MULTINATIONAL & MULTILINGUAL REUSABLE E-COMMERCE PLATFORM CASE STUDY

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CTO & Co-Founder of @Adyax

6 years of Drupal pain :)

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GUERLAIN

PARIS

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One of the oldest perfume brands in the world, created in 1828.

Pierre-François-Pascal Guerlain

GUERLAIN

SHALIMAR

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LVMH

MOËT HENNESSY • LOUIS VUITTON

Dior

benefit

SAN FRANCISCO

GIVENCHY

LOUIS VUITTON

KENZO

PARIS

FONDÉ EN 1743

MOËT & CHANDON

CHAMPAGNE

Hennessy

COGNAC

OBJECTIVES

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An e-commerce site connected to SAP
with rich editorial content,
managing multiple countries and languages,
where each country is independent,
where the content must be validated by France

except some...

Fluid front-end, that must work with IE6...

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SOME NUMBERS

2 ERP, INCLUDING SAP

16 COUNTRIES, INCLUDING CHINA

18 LANGUAGES,
INCLUDING JAPANESE

2,500 PRODUCT REFERENCES

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15,000 MAN HOURS

12 MONTHS OF DEVELOPMENT

15 PEOPLE

70 TEMPLATES

57 CONTENT TYPES

BASIC TECHNIQUES

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Drupal™

DRUPAL COMMERCE

Apache Solr

Strategic choices

A single Drupal instance for all the sites.

Site launch is progressive, country by country.

Export and import of content via Excel.

Certain sites will be e-commerce, others won't.

No Flash, in spite of luxurious environment.

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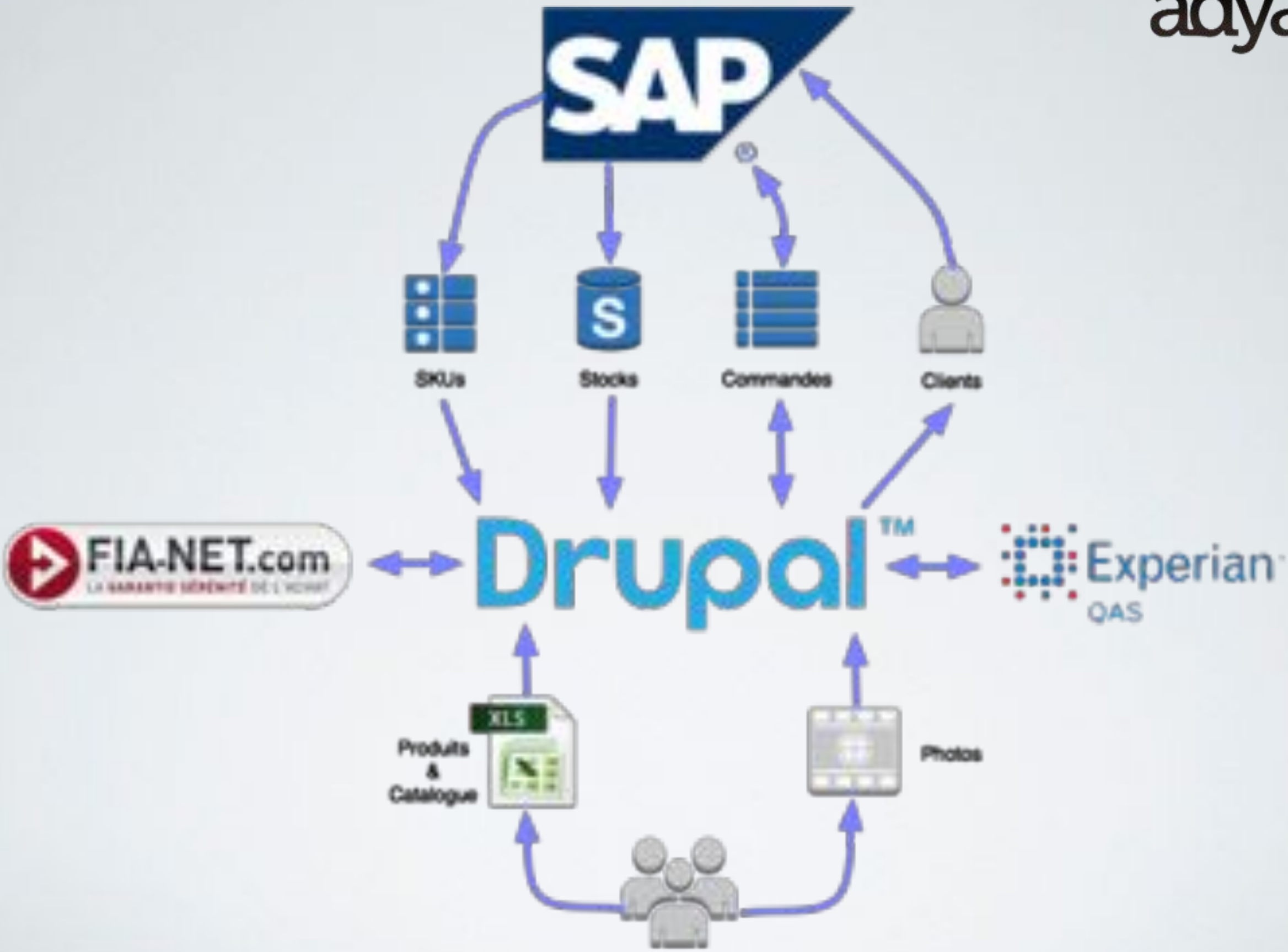
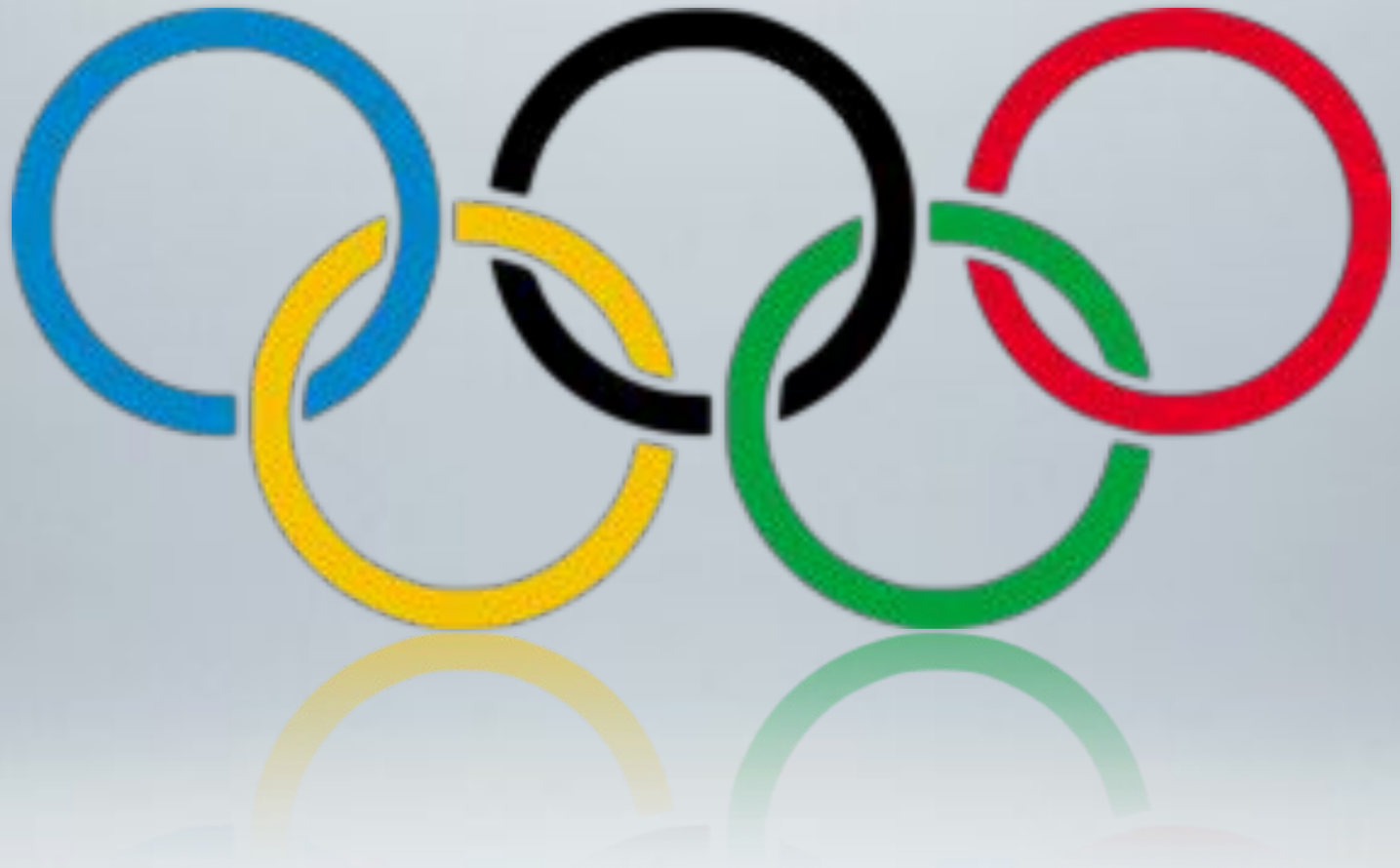

SAP
SKUs
Stocks
Commandes
Clients
FIA-NET.com
Drupal™
Experian
QAS
XLS
Produits
&
Catalogue
Photos



COUNTRIES & LANGUAGES

SWITZERLAND	FR1	IT	DE
CANADA	FR2	EN	
FRANCE	FR3		
SPAIN	ES		
CHINA	CN		

Country	Country code	Language	Language code
International in EN	int	English	en
France	fr	French	fr
US	us	English US	en-us
UK	uk	English UK	en-uk
Middle-East	me	English Middle East	en-me
China	cn	Chinese	zh
Hong Kong	hk	Chinese	zh-hk
		English	en-hk
Spain	es	Spain	es
Canada	ca	Canadian French	fr-ca
		Canadian English	en-ca
Russia	ru	Russian	ru
Korea	ko	Korean	kr
Taiwan	tw	Simplified Chinese	zh-tw
Japan	jp	Japanese	ja
Brazil	br	Brazilian Portuguese	pt
Italy	it	Italian	it
Germany	ge	German	de

Management of languages based on several very standard Drupal modules:

Localization Client (i18n_client)

Translation Template Extractor (potx)

Entity Translation (entity_translation)

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Translate interface

Overview | Translate

This page provides an overview of available translatable strings. Drupal displays translatable strings in text groups; modules may define additional text
Because text groups provide a method of grouping related strings, they are often used to focus translation efforts on specific areas of the Drupal interfa
See the Languages page for more information on adding support for additional languages.

Language	Built-in interface
Chinese, Traditional	64/15591 (0.41%)
Czech	5936/15591 (38.07%)
Dutch	163/15591 (1.05%)
English	11/15591 (0.07%)
French	10523/15591 (67.49%)
German	8351/15591 (53.56%)
Greek	5191/15591 (33.29%)
Italian	166/15591 (1.06%)
Korean	5271/15591 (33.81%)
English (built-in)	n/a
Polish	9424/15591 (60.45%)
Russian	9218/15591 (59.12%)
Spanish	147/15591 (0.94%)
Ukrainian	6121/15591 (39.26%)

Each country can be identified either by its domain (guerlain.co.uk), or by a URL key (guerlain.com/fr)

The Domain Access module (domain) offers this feature on a platter.

Homepage copying

Catalog structure configuration, product displays copying

Magazine dossiers displays copying

Menu, articles, consultations, social network configurations, …

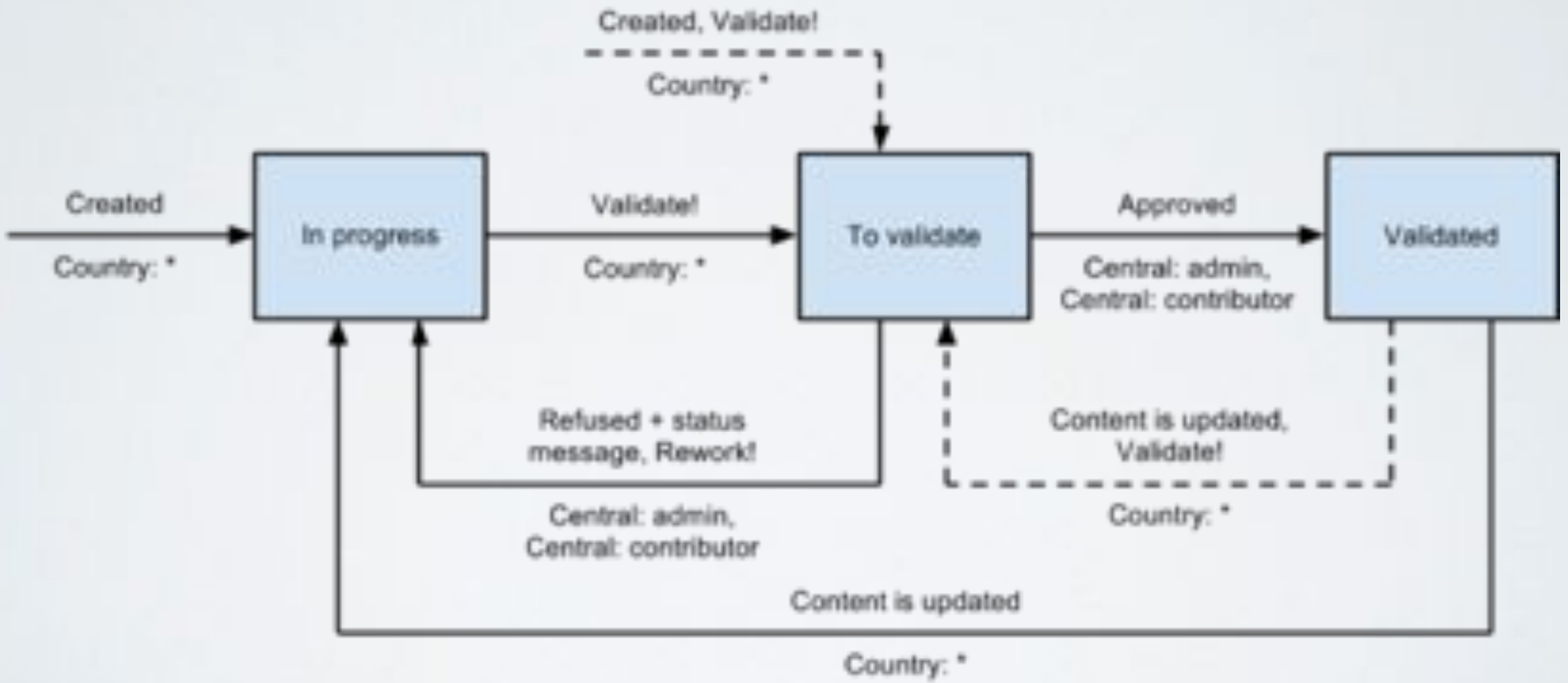
Three features were essential:

1. A 'central' country where all original content is first created
2. Possibility of copying all at once all content of one language to another
3. Notification of countries in case of modification of any content in the 'central' country

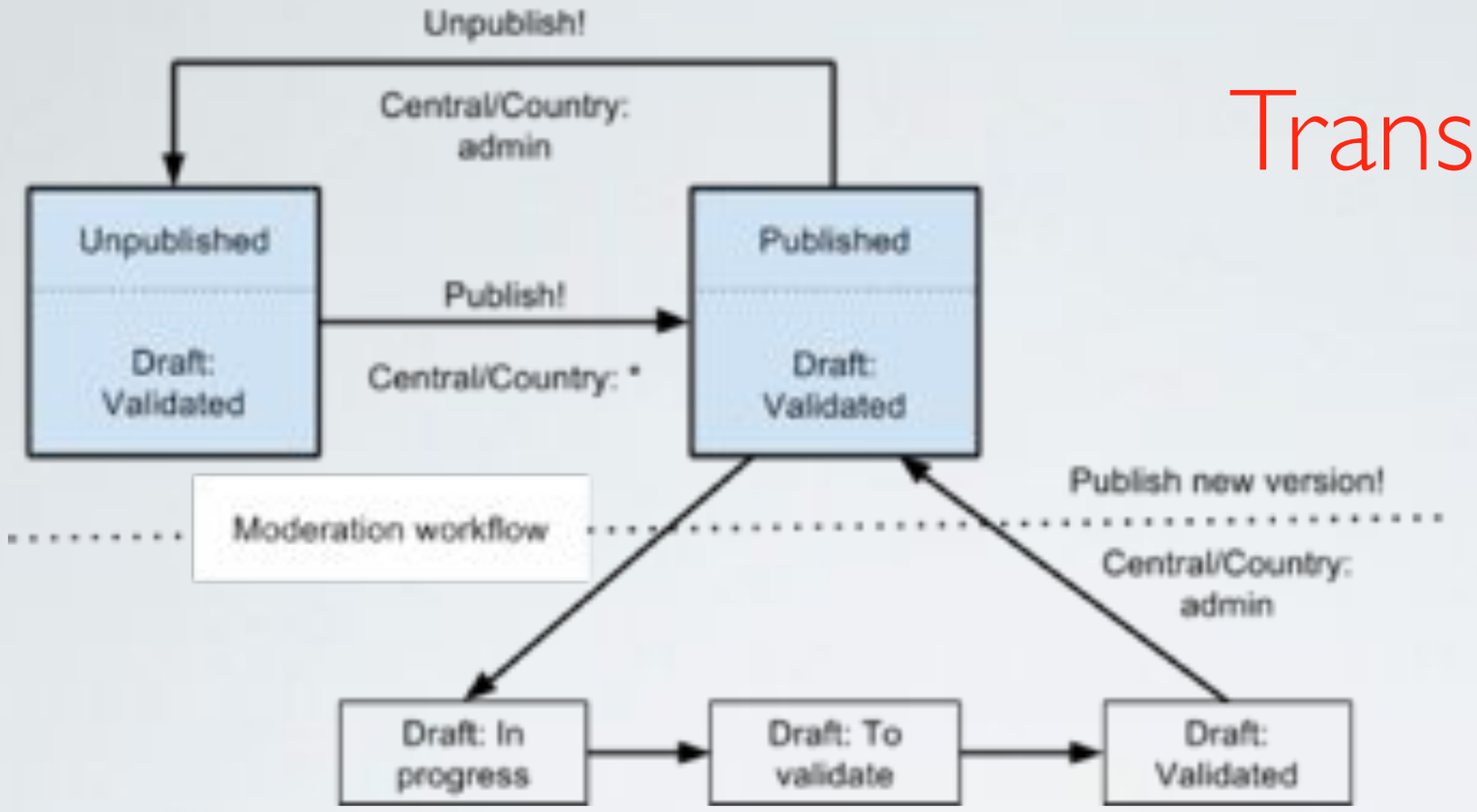
No workflow for the primary contents (editorial, products). The countries are responsible and have two versions at their disposal (draft & published)

A real workflow for the home pages

Content workflow



Translation workflow



When we say "content translation gets published", it means:

- Original language / Central: content is available for the Countries' local translations;
- Country local languages: content translation is available online for the website users.

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Specific problem: customization of forms (inscription, newsletter) according to countries.

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Configuration

	Field name	Visible	Required	Info tooltip	Options	
✣	Civilité	☑	☑		Mme, Mr.	⚙
✣	Prénom	☑	☑	☐		
✣	Nom	☑	☑	☐		
✣	Date of birth	☑	☐		DD/MM/YYYY	⚙
✣	Email	✓	✓			
✣	Mot de passe	✓	✓			
✣	Téléphone	☑	☑	☐	Minimal: 8, maximal: 12	⚙
✣	Cell number	☐	☐	☐	Minimal: 8, maximal: 12	⚙
✣	Membership code	☐	☐	☐		
✣	Billing Address	☑	☐			
✣	Veuillez cocher cette case si vous souhaitez recevoir la Newsletter de Guerlain.	☑	☐			
✣	Privacy policy 2	☐	☐		No link to static page.	⚙
✣	Privacy policy 1	☐	☐		Link: node/14069	⚙
✣	Veuillez cocher cette case si vous souhaitez recevoir la Newsletter de Guerlain.	☐	☐			
✣	Mobile mail address	☐	☐	☐		

Take-home message:

Building the best possible, scalable multilanguage-multicountry perfect solution, with overrides, notifications, permissions and complex workflow is NOT WORKING.

Client wants less features and a simple workflow, even if it requires more manual work from their contributors.

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Entity translations vs i18n

Entity translation with best source idea, but with less support - sucked. Since 2 years, we corrected several issues, had many problems with client understanding and support.

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GEOLOCALIZATION

MaxMind

JS

Guerlain.com

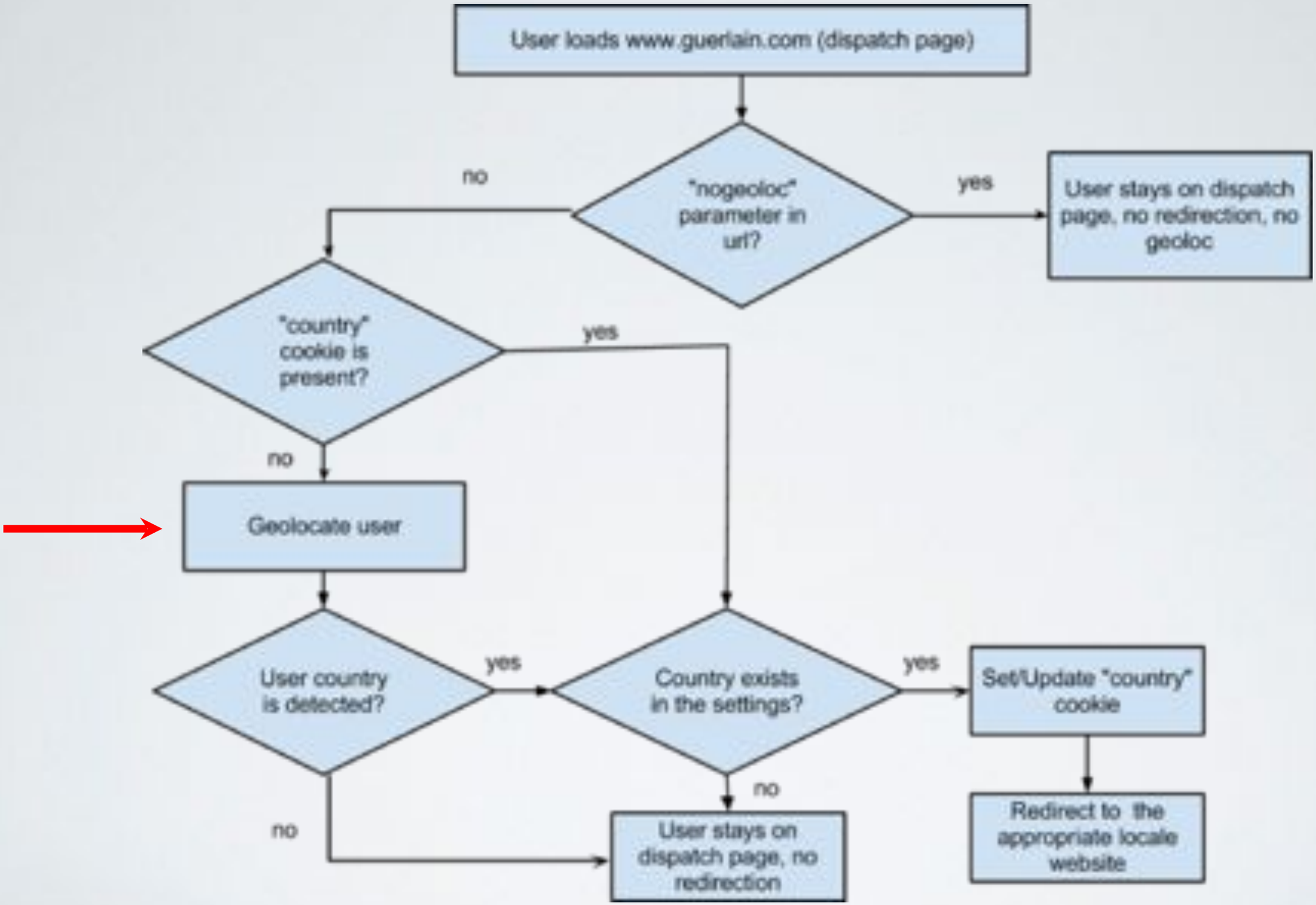
Guerlain.com/es

Guerlain.com/fr

CDN

VARNISH

NGNIX


User loads www.guerlain.com (dispatch page)
"nogeoloc" parameter in url?
no
yes
User stays on dispatch page, no redirection, no geoloc
"country" cookie is present?
yes
no
Geolocate user
User country is detected?
yes
Country exists in the settings?
yes
Set/Update "country" cookie
no
Redirect to the appropriate locale website
no
User stays on dispatch page, no redirection

1. If "nogeoloc" parameter present in URL on the dispatch page, geolocalization and automatic redirect won't happen. User will stay on the dispatch page.

2. Otherwise script will check for the value of the "country" cookie, and if it exists - will verify if this country is present in the setting file to run redirect.

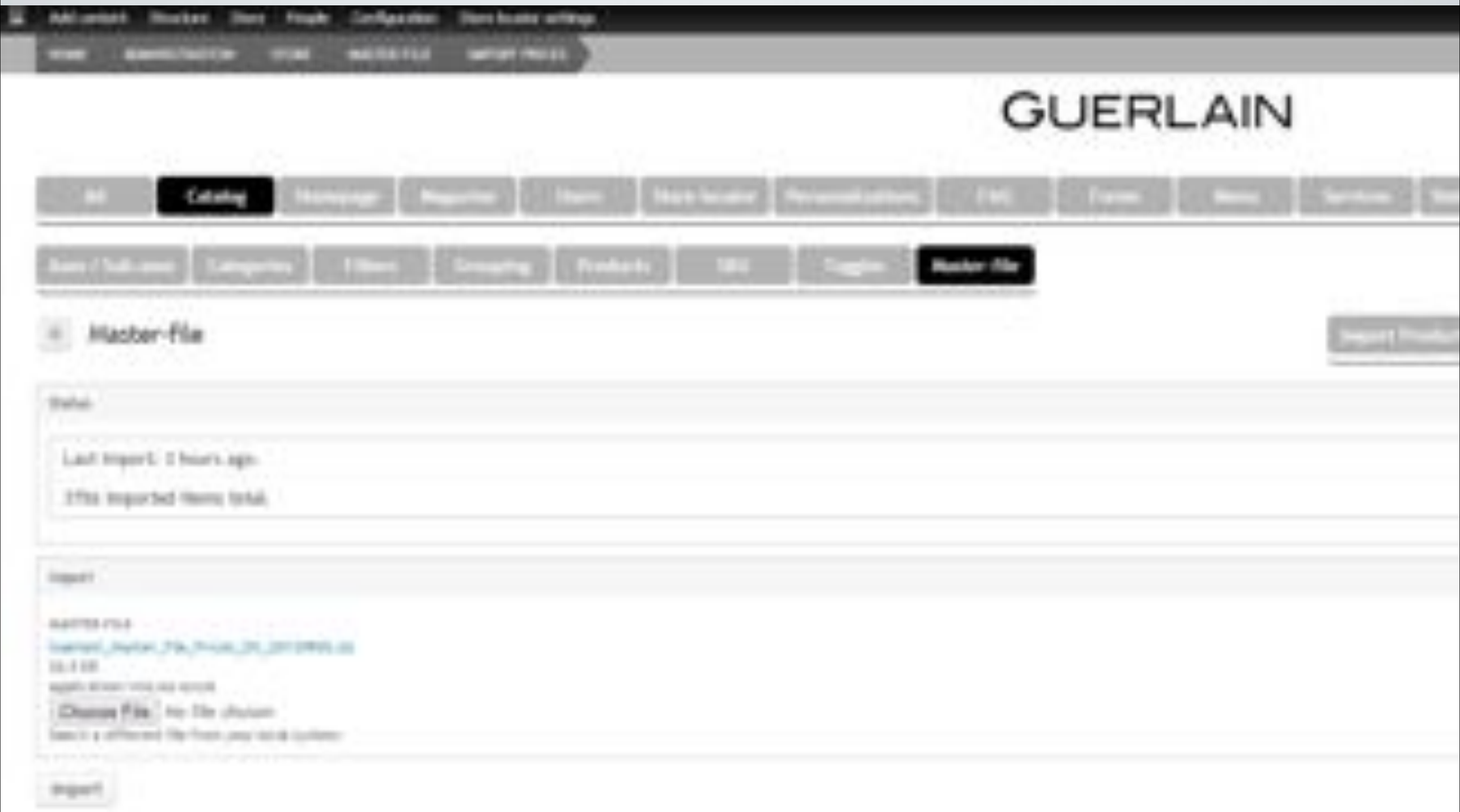
3. If "country" cookie was not found - script will try to geolocate user. If geolocated country is available present in "domains" section of settings - country cookie will be populated or updated with geolocated country and user will be redirected to the appropriate local site. If geolocated country isn't present in settings - user will stay in the dispatch page.

IMPORT / EXPORT of content

We tried many formats to support XLS, one that works with common PHP libs in most of cases is :

The Excel 97 - Excel 2003 Binary file format (BIFF8)

Feeds used to import data.


GUERLAIN
Master-File
Last Import: 2 hours ago
Choose File

2 files: catalog and products/SKUs

SKUs as well as products could have multiple photos, so we also have:

A ZIP archive with media organized into folders
product/product-ID/xxxxx.jpeg
or sku/sku-ID/xxxxx.jpeg

Product images: primary image list, N zoomed images, background image, images & video editorials

SKU images: primary, list, background, texture

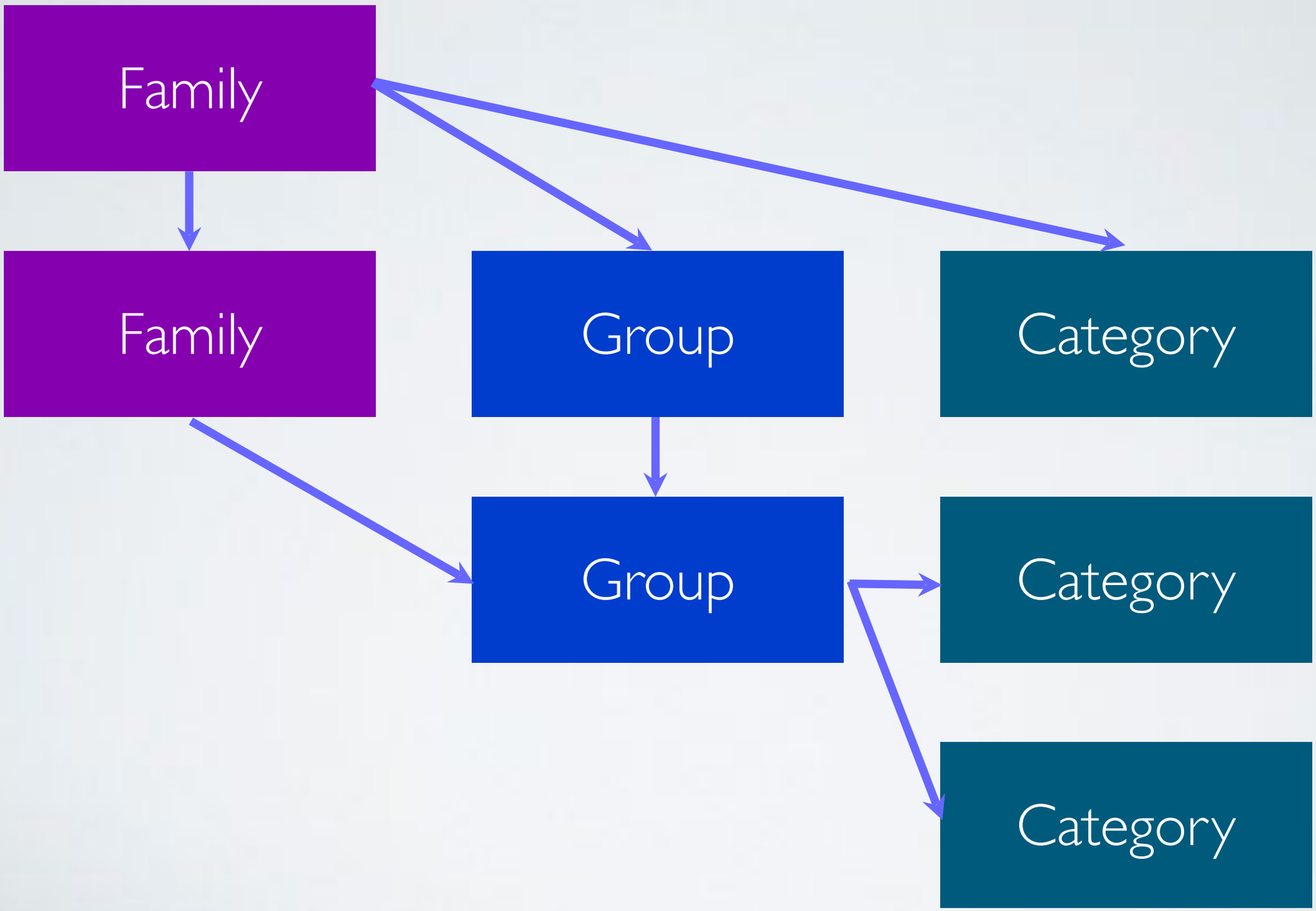
No deletion (uniquely via BO)

Import doesn't make changes

References to products still unknown

All fields (40)

Architecture of a complex catalog



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ERP INTEGRATION

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Order's, SKUs, Stock, Status

XML

SOAP

Orders, Clients

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Working with SAP is not complicated, but laborious. One command can be 5000 lines of XML

We have created a tool to send an XML command to SAP, directly from the Drupal back-office

In addition, we have put into place a log of each communication (to & from) SAP that is visible from the objects concerned (command, user, SKU)

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SOAP Client

REQUEST ENDPOINT

http://prod.guerlain.com/fr/fr-fr/sap-orders/order

REQUEST XML

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
 <SOAP-ENV:Body>
  <saprfc:CRMXIF_ORDER_SAVE xmlns:saprfc="urn:sap-com:document:sap:soap:functions:uc-style">
   <DATA>
    <item>
     <OBJECT_TASK>I</OBJECT_TASK>
     <OBJECT_GUID>510F95DD4C1A14E0E10080000A037809</OBJECT_GUID>
     <OBJECT_ID>0099043542</OBJECT_ID>
     <PROCESS_TYPE>ZCD1</PROCESS_TYPE>
```

SEND!

History User to CRM requests

Date	Request	Response	Result	Status	Comments
Wed, 19/06/2013 - 16:20	<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:urn="urn:sap-com:document:sap:rfc:functions"> ... Download request	<soap-env:Envelope xmlns:soap-env="http://schemas.xmlsoap.org/soap/envelope/"> <soap-env:Body> <soap-env:Fault> <faultcode>soap-env:Client</faultcode> <faultstring xml:lang="en">Deserialisation failed</faultstring> <detail> <n0:SimpleTransformationFault xmlns:n0="http://www.sap.com/transformation-templates"> <MainName>/1BCDWB/WS527E46486788E78BC10251</MainName> <ProgName>/1BCDWB/WS527E46486788E78BC10251</ProgName> <Line>46 </Line> <Valid>X</Valid> <DeserialisationFault> <DescriptionText>An error occurred when deserializing in the simple transformation program /1BCDWB/WS527E46486788E78BC10251</DescriptionText> <DescriptionDetailText>Data loss occurred when converting F8->F8</DescriptionDetailText> <TreePosition></TreePosition> <ClassName>CX_SY_CONVERSION_DATA_LOSS</ClassName> </DeserialisationFault> <Caller> <Class>CL_SRC_RFC_PROXY_CONTEXT</Class> <Method>IF_SAML_PART~DECODE</Method> <Positions>[] </Positions> </Caller> </n0:SimpleTransformationFault> </detail> </soap-env:Fault> </soap-env:Body> </soap-env:Envelope>		0	
Wed, 19/06/2013 - 16:10	<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:urn="urn:sap-com:document:sap:rfc:functions">... Download request	<soap-env:Envelope xmlns:soap-env="http://schemas.xmlsoap.org/soap/envelope/"> <soap-env:Body> <soap-env:Fault> <faultcode>soap-env:Client</faultcode> <faultstring xml:lang="en">Deserialisation failed</faultstring> <detail> <n0:SimpleTransformationFault xmlns:n0="http://www.sap.com/transformation-templates"> <MainName>/1BCDWB/WS527E46486788E78BC10251</MainName> <ProgName>/1BCDWB/WS527E46486788E78BC10251</ProgName> <Line>46 </Line> <Valid>X</Valid> <DeserialisationFault> <DescriptionText>An error occurred when deserializing in the simple transformation program /1BCDWB/WS527E46486788E78BC10251</DescriptionText> <DescriptionDetailText>Data loss occurred when converting F8->F8</DescriptionDetailText> <TreePosition></TreePosition> <ClassName>CX_SY_CONVERSION_DATA_LOSS</ClassName> </DeserialisationFault> <Caller> <Class>CL_SRC_RFC_PROXY_CONTEXT</Class> <Method>IF_SAML_PART~DECODE</Method> <Positions>[] </Positions> </Caller> </n0:SimpleTransformationFault> </detail> </soap-env:Fault> </soap-env:Body> </soap-env:Envelope>		0	

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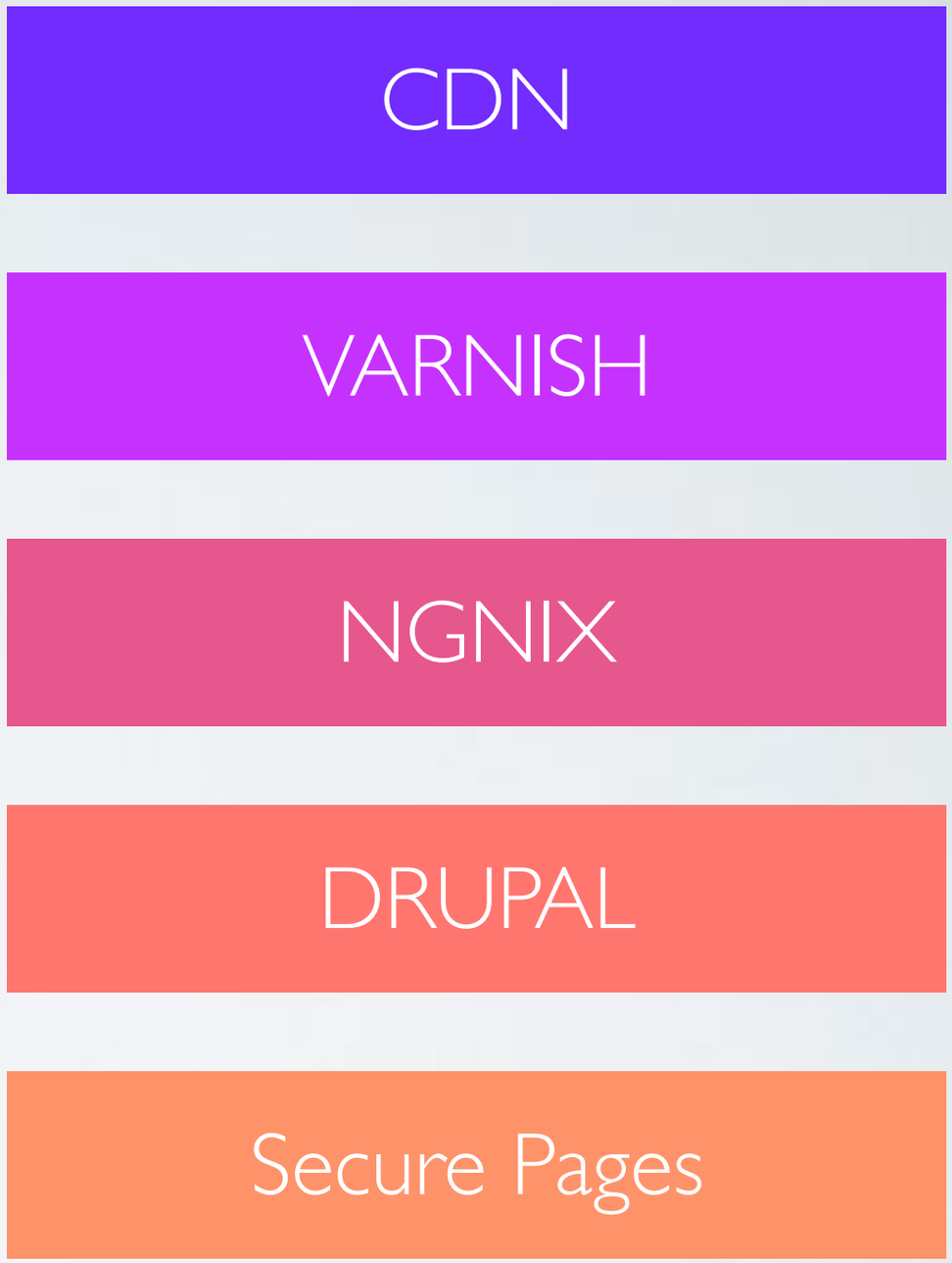
SSL

Setup of the Secure Pages module

Creation of the sub-domain

www

SSL = User Data (Cart, My-Account)



Necessary to port the Secure Pages Domain Access module (securepages_domain).

For submission + redirection of all user forms.

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Secure vs insecure / http vs https

Start development with activating all https support. Define https urls at every beginning! Do think about cross-site scripting and ajax, if urls differ. Secured cookies.

Idea: start thinking secure from the beginning of every project.

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SMOOTH FRONT-END

LA PETITE ROBE NOIRE
EAU DE PARFUM
Mon Nouveau Parfum
DESCRIPTION
FRAGRANCE
SECRETS DE PARFUMEUR
82,00 €
AJOUTER AU PANIER

Home › Parfums › Parfums pour femmes › La Petite Robe Noire › La Petite Robe Noire
LA PETITE ROBE NOIRE
EAU DE PARFUM
Mon Nouveau Parfum
DESCRIPTION
FRAGRANCE
SECRETS DE PARFUMEUR
Je suis absolument indispensable et totalement irrésistible. Je suis la création parfumée Guerlain chic et terriblement glamour.
Ma fragrance est une broderie des plus belles notes "noires" de la parfumerie: Cerise noire, Rose noire, Patchouli, Thé noir.
Mon écrin de verre est le flacon mythique "coeur inversé", revisité avec audace et modernité. Dans sa transparence cristalline, dégradée du noir au rose poudré, je dévoile ma petite robe noire en ombre chinoise, prête à danser!
Vaporisateur 50 ml
82,00 €
Qté 01
AJOUTER AU PANIER
Partager
Pin it
Imprimer

OOOOOPTIMIZATIONS

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ESI

CDN

BLOCS JS

VARNISH

STATIC.GUERLAIN.COM

NGNIX

MEMCACHE

DRUPAL

ENTITY CACHE

VIEWS CACHE

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Never underestimate performance tuning.

Start first Sprint by activating all performance related modules - memcache, entity-cache, adv-agg, Varnish/purge, etc.

Test your deliveries with all those that have been activated, measure load/server responses starting from Sprint 1, force your teams to develop in a performance-oriented way.

Idea: Ecommerce is performance-oriented development.

Did you know that cache-form is a table that grows progressively and never cleans?

Mimics cache storage, but used in another way?

Did you know that Drupal commerce locks the tables, while committing updates? Any intensive Ecommerce sites will experience hard locks in order tables?

Idea: never over-estimate Drupal way, have an eye on everything (logs, tuning, etc,) and give back to the community.

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DRUPAL ?

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MAKE UP FOR EVER

PROFESSIONAL

PARIS

makeupforever.com

From re-use to platform

Countries, Languages, Multi-site system:
100% re-use of modules developed for Guerlain

Import/Export, Workflow: partial re-use

ERP: connectors to SAP or JDEdwards may be partially exchanged

Same platform: features may be easily exchanged

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Number **one** Drupal Integrator in Europe

Johnson & Johnson

EuRail Your Pass. Your Europe.

Slate

MAKE UP FOR EVER PROFESSIONAL – PARIS

GUERLAIN PARIS

SOCIETE GENERALE