GoodsAndServices	VARCHAR2(255)	
DtCreate	DATE	
DtUpdate	DATE	
LogCreatedBy	VARCHAR2(30)	
LogUpdatedBy	VARCHAR2(30)	

Development – OSA2 Data Model Design



```
<?xml version='1.0' encoding='utf-8'?>
<!DOCTYPE hibernate-configuration PUBLIC
"-//Hibernate/Hibernate Configuration DTD 3.0//EN"
"http://hibernate.sourceforge.net/hibernate-configuration-3.0.dtd">
<hibernate-configuration>
  <session-factory>
    <property name="connection.url">jdbc:mysql://localhost:3306/cestod4</property>
    <property name="connection.username">[REDACTED]</property>
    <property name="connection.driver_class">com.mysql.jdbc.Driver</property>
    <property name="dialect">org.hibernate.dialect.MySQLDialect</property>
    <property name="connection.password">[REDACTED]</property>
    <property name="transaction.factory_class">org.hibernate.transaction.JDBCTransactionFactory</property>
    <property name="current_session_context_class">thread</property>
    <property name="hibernate.show_sql">>false</property>
    <mapping class="eu.ohim.cesto.persistence.entity.POffice" />
    <mapping class="eu.ohim.cesto.persistence.entity.ReportStats" />
    <mapping class="eu.ohim.cesto.persistence.entity.ReportStatus" />
  </session-factory>
</hibernate-configuration>
```

Development – Database

Oracle SQL Developer

Archivo Editar Ver Navegar Ejecutar Equipo Herramientas Ventana Ayuda

Conexiones

CESTO

- Tablas (Filtrado)
 - DBATCH
 - DGIAGREEMENT
 - DGIDENOMINATION
 - DNATIONALDATALIST
 - DNATIONALDATALISTTERM
 - DREPORT
 - DWORDDIST
 - OSA_WORD
 - POFFICE
 - IDOFFICE

Informes

- Todos los Informes
- Informes de Diccionario de Datos
- Informes Definidos por el Usuario
- Informes de Modelador de Datos
- Informes de OLAP

Página Inicial POFFICE

Columnas Datos Model Restricciones Permisos Estadísticas Disparadores Flashback Dependencias Detalles Particiones Índices SQL

Ordenar... Filtrar: Acciones...

	IDOFFICE	NMOFFICE	WEBSITE	LOGO	ISACTIVE	ISPARTICIPANT	
1	IE	IE IPO	http://oami.europa.eu/ows/rw/pages/index.en.do	(null)	Y	Y	A
2	IT	UIBM	http://www.uibm.gov.it/	(null)	Y	Y	A
3	LT	VPB	http://www.vpb.gov.lt/	(null)	Y	Y	A
4	LV	LRPV	http://www.lrpv.gov.lv/	(null)	Y	Y	A
5	MT	IPRD MT	http://commerce.gov.mt/contact.asp	(null)	Y	Y	A
6	RO	OSIM	http://www.osim.ro/	(null)	Y	Y	A
7	SE	PRV	http://www.prv.se/	(null)	Y	Y	A
8	SI	OFFICE	http://www.google.es	(null)	N	N	A
9	SK	SKIPO	http://www.indprop.gov.sk/	(null)	Y	Y	A
10	XX	New Office2	http://www.google.es	(null)	N	N	A
11	EE	EPA	http://www.epa.ee/	(null)	Y	Y	A
12	BG	BPO	http://www.bpo.bg/	(null)	Y	Y	A
13	FI	PRH	http://www.prh.fi/en.html	(null)	Y	Y	A

ESPEAK – <http://espeak.sourceforge.net/>

- Open source speech synthesizer for English and other languages
- Available for Linux and Windows
- Options:
 - -v: Use voice file from espeak-data/voices (ie. “-ven”)
 - -q: quiet
 - --ipa: Write phonemes to stdout using International Phonetic Alphabet
- Bash script running in HTTPD server in Unix
- PHP script running PHP server in Windows



ESPEAK – <http://espeak.sourceforge.net/>

Bash script

```

echo "{ \"transcriptions\": {\"
CGI_word=${CGI_word//yydol/\$}

theWord=${CGI_word}
theWord=${theWord//\\|/\\\\}
theWord=${theWord//^/\\\\}

echo \" \"text\": \"\${theWord}\"\"

for lang_it in ${CGI_lang}
do
  ipaText=`echo \"\${CGI_word}\"|/usr/share/espeak/src/espeak -v\${lang_it} -q --ipa`
  ipaText=${ipaText//^/\\\\}
  ipaText=${ipaText//^/\\\\}

##for removing the text parenthesis, normally (fr) (es) ...
  ipaText=`echo $ipaText|sed -e 's/\x28[^)]*\x29//g'

#  echo \" \"\${lang_it}\": \"\${ipaText:1}\"\"
  echo \" \"\${lang_it}\": \"\${ipaText}\"\"

done
echo \"}\"\"

# /bin/cat << EOM
#EOM
  
```

PHP script

```

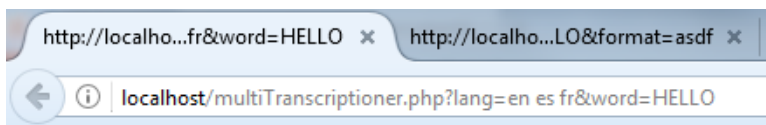
<?php
header("Content-type: text/html; charset=utf8");
...
$texto = $_GET['word'];
$lang = $_GET['lang'];

echo "{ \"transcriptions\": {\";
echo "</br>\";
echo \" \"text\": \"\${texto}\"\";
echo "</br>\";

$languages = explode(" ", $lang);
foreach($languages as $v){
  $answer = shell_exec("espeak.exe -v$v -q --ipa $texto");
  $answertrim = str_replace(' ', '', $answer);
  $answertrim2 = preg_replace('/\s+/', '', $answertrim);
  echo \" \"\${v}\"\": \"\${answertrim2}\"\"\\n\";
  echo "</br>\";
}

echo \"}\"\";
?>
  
```

Web result JSON



```

{ "transcriptions": {
  "text": "HELLO"
  , "en": "həl'əʊ"
  , "es": "e'lo"
  , "fr": "el'o"
}}
  
```

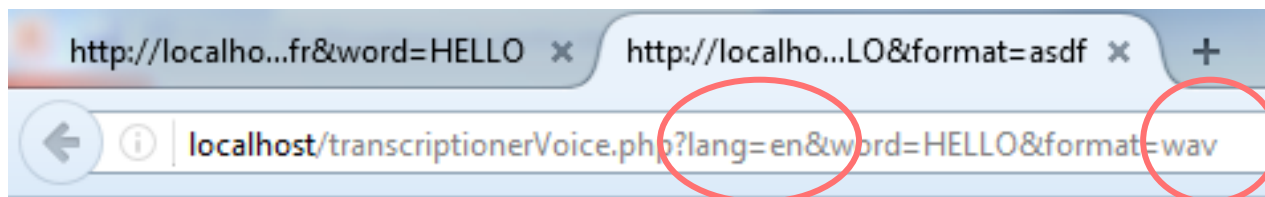
LAME – <http://lame.sourceforge.net/>

```
<?php
$texto = $_GET['word'];
$lang = $_GET['lang'];
$format = $_GET['format'];
$filename = $texto."_".$lang;
$answer = shell_exec("espeak.exe -v$lang -w $filename.wav $texto");

if (strcmp($format,'wav')==0) {
    header('Content-Type: application/download');
    header('Content-Disposition: attachment; filename="transcriptionerVoice"');
    header("Content-Length: " . filesize("$filename.wav"));
    $fp = fopen("$filename.wav", "r");
    fpassthru($fp);
    fclose($fp);
} elseif (strcmp($format,'mp3')==0) {
    $answer = shell_exec("lame.exe -V sound $filename.wav $filename.mp3");

    header('Content-Type: application/download');
    header('Content-Disposition: attachment; filename="transcriptionerVoice"');
    header("Content-Length: " . filesize("$filename.mp3"));
    $fp = fopen("$filename.mp3", "r");
    fpassthru($fp);
    fclose($fp);
} else {
    echo "Format error: use format=mp3 or format=wav";
}
?>
```

Web result JSON



SOLR – <http://lucene.apache.org/solr/>

- Open source enterprise search platform (JAVA)
- Advanced Full-Text Search capabilities
- Optimize for High Volume Traffic
- Standard Based interface (XML, JSON & HTTP)
- Highly Scalable & Fault Tolerant
- Real-Time Indexing
- Multiple search indices



SOLR – <http://lucene.apache.org/solr/>

- Indexing
- Querying
- Mapping
- Ranking the outcome



SOLR – <http://lucene.apache.org/solr/>

- Solr Indexation from TM-Database
- Solr Indexation from NDL (National Data List)
- Solr Indexation from GI (Geographical Indications)
- Solr Indexation from 6ter Paris



- | | |
|---------------------------------------|---|
| ☐ name: | The name for the field |
| ☐ type: | Mandatory - the name of a previously defined type from |
| ☐ indexed: | True if this field should be indexed (searchable or sortable) |
| ☐ stored: | True if this field should be retrievable |
| ☐ multiValued: | True if this field may contain multiple values per document |
| ☐ omitNorms: | (Expert) set to true to omit the norms associated with this |



SOLR – Trademark index

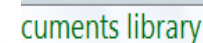
NAME	INDEX	STORED	TYPE	MULTIVALUED	TERM VECTORS	OMIT NORMS
ApplicationNumber	TRUE	TRUE	int	FALSE	FALSE	FALSE
GoodsServicesClassNumber	TRUE	TRUE	string	TRUE	FALSE	FALSE
MarkCurrentStatusCode	TRUE	TRUE	string	FALSE	FALSE	TRUE
RegistrationOfficeCode	TRUE	TRUE	string	FALSE	FALSE	TRUE
MarkVerbalElementText	TRUE	TRUE	entity_names	FALSE	TRUE	TRUE
SortedMarkVerbalElementText	TRUE	TRUE	string	FALSE	FALSE	FALSE
CTMAppllicantName	FALSE	FALSE	entity_names	TRUE	FALSE	FALSE
ApplicantName	TRUE	FALSE	entity_names	TRUE	FALSE	TRUE
ApplicantNameString	TRUE	TRUE	contains_string	TRUE	FALSE	TRUE
ApplicationDate	TRUE	TRUE	tdate	FALSE	FALSE	FALSE
MarkFeature	TRUE	TRUE	string	FALSE	FALSE	FALSE
MarkImageURI	TRUE	TRUE	string	FALSE	FALSE	FALSE
ST13	TRUE	TRUE	string	FALSE	FALSE	FALSE
TradeMarkURI	TRUE	TRUE	ignored	FALSE	FALSE	FALSE
ViennaCode	TRUE	TRUE	string	TRUE	FALSE	FALSE
CTMRepresentativeIdentifier	FALSE	FALSE	string	TRUE	FALSE	FALSE
CTMRepresentativeName	FALSE	FALSE	entity_names	TRUE	FALSE	FALSE
IRRepresentativeURI	FALSE	FALSE	string	TRUE	FALSE	FALSE
IRRepresentativeIdentifier	FALSE	FALSE	string	TRUE	FALSE	FALSE
IRRepresentativeName	FALSE	FALSE	entity_names	TRUE	FALSE	FALSE
RepresentativeIdentifier	TRUE	TRUE	string	TRUE	FALSE	FALSE
RepresentativeName	TRUE	TRUE	entity_names	TRUE	FALSE	FALSE
RepresentativeNameString	TRUE	TRUE	string	TRUE	FALSE	FALSE
IpaDoublese	FALSE	TRUE	string	TRUE	FALSE	TRUE

SOLR – GI index

NAME	INDEX	STORED	TYPE	MULTIVALUED	TERM VECTORS	OMIT NORM
uniqueid	TRUE	TRUE	string	FALSE	FALSE	FAL
office	TRUE	TRUE	string	FALSE	FALSE	FAL
idAgreement	TRUE	TRUE	string	FALSE	FALSE	FAL
shortDescription	TRUE	TRUE	string	FALSE	FALSE	FAL
Denomination	TRUE	TRUE	entity_names	FALSE	TRUE	TRI
ApplicationNumber	TRUE	TRUE	int	FALSE	FALSE	FAL
GoodsServicesClassNumber	TRUE	TRUE	string	TRUE	FALSE	FAL
MarkCurrentStatusCode	TRUE	TRUE	string	FALSE	FALSE	TRI
RegistrationOfficeCode	TRUE	TRUE	string	FALSE	FALSE	TRI
MarkVerbalElementText	TRUE	TRUE	entity_names	FALSE	TRUE	TRI
SortedMarkVerbalElementText	TRUE	TRUE	string	FALSE	FALSE	FAL
CTMApPLICANTName	FALSE	FALSE	entity_names	TRUE	FALSE	FAL
ApplicantName	TRUE	FALSE	entity_names	TRUE	FALSE	TRI
ApplicantNameString	TRUE	TRUE	contains_string	TRUE	FALSE	TRI
ApplicationDate	TRUE	TRUE	tdate	FALSE	FALSE	FAL
MarkFeature	TRUE	TRUE	string	FALSE	FALSE	FAL
MarkImageURI	TRUE	TRUE	string	FALSE	FALSE	FAL
ST13	TRUE	TRUE	string	FALSE	FALSE	FAL
TradeMarkURI	TRUE	TRUE	ignored	FALSE	FALSE	FAL
ViennaCode	TRUE	TRUE	string	TRUE	FALSE	FAL
IpaDoublese	FALSE	TRUE	string	TRUE	FALSE	TRI
IpaDoubleen	FALSE	TRUE	string	TRUE	FALSE	TRI
IpaDoublees	FALSE	TRUE	string	TRUE	FALSE	TRI
IpaDoublede	FALSE	TRUE	string	TRUE	FALSE	TRI
IpaDoublefr	FALSE	TRUE	string	TRUE	FALSE	TRI
IpaDoublebg	FALSE	TRUE	string	TRUE	FALSE	TRI
IpaDoubleel	FALSE	TRUE	string	TRUE	FALSE	TRI

SOLR – National Data List index

NAME	INDEX	STORED	TYPE	MULTIVALUED	TERM VECTORS	OMIT NORMS
ndluniqueid	TRUE	TRUE	string	FALSE	FALSE	FALSE
idList	TRUE	TRUE	string	FALSE	FALSE	FALSE
office	TRUE	TRUE	string	FALSE	FALSE	FALSE
listDescription	FALSE	TRUE	string	FALSE	FALSE	FALSE
listShortDescription	FALSE	TRUE	string	FALSE	FALSE	FALSE
isListPublic	TRUE	TRUE	boolean	FALSE	FALSE	FALSE
idTerm	FALSE	TRUE	string	FALSE	FALSE	FALSE
term	TRUE	TRUE	string	FALSE	FALSE	FALSE
comment	FALSE	TRUE	string	FALSE	FALSE	FALSE
termDescription	FALSE	TRUE	string	FALSE	FALSE	FALSE



ides: 2 locations

Arrange by: **Folder** ▼

GI Agreement

GI maintenance / Denominations

New Denomination

Upload File

GI Agreement

ID AG000000008

Description	Council Regulation (EC) No 4
-------------	------------------------------

Short Council Regulation (EC) No 4

Description

Сухиндол (Suhindol)

Търговище (Targovishte)

⁴ Хан Крум (Han Krum)

File Home

New Denomination

Upload File

Denomin

Сухиндол (Suhindol)

Търговище (Targovishte)

Хан Крум (Han Krum)

Хасково (Haskovo)

Хисаря (Hisarya)

Хърсово (Harsovo)

Черноморски район - Северен (Northern Black Sea)

Шивачево (Shivachevo)

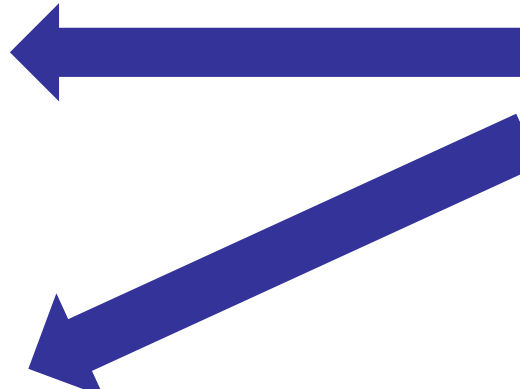
Шумен (Shumen)

Южно Черноморие (Southern Black Sea Coast)

Showing 1 to 10 of 1,923 entries

[illegible]

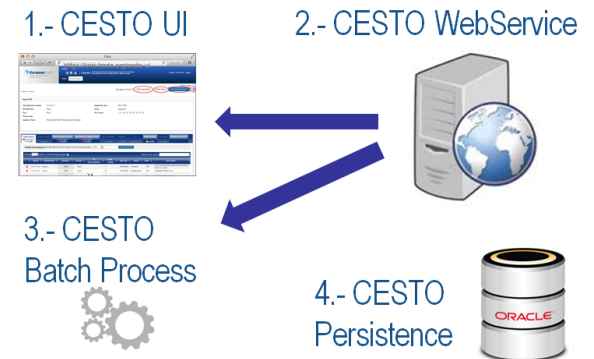
2.- CESTO WebService



4.- CESTO Persistence

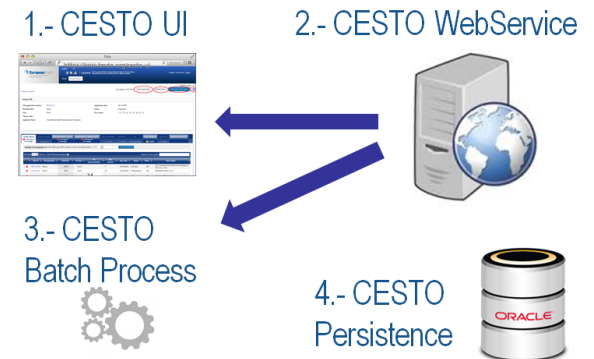
CESTO – BATCH

- Spring Batch framework
- Daily Schedule (out office hours)
- Generate and storage Reports for TM
 - New trademarks from OSA
 - Past failed reports
- Purging the old reports
- Use of CESTO Web Services



CESTO – PERSISTENCE

- Manage the CESTO database through Hibernate.
 - Relational data persistence is managed with JPA 2.0.
- CESTO persistence uses a mechanism to store XML files on disk.
 - Document persistence is managed with JCR 2.0.



CESTO – WEB SERVICE

- Internal interfaces will be Java interfaces
- WSDL definitions (v1.1 for SOAP, v2.0 for REST)
- JAXB 2.0
- JPA 2.0
- JCR 2.0
- SPRING 3 MVC REST
- TOMCAT

Business logic to perform the different tasks:

- Administration functionalities
- CESTO Report generation, storage and retrieval
- Search for and retrieve CESTO reports
- Statistics generation

CESTO – WEB SERVICE

Operations

Operation: Search for and view a CESTO report

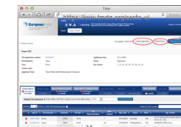
-URL: `http://<server>/cesto-webservice/report/search/<idTm>`

-Http Method: GET



CESTOReport.xsd

1.- CESTO UI



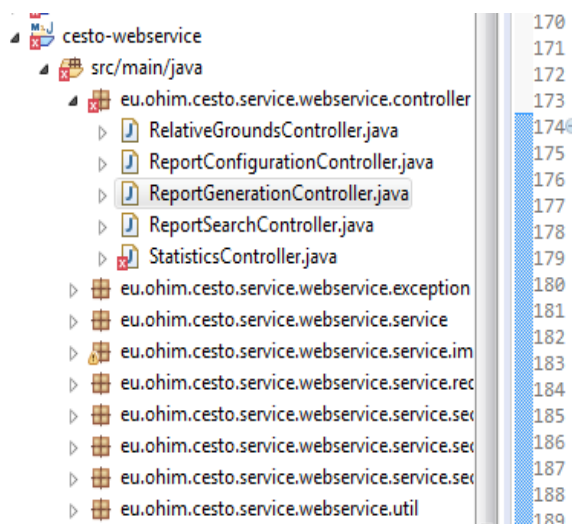
2.- CESTO WebService



3.- CESTO
Batch Process



4.- CESTO
Persistence



```

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187
188
189
    }
    return report;
}

@RequestMapping(value = "/report/freeCustomGeneration/{idOffice}/{mDeno}/{niceClasses}/{applicantName}", method = RequestMethod.GET)
public @ResponseBody
CESTOReport freeSearchCustomGeneration(@RequestBody ReportConfig reportConfig, @PathVariable String idOffice,
    @PathVariable String mDeno, @PathVariable String niceClasses,
    @PathVariable String applicantName, HttpServletRequest request) {

    String denomination = CESTOStringUtils.decode(mDeno);
    String appName = CESTOStringUtils.decode(applicantName);

    CESTOReport report = serviceRef.generateReportForFreeSearch(idOffice, denomination, niceClasses, appName, reportConfig);

    statisticsService.logEvent(idOffice, new Date(), StatisticsEventEnum.FREESEARCH);
    logTrafficLights(report, idOffice);

    return report;
}

```

CESTO – WEB SERVICE

```

1  <?xml version="1.0" encoding="UTF-8" standalone="yes"?>
2  <xs:schema version="1.0" xmlns:xs="http://www.w3.org/2001/XMLSchema"
3    elementFormDefault="qualified" attributeFormDefault="unqualified">
4
5    <xs:include schemaLocation="CESTOCommons.xsd" />
6
7    <xs:element name="CESTOReport">
8      <xs:complexType>
9        <xs:sequence>
10         <xs:element name="applicationId" type="xs:string"
11           minOccurs="0" />
12         <xs:element name="result" type="Result" minOccurs="0" />
13         <xs:element name="dtCreate" type="xs:dateTime" minOccurs="0" />
14         <xs:element name="dtUpdate" type="xs:dateTime" minOccurs="0" />
15         <xs:element name="logCreatedBy" type="xs:string"
16           minOccurs="0" />
17         <xs:element name="logUpdatedBy" type="xs:string"
18           minOccurs="0" />
19         <xs:element name="markDetails" type="MarkDetails"
20           minOccurs="0" />
21         <xs:element name="similarTm" type="CESTOTMReportDetail" />
22         <xs:element name="similarTmApplicant" type="CESTOTMReportDetail" />
23         <xs:element name="similarTmRepresentative" type="CESTOTMReportDetail"
24           minOccurs="0" />
25         <xs:element name="similarTmOpposition" type="CESTOTMReportDetail"
26           minOccurs="0" />
27         <xs:element name="similarINN" type="CESTOINNReportDetail" />
28         <xs:element name="similarGI" type="CESTOGIReportDetail" />
29         <xs:element name="similarSixter" type="CESTOSixterReportDetail" />
30         <xs:element name="similarNDL" type="CESTONDLReportDetail" />
31         <xs:element name="similarCPVO" type="CESTOCPVOReportDetail"
32           minOccurs="0" />
33       </xs:sequence>
34     </xs:complexType>
35   </xs:element>
36
37   <xs:complexType name="CESTOBaseReportDetail" abstract="true">
38     <xs:sequence />
39     <xs:attribute name="result" type="ResultCode" />
40   </xs:complexType>
41
42   <xs:complexType name="CESTOTMReportDetail">
43     <xs:complexContent>

```

CESTO – External Web Services & WIPO 6ter FTP

INN International Non-proprietary Names
WHO World Health Organization



https://extranet.who.int/tools/inn_global_data_hub

CPVO



Community Plant Variety Office

<https://cpvoextranet.cpvo.europa.eu>



WIPO 6ter Paris

<ftp://ftpird.wipo.int/wipo/6ter/>

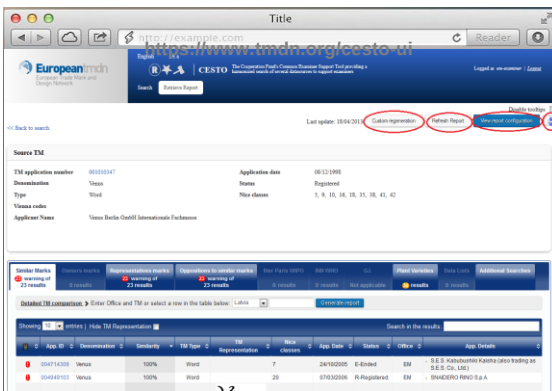


BILATERAL AGREEMENT

- DB ORGANIZATION
- PROPERTY OFFICE

CESTO

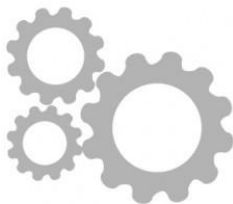
1.- CESTO UI



2.- CESTO WebService



3.- CESTO Batch Process



4.- CESTO Persistence



CESTO – UI

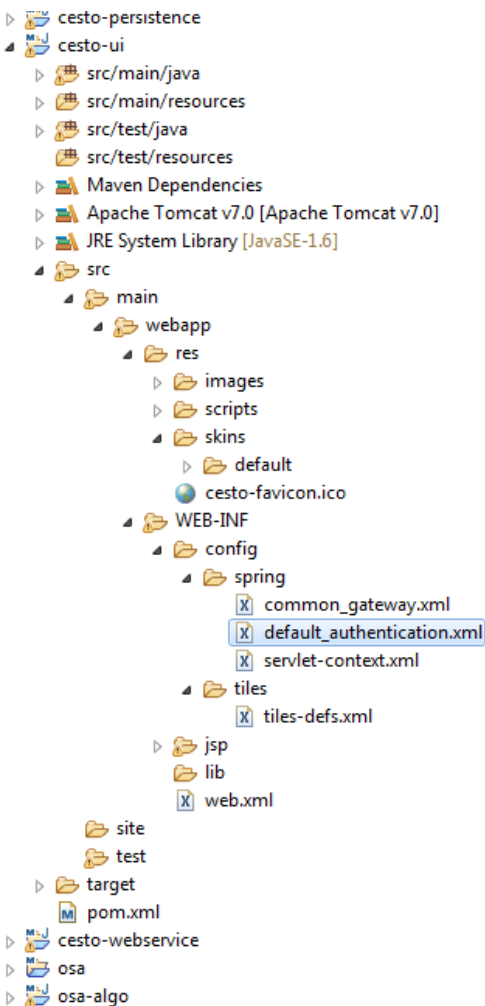
Web-based user interface:

- Spring Web MVC frameworks

Roles:

- **Office administrator** → CESTO report / traffic light configuration
- **Authenticated and non-authenticated user** → Search: Free search
- **Authenticated PO user** → Search: Can perform search for, view and re-generation of a CESTO report
- **Administrator** → Statistics generation

CESTO – UI: Login



```

6      xsi:schemaLocation= http://www.springframework.org/schema/beans
7                          http://www.springframework.org/schema/beans/spring-beans-3.1.xsd
8                          http://www.springframework.org/schema/security
9                          http://www.springframework.org/schema/security/spring-security-3.1.xsd"
10
11      <security:http auto-config="true" use-expressions="true">
12          <security:intercept-url pattern="/admin/cesto/**" access="hasRole('ROLE_CESTO_ADMIN')"/>
13          <security:intercept-url pattern="/admin/nationaloffice/**" access="hasRole('ROLE_OFFICE_ADMIN')"/>
14          <security:intercept-url pattern="/examiner/**" access="hasRole('ROLE_EXAMINER')"/>
15
16          <security:intercept-url pattern="/free/**" access="permitAll"/>
17          <security:intercept-url pattern="/home/show.htm" access="permitAll"/>
18          <security:intercept-url pattern="/defaultError.htm" access="permitAll"/>
19          <security:intercept-url pattern="/i18n.htm" access="permitAll"/>
20          <security:intercept-url pattern="/retrieveOffices.htm" access="permitAll"/>
21          <security:intercept-url pattern="/" access="permitAll"/>
22
23          <security:intercept-url pattern="/Logincas.htm" access="isAuthenticated()"/>
24
25          <security:form-login login-page="/Login.htm" authentication-success-handler-ref="customTargetUrlResolver"/>
26          <security:access-denied-handler error-page="/Login.htm?access_denied"/>
27
28          <security:logout invalidate-session="true" delete-cookies="JSESSIONID,tooltip_status" logout-success-url="/Login.htm"
29
30      </security:http>
31
32      <security:authentication-manager>
33          <security:authentication-provider>
34              <security:user-service>
35                  <security:user name="cestoadmin" password="cestoadmin" authorities="ROLE_CESTO_ADMIN"/>
36                  <security:user name="officeadmin" password="officeadmin" authorities="ROLE_OFFICE_ADMIN"/>
37                  <security:user name="examiner" password="examiner" authorities="ROLE_EXAMINER"/>
38              </security:user-service>
39          </security:authentication-provider>
40      </security:authentication-manager>
41
42      <bean id="customTargetUrlResolver" class="eu.ohim.cesto.ui.security.RoleBasedTargetUrlResolverImpl"/>
43
44      <!-- Utilities bean for retrieving user credentials -->
45      <bean id="authenticationUtils" class="eu.ohim.cesto.ui.security.AuthenticationUtils"/>
46
47
48  </beans>

```

CESTO – UI: Internationalization

- cesto-ui
 - src/main/java
 - src/main/resources
 - src/test/java
 - src/test/resources
 - Maven Dependencies
 - Apache Tomcat v7.0 [Apache Tomcat v7.0]
 - JRE System Library [JavaSE-1.6]
 - src
 - main
 - webapp
 - res
 - images
 - scripts
 - skins
 - cesto-favicon.ico
 - WEB-INF
 - config
 - jsp
 - admin
 - common
 - error
 - examiner
 - free
 - freeSearch.jsp
 - searchError.jsp
 - searchResults.jsp
 - i18n
 - segments
 - accessDenied.jsp
 - disclaimer.jsp
 - home.jsp
 - index.jsp
 - login.jsp

```

71         <button type="reset" class="btn pull-right" id="btn-reset"><spring:message code="app.button.reset" />
72     </div>
73
74     </div>
75
76
77 <div class="container-fluid">
78
79     <div class="row-fluid">
80         <div class="span12">
81             <div id="hometext" class="float clearBoth">
82                 <p class="clearBoth">
83                     <spring:message code="app.text.welcome" />
84                 </p>
85                 <h5 class="float clearBoth bold"><spring:message code="app.text.headers.whatis" /></h5>
86
87                 <p class="clearBoth">
88                     <spring:message code="app.text.whatis" />
89                 </p>
90             </div>
91
92             <div class="search text float clearBoth">
93                 <h5 class="float clearBoth bold"><spring:message code="app.text.headers.howWorks" /></h5>
94
95                 <p class="clearBoth" style="text-align: justify">
96                     <spring:message code="app.text.howWorks" />
97                 </p>
98             </div>
99         </div>
100     </div>
101 </div>
102
103
104 </form>
105
106 <div class="modal hide" id="blockMsg">
107     <div class="modal-body">
108         <b><spring:message code="app.freesearch.waitmessage" /></b>
109     </div>
110     <div class="modal-footer">
111         <a class="btn btn-primary" href="#"><spring:message code="app.button.close" /></a>

```

CESTO – UI: Internationalization

~650 terms
~2000 words

	messages_bg.properties	07/08/2017 11:58	PROPERTIES File	60 KB
	messages_cs.properties	07/08/2017 11:58	PROPERTIES File	46 KB
	messages_da.properties	07/08/2017 11:58	PROPERTIES File	42 KB
	messages_de.properties	07/08/2017 11:58	PROPERTIES File	46 KB
	messages_el.properties	07/08/2017 11:58	PROPERTIES File	65 KB
	messages_en.properties	07/08/2017 11:58	PROPERTIES File	43 KB
	messages_es.properties	07/08/2017 11:58	PROPERTIES File	45 KB
	messages_et.properties	07/08/2017 11:58	PROPERTIES File	42 KB
	messages_fi.properties	07/08/2017 11:58	PROPERTIES File	43 KB
	messages_fr.properties	07/08/2017 11:58	PROPERTIES File	47 KB
	messages_hr.properties	07/08/2017 11:58	PROPERTIES File	44 KB
	messages_hu.properties	07/08/2017 11:58	PROPERTIES File	47 KB
	messages_it.properties	07/08/2017 11:58	PROPERTIES File	45 KB
	messages_lt.properties	07/08/2017 11:58	PROPERTIES File	46 KB
	messages_lv.properties	07/08/2017 11:58	PROPERTIES File	45 KB
	messages_mt.properties	07/08/2017 11:58	PROPERTIES File	46 KB
	messages_nl.properties	07/08/2017 11:58	PROPERTIES File	45 KB
	messages_pl.properties	07/08/2017 11:58	PROPERTIES File	47 KB
	messages_pt.properties	07/08/2017 11:58	PROPERTIES File	45 KB
	messages_ro.properties	07/08/2017 11:58	PROPERTIES File	46 KB
	messages_si.properties	07/08/2017 11:58	PROPERTIES File	37 KB
	messages_sk.properties	07/08/2017 11:58	PROPERTIES File	45 KB
	messages_sl.properties	07/08/2017 11:58	PROPERTIES File	44 KB
	messages_sv.properties	07/08/2017 11:58	PROPERTIES File	43 KB



Internationalization



messages_en.properties

CESTO



English A a
  | **CESTO** The Cooperation Panel's Common Examiner Support Tool providing a harmonized search of several databases to support examiners
 Logged as: [en-examiner](#) | [Logout](#)

Search

<< Back to search

Last update: 18/04/2013

Source TM

TM application number	00000347	Application date	08/12/1998
Denomination	Venus	Status	Registered
Type	Word	Nice classes	5, 9, 10, 16, 18, 35, 38, 41, 42
Vienna codes			
Applicant Name	Venus Berlin GmbH Internationale Fachmesse		

Similar Marks
 23 warning of 23 results

Owners marks
 0 results

Representatives marks
 23 warning of 23 results

Oppositions to similar marks
 23 warning of 23 results

Eter Paris WIPO
 0 results

BIN WIPO
 0 results

G/L
 Not applicable

Plant Varieties
 0 results

Data Lists
 0 results

Additional Searches

Detailed TM comparison: Enter Office and TM or select a row in the table below:

Showing 10 entries | Hide TM Representation ☐

Search in the results:

	App. ID	Denomination	Similarity	TM Type	TM Representation	Nice classes	App. Date	Status	Office	App. Details
	004714308	Venus	100%	Word		7	24/10/2005	E-Ended	EN	- S.E.S. Kabushiki Kaisha (also trading as S.E.S. Co., Ltd.)
	004949103	Venus	100%	Word		20	07/03/2006	R-Registered	EN	- SNAIDERO RINO S.p.A.

Deployment

Deployment – CESTO Infrastructure model

Deployment models vary from the office needs and requirements of the Office:

1. Standalone or Portable deployment

- Single server/VM/PC with 16GB RAM, 100GB HDD

2. Distributed

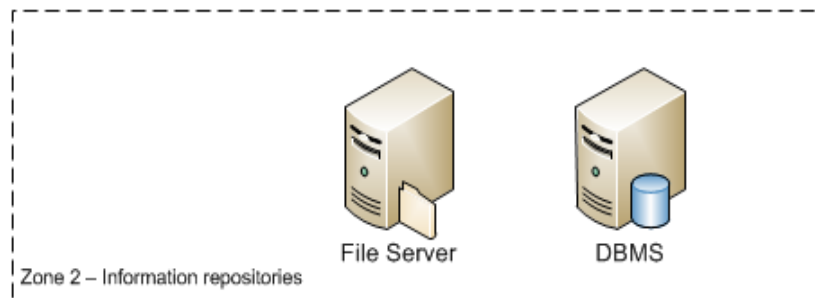
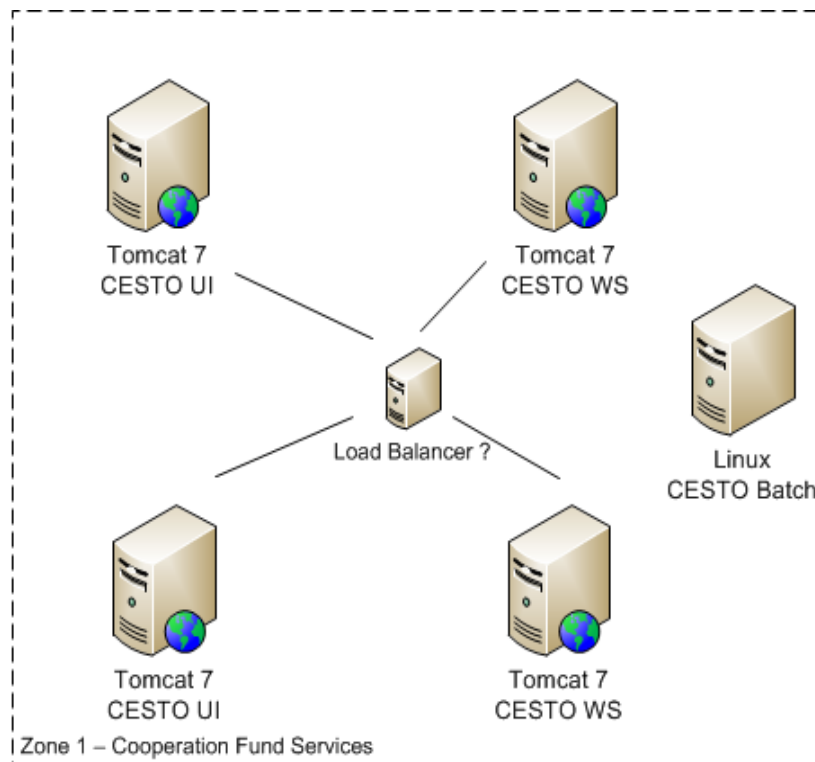
- Every component of CESTO to be installed in separate server/VM with 8GB RAM, 100GB HDD

3. Clustered

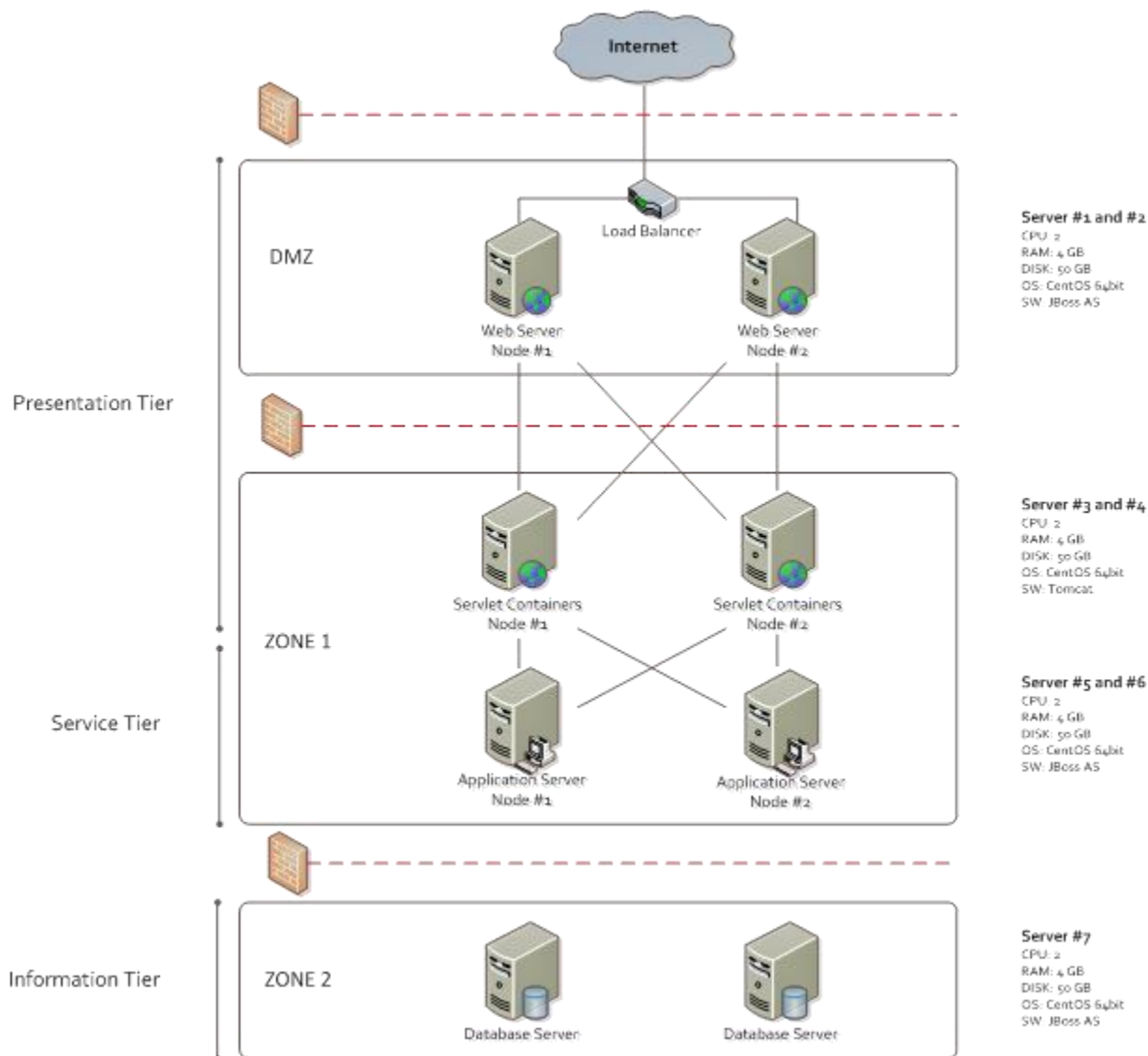
- Every component of CESTO to be installed in separate server/VM with 16GB RAM, 100 HDD, in addition to have a proper replication configuration of the most critical components of CESTO such as OSA2 and SOLR indexes with master/slave configurations. Load balancer will be required to balance the number of request.

***Jmeter** – tool to test the performance of the deployment model

Deployment – CESTO Infrastructure model



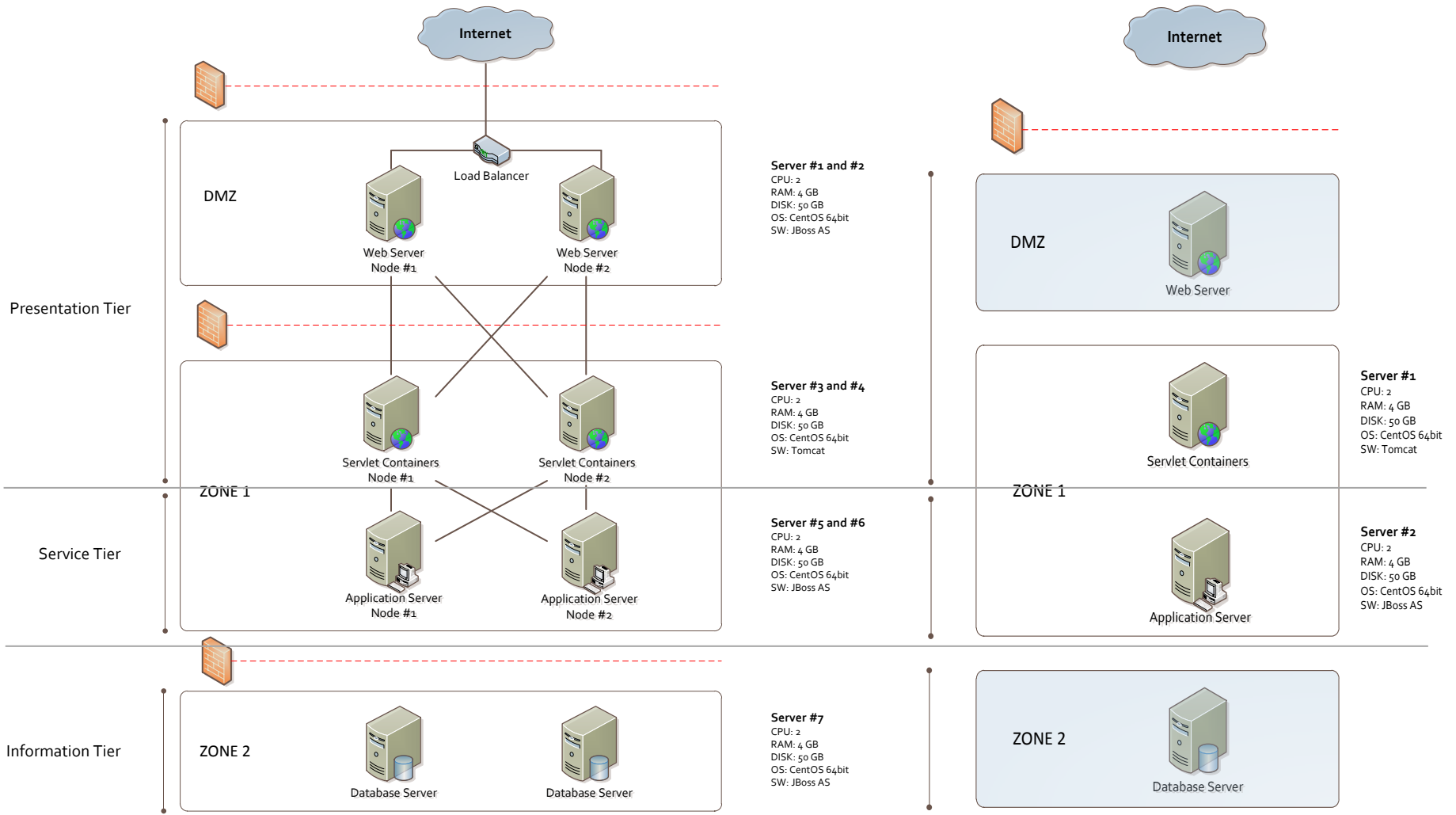
Deployment – OSA2 Infrastructure model



Deployment – OSA2 Infrastructure model

Production

Development



Deployment – Infrastructure model

Type	Specification	Usage	Qty
File Server	RAM = 2 GB, Disk = 60 GB	Reports storage	1
Web Server	RAM = 4 GB, Disk = 40 GB	CESTO UI / CESTO batch	1
Web Server	RAM = 4 GB, Disk = 40 GB	CESTO web services / CESTO batch	1
Database Server	RAM = 2 GB, CPU = 2x2GHz, Disk = 50 GB	CESTO data base	1

Type	Specification	Usage	Qty
Solr Master	RAM = 4 GB, Disk =100 GB	Solr Indexation from TM-Database Solr Indexation from NDL DS Solr Indexation from GI DS Solr Indexation from 6ter DS	1
Solr Slaves	RAM = 4 GB, Disk =100 GB	Replication of Solr Master indexes	1..N
OSA Servers	RAM = 4 GB, Disk =50 GB	OSA Search (TM, NDL, GI , 6ter)	1..N
OSA-MAINTENANCE-GUI	RAM = 2 GB, Disk =25 GB	GUI OF OSA-MAINTENANCE OF NDL, GI, and 6ter	1

Thank You