



Tax and Customs administration

Meeting Software developers

regarding

Dividend Withholding Tax

Jaarbeurs, Utrecht

October 12, 2016



Opening & Introduction

October 12, 2016



Program

<u>From</u>	<u>To</u>	<u>Item</u>
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09:30	10:00	Reception
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10:00	10:30	Opening & Introduction
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10:30	11:00	Your expectations from this meeting?
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11:00	11:15	Support to software developers
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11:15	11:30	Coffee break
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11:30	12:00	Dutch Withholding Tax business proces
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12:00	12:45	Lunch
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12:45	13:30	Information about XBRL
13:30	14:15	Connection to Digipoort
14:15	15:15	What is needed for connection to Digipoort?
15:15	15:45	Pause
15:45	17:00	The technique behind the connection to Digipoort
17:00	17:30	Demonstration
17:30	18:00	Review & Closing



Your expectations from this meeting?



Tax and Customs administration

Team OSWO

**Support to
Software
Developers**



Community Software Ontwikkelaars (CSO)

at www.oswo.nl

Brochure OSWO: Services to software developers



Services of OSWO

- **Information** (CSO: Releases, Latest news section)
- **Support servicedesk** (servicedesk@oswo.nl)
- **Test facility ValidatieTestService** (VTS)



Home > Teruggaaf Dividendbelasting / Dividend Withholdin...



Testfacilities

 [ValidatieTestService](#)

Vragen aan de Servicedesk

[Vragen aan de Servicedesk](#)

Information

 [Brochure OSWO \(English version\)](#)

Laatste nieuws

6 sep, 15:41
(OSWO) Belastingdienst

Teruggaaf Dividendbelasting / Dividend Withholding Tax

Algemeen

Teruggaaf Dividendbelasting / Dividend Withholding Tax



[Nieuwsforum](#)

Vragen aan de servicedesk

Gebruik dit communicatiemiddel als u uw vraag expliciet aan de servicedesk van team OSWO wilt stellen. De collega's binnen uw bedrijf die toegang hebben tot de community kunnen uw vraag of opmerking en de reactie daarop wel lezen, maar alle andere communitygebruikers niet.

U kunt ook uw vraag of opmerking per email sturen naar servicedesk@oswo.nl

Binnen 2 werkdagen krijgt u een reactie op uw vraag of opmerking.

Vragen aan de servicedesk (Questions for the servicedesk of team OSWO)

Use this communication instrument if you have any questions explicit for the servicedesk of team OSWO. Only your colleagues within your company with access to the community are able to read your question or comment and the response to it. Other community members are not able to read the question or the response.

You can also sent your question or comment by email to servicedesk@oswo.nl

October 12, 2016



Teruggaaf Dividendbelasting / Dividend Withholding Tax

 [Release Dividend Withholding Tax TDi \(NT10.2\) Version 02](#)

 [Release Dividend Withholding Tax TDi \(NT10.2\) Version 02](#)

 [Known-errorlist v1.0 Gegevensspecificatie TDi Verzoek \(Specification of data regarding DWT Collective Reclaim](#)

 [Known-errorlist v1.0 Gegevensspecificatie TDi Klantregistratie \(Specification of data regarding DWT Registration BO\)](#)



Quick reference of all available SBR Information

October 12, 2016



Coffee break



October 12, 2016



Tax and Customs administration

New process

Dividend Withholding Tax business proces

October 12, 2016



What's New

- ✓ **No** longer paper, **only** digital reclaims
- ✓ **Individual** reclaims by **DTA-Portal**:
 - ✓ Only new beneficiaries
 - ✓ Registration as a authorised representative
 - ✓ Reclaim on behalf of your beneficiaries
- ✓ **Collective** reclaims by **E-file**:
 - ✓ XBRL by Digipoort: **from 01-07-2017**
 - ✓ Textfile by email: **until Q4 2017**



What changed in paperfile

- **Registration by DTA-Portal**
- **Reclaim form by DTA-Portal**
- **Validity**



Registration by DTA-Portal

First of all; registration

- authorised representative**
- name of your company**
- contact (only one)**

3 letters

- confirmation**
- userid (Dutch letter without contact)**
- password (Dutch letter without contact)**



Reclaim form by DTA-Portal

- No possibility to upload attachements**
- Evidence in your possession**
- Immediately to be send if we ask (2 weeks)**
 - certificate of residence \ tax exemption certificate**
 - statute**
 - dividendnotes**



Validity

- **Because we are in transition situation we accept certificate of residence /tax exemption certificates issued in 2016 or 2015 also for previous years.**
- **For benefits from 2016 the certificate of residence / tax exemption certificate may not be issued two years before the year of benefit.**



Short impression DTA-Portal



Teruggaaf dividendbelasting

Application for refund of the dividend tax
Teruggaafverzoek 090003032014-23-03-2016 12:56

06-10-2016
We have accepted your application for refund

06-10-2016
We have received your application for refund

Teruggaafverzoek dividendbelasting
Teruggaafverzoek 090003032016-01-01-2016 12:12

06-10-2016
We hebben uw teruggaafverzoek ontvangen

Registration for refund of dividend tax
Registratieaanvraag 090003032016-01-01-2016 12:12

06-10-2016
We have accepted your request for change

06-10-2016
We have received your request for change

06-10-2016
We have approved your request for registration

[Submit an application for refund of the dividend tax](#)

Distributing company/ companies and dividend tax to be refunded
State the company/ companies from which you received a dividend distribution in 2013.

ALGEMEEN

Distributing company
Name of distributing company: [Remove](#)

☒ Select the name from a list
☐ Fill in the name yourself (the name is not listed)

Details of distributing bank
BIC (optional):
IBAN (optional):

Dividend tax
Date of dividend distribution:

Dividend per share
Number of shares:

Gross amount of dividend
Dividend per share:

Gross amount of dividend
Gross amount of dividend:

Dividend tax to be refunded
Dividend tax to be refunded:

ALGEMEEN

Distributing company
Name of distributing company: [Remove](#)

☒ Select the name from a list
☐ Fill in the name yourself (the name is not listed)



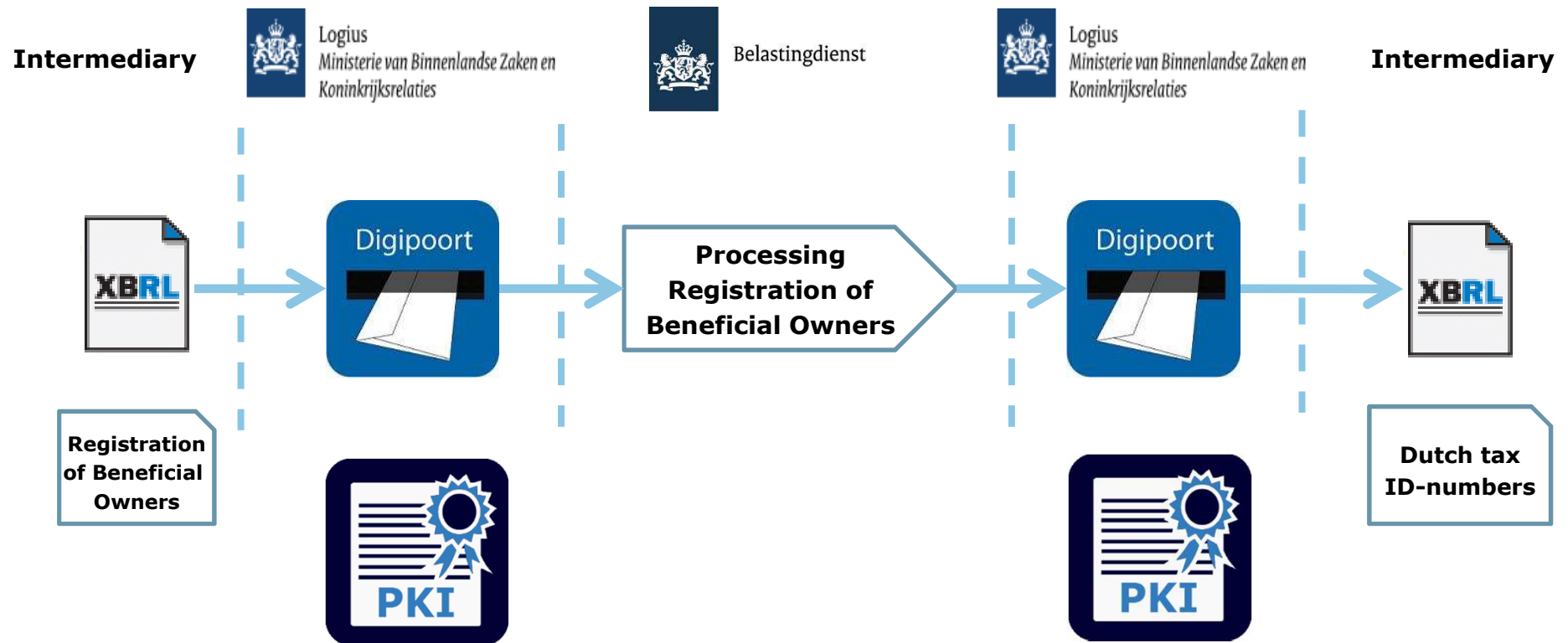


What's the new process by E-file:

- System-to-system interaction**
- New dataset**
- Identification and registration of Beneficial Owner in advance**
- Correction policy on individual records**
- Verification and corrections first, than payment**

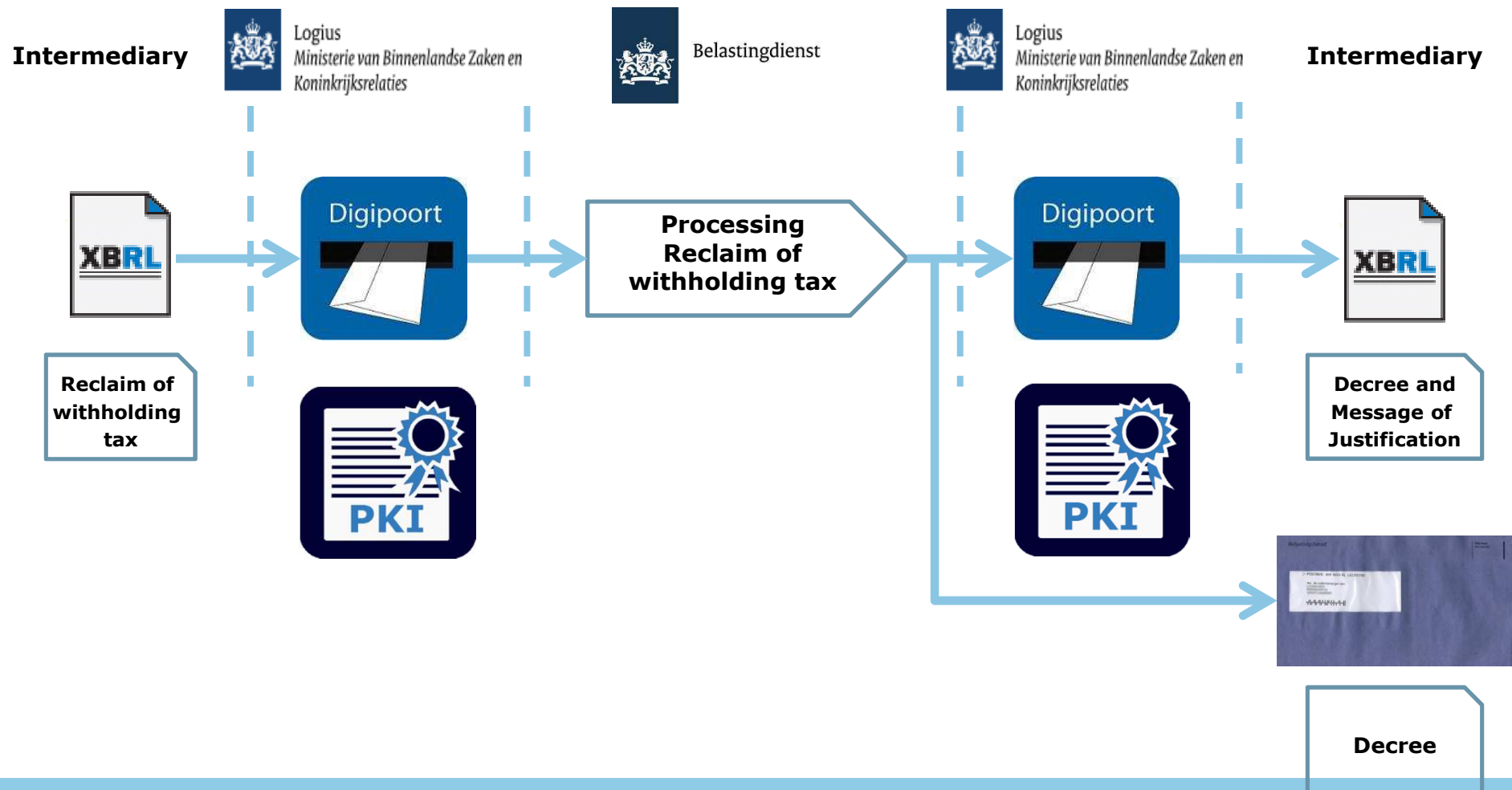


Registration Beneficial Owners





Reclaim of withholding tax





New dataset: Registration Beneficial Owner

Beneficial Owner:

- **Dutch Tax identification number**
- **Name**
- **Adress**
 - **street/PO box,**
 - **house number, house number suffix, extra address**
 - **postal code**
 - **town/city**
- **Country of residence**
- **Tax identification number (TIN, optional)**
- **Indication Natural Person (Y/N)**
- **Indication Full Refund (Y/N)**



New dataset: Reclaim withholding Tax

Grand Total Reclaim:

- **Total gross amount of dividend tax**
- **Total amount of the refund of dividend tax**
- **Year**

Beneficial Owner:

- **Dutch Identification number**



New dataset: Reclaim withholding Tax

Dividend payment per share:

- **ISIN**
- **Name Issue**
- **BIC Custodian Depotholder**
- **Depot/account number**
- **Amount of dividend pro share**
- **Paydate**
- **Number of shares**
- **Refund dividend withholding tax**



XBRL-files

Registration Beneficial Owner:

- ✓ DWT_Registration_BO
- ✓ DWT_Confirmation_BO

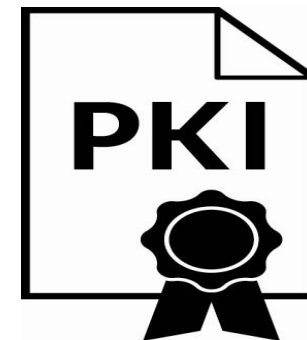
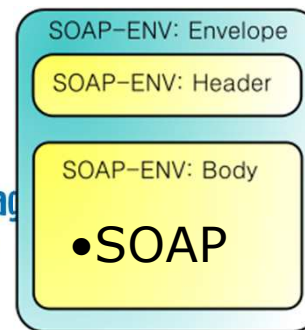
Reclaim Withholding Tax:

- ✓ DWT_Collective_Reclaim
- ✓ DWT_Collective_Decree



System-to-system requirements (SBR)

SBR: Simplification and standardisation of financial reports



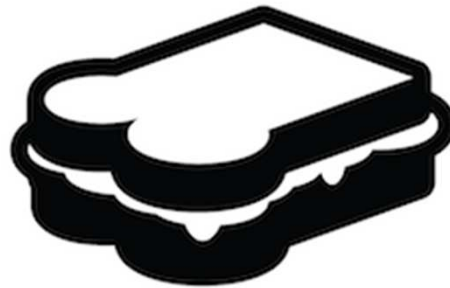


Questions and final remarks





Lunch



October 12, 2016



Information about



October 12, 2016



Standard Business Reporting Programma
Een initiatief van de Nederlandse overheid

DWT Session
12 october 2016

Information about XBRL

Jos van der Heiden
Logius – Centre for Standards



XBRL - What will we discuss?

1. Taxonomy – the basics
2. Instance Document
3. Taxonomy – ‘advanced’ topics
4. (Architecture)



eXtensible Business Reporting Language

- eXtensible
 - Allows for several types of extensions
 - Languages
 - Data to be reported
 - Reporting constructs
- Business Reporting
 - Essentially reporting of **any** business data
 - Commonly used for financial and fiscal reporting
- Language
 - Syntax for
 - Taxonomies – semantics, categorization, business rules, validation, presentation
 - Instances
- “XML on steroids” 😊



Taxonomy – Basics



What is a taxonomy?

- Defines the semantics of a (set of) report(s) in terms of
 - Concepts: The data elements that can be reported
 - name; type; definition; alternative names; ...
 - Relationships
 - General – Special; Essence – Alias;
 - References
 - Law books; authoritative publications; ...
 - Presentation
 - Tree structure; Table structure;
 - Formula
 - Validation; Fact creation;

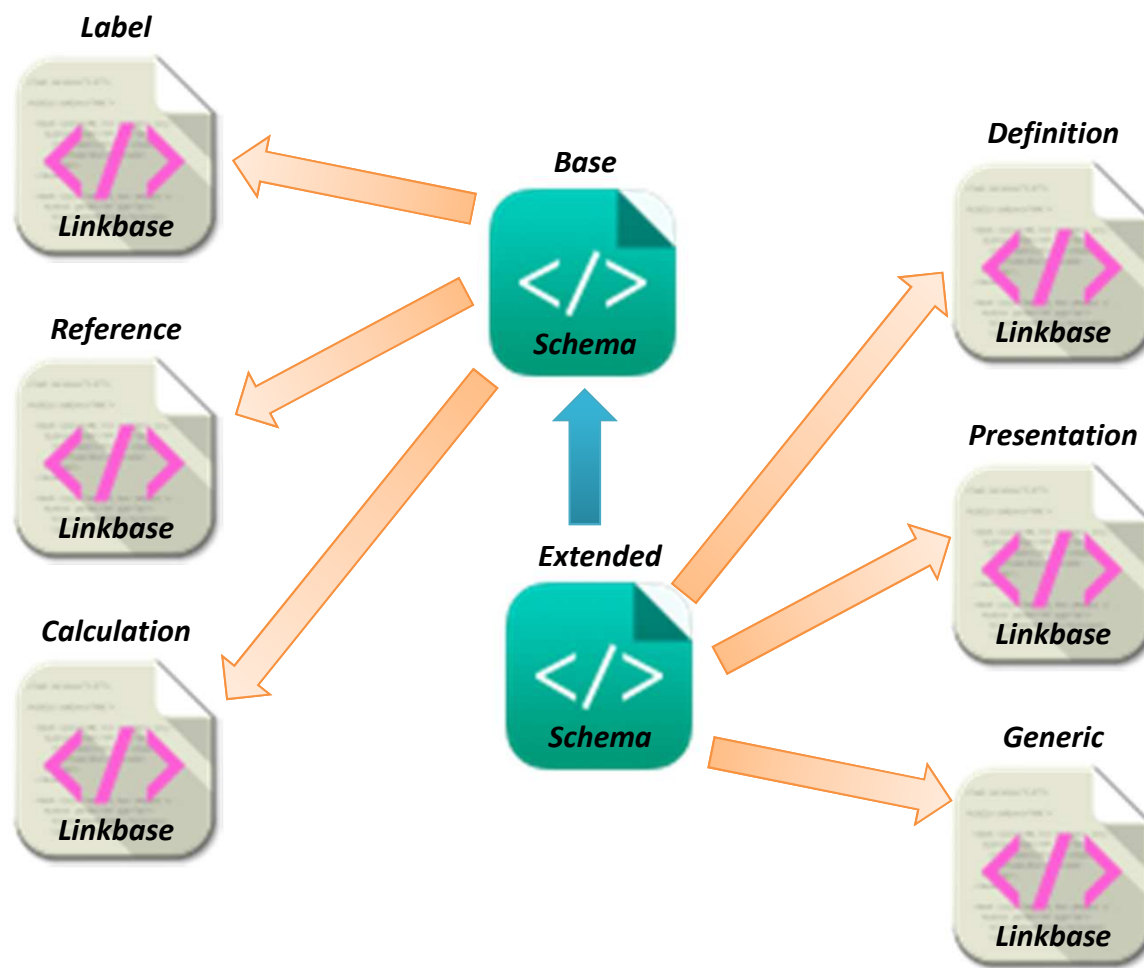


What does a taxonomy consist of?

- The core information about concepts is defined in an XML Schema:
 - name; type; period type; credit/debit; required; structure
- All other information to a taxonomy (or instance) is added through linkbases (xml files):
 - Defines links between concepts and other concepts or resources
 - Definition; Calculation; Presentation; Label; Reference; Footnote; Generic
- Arcroles to further identify the type of information in links:
 - label; verboseLabel; totalLabel; ...
 - definitionRef; presentationRef; ...
 - general-special; essence-alias; dimension-member; ...
- Roles to group relations in sets:
 - By report (section), functionality, ...
- Linkbases form the main extension mechanism



Structure of a taxonomy – an overview





Concepts

- All facts that are reported
 - Id
 - Name
 - Type
 - Period type
 - Balance
 - Abstract
 - structure
 - Items – interpreted independently
 - Tuples – group of related concepts
 - Allows multiple occurrences of concept



Taxonomy – Example of concept

```
<xs:element id="bd-bedr_ValueAddedTaxPayablesFiscal" name="ValueAddedTaxPayablesFiscal" type="nl-types:monetaryNoDecimalsItemType" substitutionGroup="xbrli:item" xbrli:periodType="instant" xbrli:balance="credit" abstract="false" nillable="false" />
```

```
<link:label xlink:label="bd_sample_label_nl" xml:lang="nl" xlink:role="http://www.xbrl.org/2003/role/label" xlink:type="resource" id="bd_90ae7326d8994095a942e00e2ef5c189">Schulden omzetbelasting fiscaal</link:label>  
<link:loc xlink:href="/bd-bedrijven.xsd#bd-bedr_ValueAddedTaxPayablesFiscal" xlink:label="bd-bedr_VATPF_loc" xlink:type="locator" />  
<link:labelArc xlink:from="bd-bedr_VATPF_fiscal_loc" xlink:to="bd_sample_label_nl" xlink:arcrole="http://www.xbrl.org/2003/arcrole/concept-label" xlink:type="arc" />
```

```
<link:loc xlink:href="/bd-bedrijven.xsd#bd-bedr_ValueAddedTaxPayablesFiscal" xlink:label="bd-bedr_VATPF_loc" xlink:type="locator" />  
<link:referenceArc xlink:from=" bd-bedr_VATPF_loc " xlink:to="bd_sample1_ref" xlink:arcrole="http://www.xbrl.org/2003/arcrole/concept-reference" xlink:type="arc" />  
<link:referenceArc xlink:from=" bd-bedr_VATPF_loc " xlink:to="bd_sample2_ref" xlink:arcrole="http://www.xbrl.org/2003/arcrole/concept-reference" xlink:type="arc" />  
<link:reference xlink:label="bd_sample1_ref" xlink:role="http://www.xbrl.org/2003/role/reference" xlink:type="resource" id="bd_sample1">  
  <ref:Name>belastingdienst taxonomie definities.pdf</ref:Name>  
  <ref:Paragraph>119443</ref:Paragraph>  
  <ref:Chapter>gsp definities</ref:Chapter>  
</link:reference>  
<link:reference xlink:label="bd_sample2_ref" xlink:role="http://www.xbrl.org/2003/role/reference" xlink:type="resource" id="bd_sample2">  
  <ref:Article>3.25</ref:Article>  
  <ref:Name>Wet IB2001</ref:Name>  
</link:reference>
```

- Concept
 - Name: ValueAddedTaxPayablesFiscal
 - Type: monetary no decimals
 - Label: Schulden omzetbelasting fiscaal
 - Referentie: Paragraaf 119443, Hoofdstuk “gsp definities” van “belastingdienst taxonomie definities.pdf”
 - Referentie: Artikel 3.25 van Wet IB2001



Taxonomy – What does it look like?

■ Concept

```
<element id="sample_nr_employees_total" name="nr_employees_total" xbrli:periodType="instant" type="xbrli:nonNegativeIntegerItemType" substitutionGroup="xbrli:item" nillable="true" />
```

■ Linkbase reference

```
<annotation>
  <appinfo>
    <link:linkbaseRef xlink:type="simple" xlink:href="sample-2006-01-01-label.xml"
      xlink:role="http://www.xbrl.org/2003/role/labelLinkbaseRef"
      xlink:arcrole="http://www.w3.org/1999/xlink/properties/linkbase" />
    <link:linkbaseRef xlink:type="simple" xlink:href="sample-2006-01-01-presentation.xml"
      xlink:role="http://www.xbrl.org/2003/role/presentationLinkbaseRef"
      xlink:arcrole="http://www.w3.org/1999/xlink/properties/linkbase" />
  </appinfo>
</annotation>
```

■ Label link

```
<loc xlink:type="locator" xlink:href="sample-2006-01-01.xsd#sample_nr_employees_total"
  xlink:label="concept_nr_employees_total" />
<label xlink:type="resource" xlink:label="label_nr_employees_total"
  xlink:role="http://www.xbrl.org/2003/role/label" xml:lang="en">Total number employees</label>
<labelArc xlink:type="arc" xlink:arcrole="http://www.xbrl.org/2003/arcrole/concept-label"
  xlink:from="concept_nr_employees_total" xlink:to="label_nr_employees_total" />
```



Instance Document

Standard Business Reporting Programme
A Dutch Government initiative



What is an instance document?

- The actual report
- Contains
 - Reference to taxonomy (and optionally linkbases)
 - Contexts
 - Reporting entity
 - Period
 - Segment / Scenario
 - Units
 - Facts
 - The value for a given concept, referring to context and unit



Examples – Instance

■ Context

```
<context id="c_start">  
<entity> <identifier scheme="http://www.statistics.org">12-34567</identifier> </entity>  
<period> <instant>2005-01-01</instant> </period>  
</context>
```

■ Unit

```
<unit id="u_person"> <measure>Person</measure> </unit>
```

■ Fact

```
<s:nr_employees_total contextRef="c_start" unitRef="u_person" decimals="0">35</s:nr_employees_total>  
<s:nr_employees_male contextRef="c_start" unitRef="u_person" decimals="0">23</s:nr_employees_male>
```



Taxonomy – ‘Advanced’ Topics



Dimensions -1-

- By country
- By product
- By departement
- By kind of ...
- ...

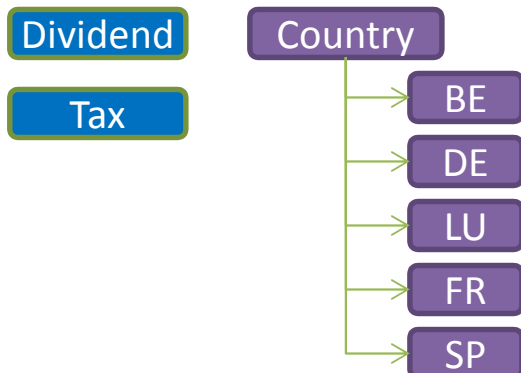
Taxonomy: concepts

Dividend BE	Tax BE
Dividend DE	Tax DE
Dividend LU	Tax LU
Dividend FR	Tax FR
Dividend SP	Tax SP

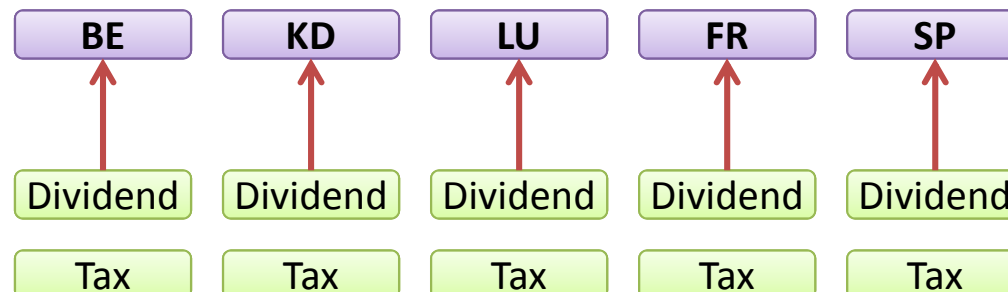
Report: facts

Dividend BE	Tax BE
Dividend DE	Tax DE
Dividend LU	Tax LU
Dividend FR	Tax FR
Dividend SP	Tax SP

Taxonomy: concepts & dimensions



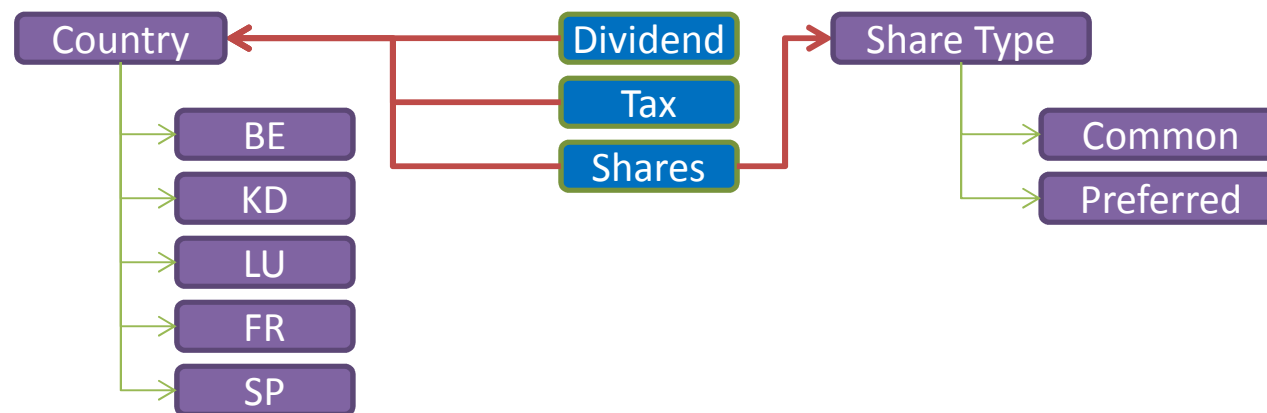
Report: facts in context





Dimensions -2-

- A structured way to define / declare:
 - Allowed values
 - Allowed combinations
 - Defineable per concept / report
- Validation based on this definition





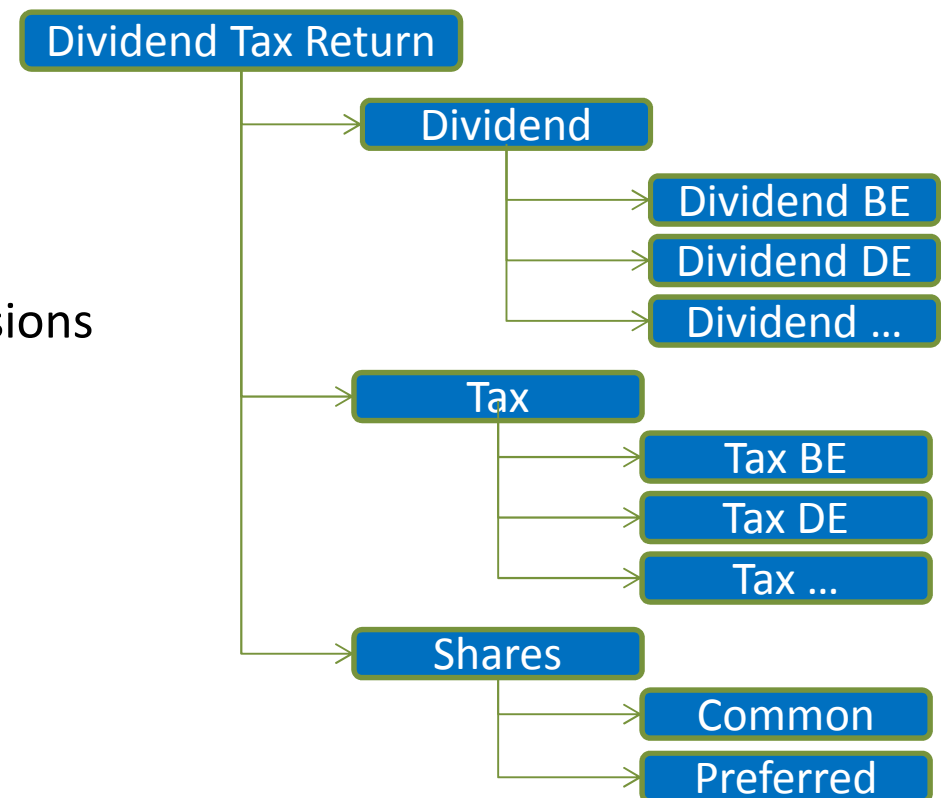
Business Rules

- Define/declare rules on contents of a report
 - $\text{Endvalue} = \text{Startvalue} + \text{mutations}$
 - IF reporting Y THEN X must be reported as well
 - ...
- Validation of the contents of a report



Hierarchical presentation -1-

- Define a 'tree' structure in taxonomy
 - 'parent – child' relationships between concepts
 - Optional 'titles' to group
 - No actual layout definition
 - No standard way to handle dimensions





Hierarchical presentation -2-

- Actual report

- Reported facts

Concept	Date	Value
Dividend BE	01/01	10
Dividend BE	31/12	15
Dividend DE	01/01	20
Dividend DE	31/12	17
...		
Tax BE	01/01	30
Tax BE	31/12	25
Tax DE	01/01	40
Tax DE	31/12	45
...		
Common Shares	01/01	20
Common Shares	31/12	25
Preferred Shares	01/01	30
Preferred Shares	31/12	35



Hierarchical presentation -3-

■ Report presentation		01/01	31/12
■ Reported facts for concepts in hierarchy	Dividend Tax Return		
	<i>Dividend</i>		
	Dividend BE	10	15
■ Layout application specific, one example in separate columns for each date	Dividend DE	20	17
	...		
	<i>Tax</i>		
	Tax BE	30	25
	Tax DE	40	45
	...		
	<i>Shares</i>		
	Common	20	25
	Preferred	30	35



Table presentation

- Define a 'table' structure in taxonomy

- Axes
- Multiple headers
- Dimensions
- Totals
- Layout determined by definition

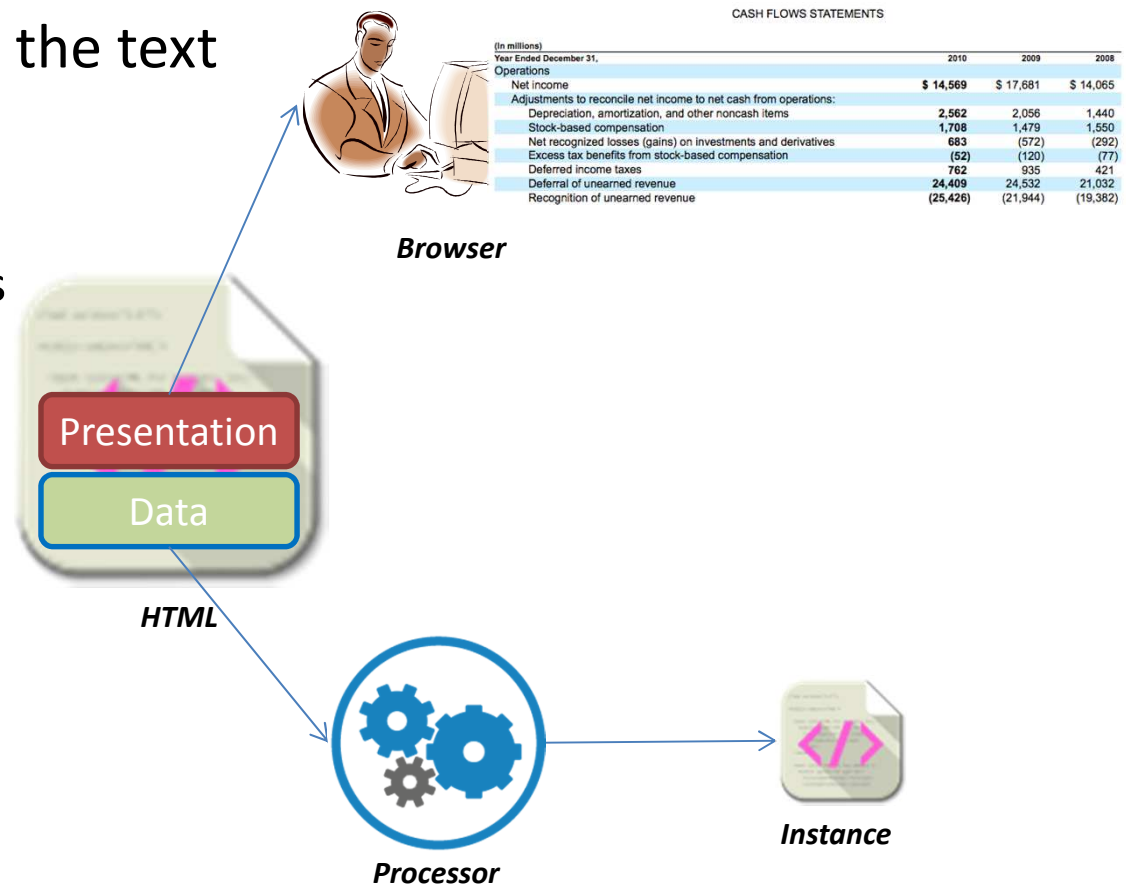
Country	BE KD LU FR SP	Dividend	Tax	Shares	
				Common	Preferred



Formatted text - Inline XBRL

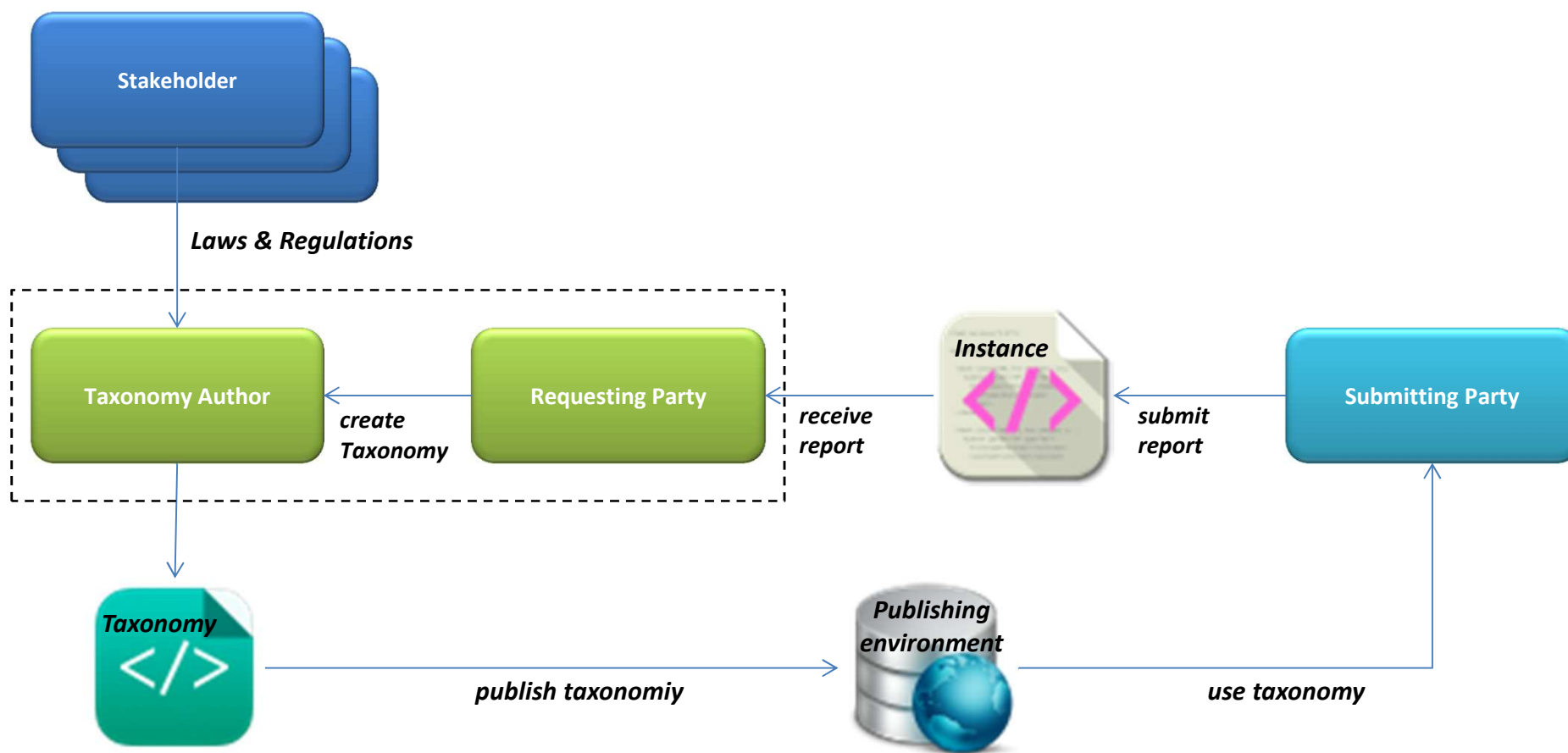
- HTML page with facts in the text

- Requires extra syntax
- User readable
- Requires extraction of facts for automated processing



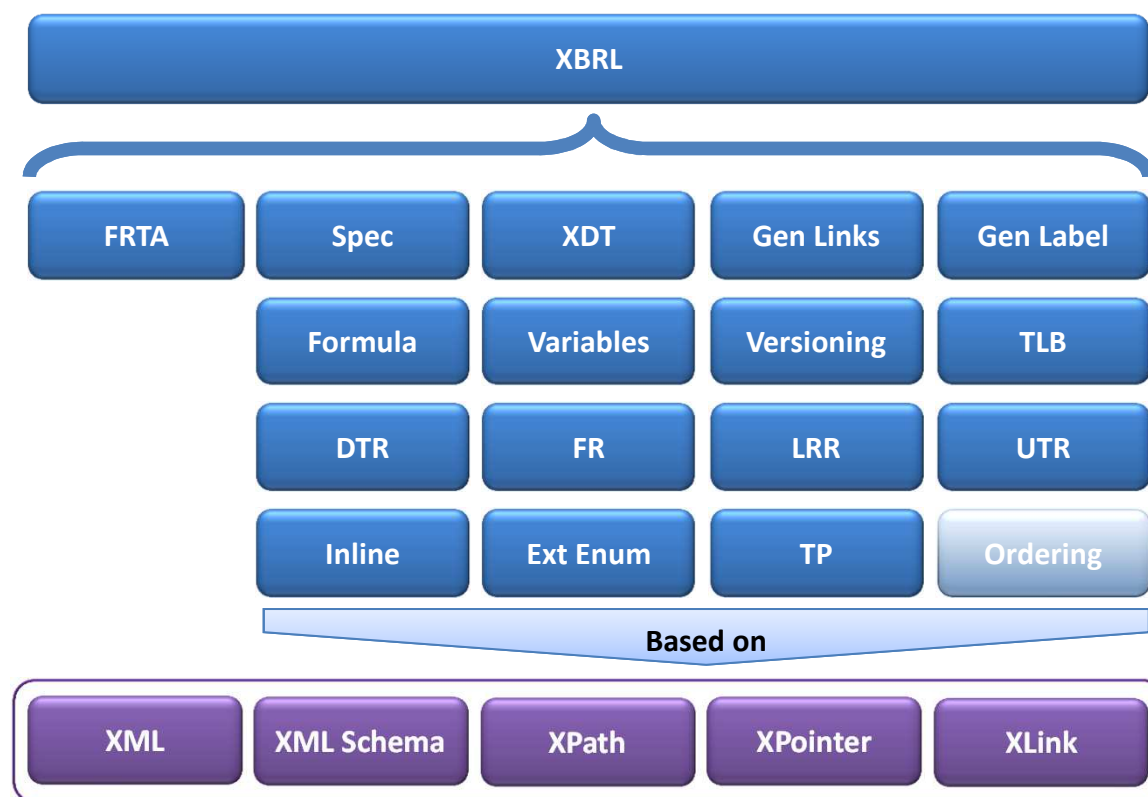


Process





XBRL as compound standard



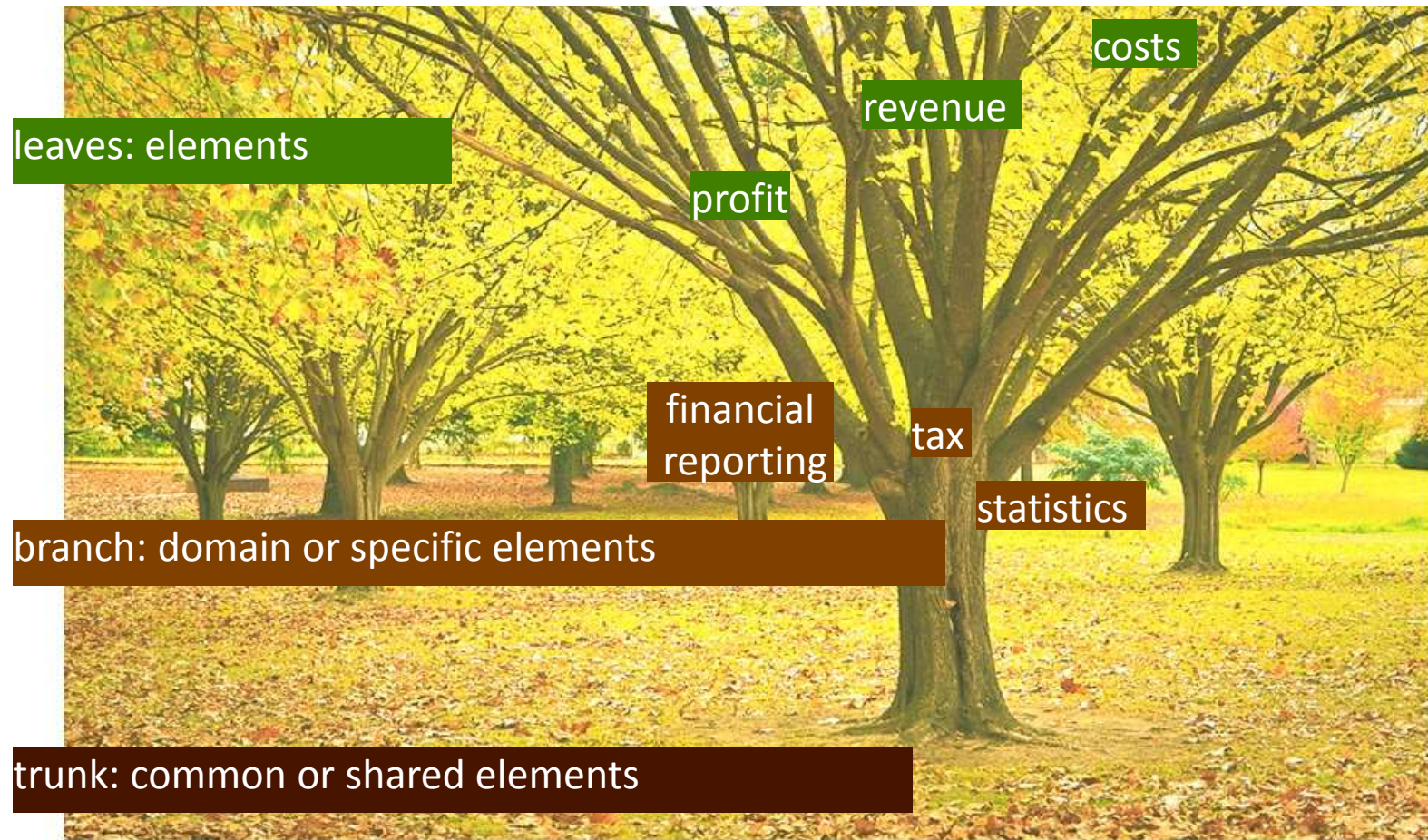


Architecture

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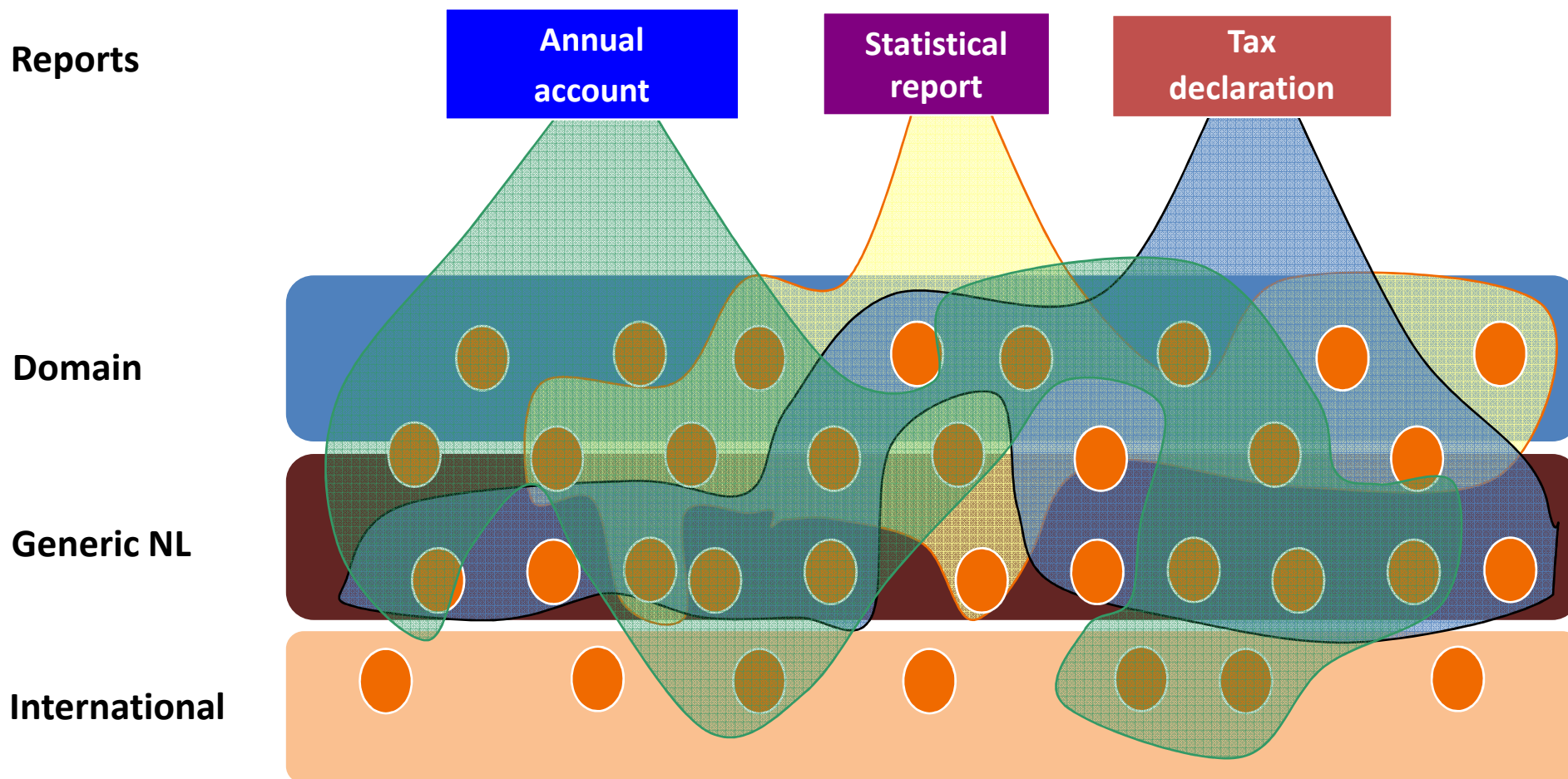


“The taxonomy is like a tree”





Harmonisation and standardisation





XBRL taxonomy architecture

- Because the XBRL spec. 2.1 is flexible you have many solutions for one problem
 - multi domain
 - multi agency

- XBRL projects have different goals. We believe that taxonomy design should be based on our project goals.
 - glue the taxonomy pieces together
 - 'plug and play' new extensions ('branches')



Core taxonomy and extensions

- Key data processes
 - Adding new domains
 - Normalization
 - Harmonization



Re-use



Little re-use



Questions?



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Digipoort

- Standard Business Reporting
- Dividend Withholding Tax

October 12, 2016



Introductie



Jasper Misset

Connection team
EBPI

Delivers support to organisations with setting up a connecting to
Digipoort



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Koninkrijksrelaties*

Digipoort

- Why use Digipoort?
- What is Digipoort?
- How to exchange messages with Digipoort?
- Certificates



Why use Digipoort?

Why Digipoort?

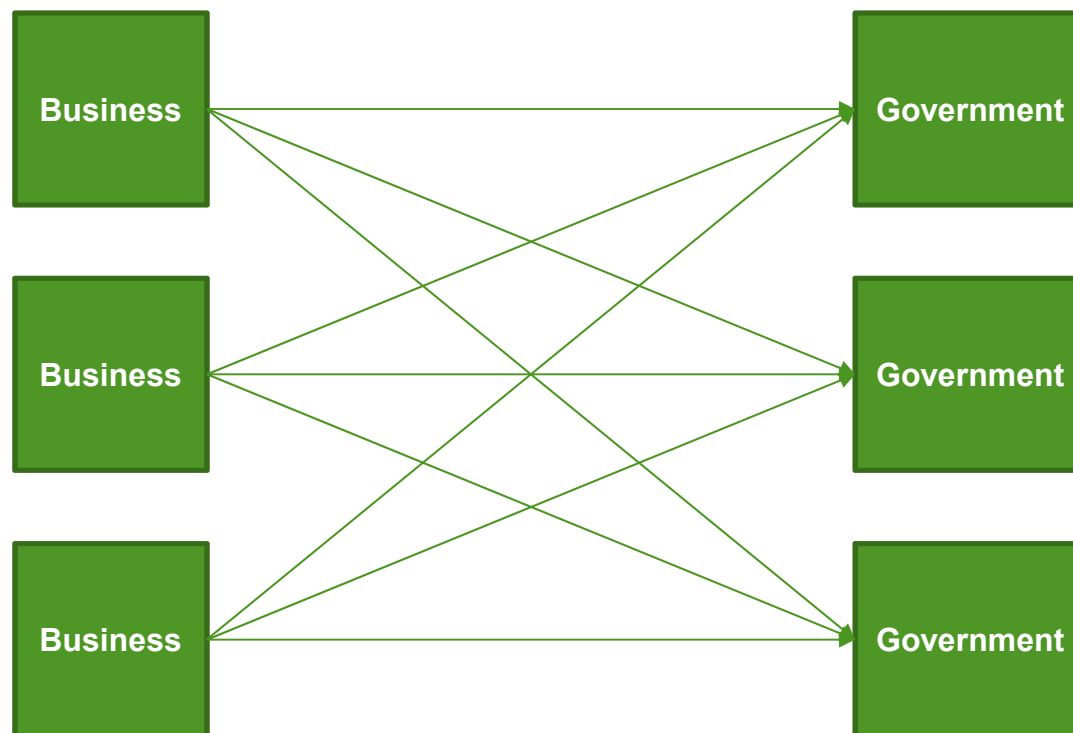
Electronic messaging

- Fast
- Secure
- Reliable
- Efficient



Why use Digipoort?

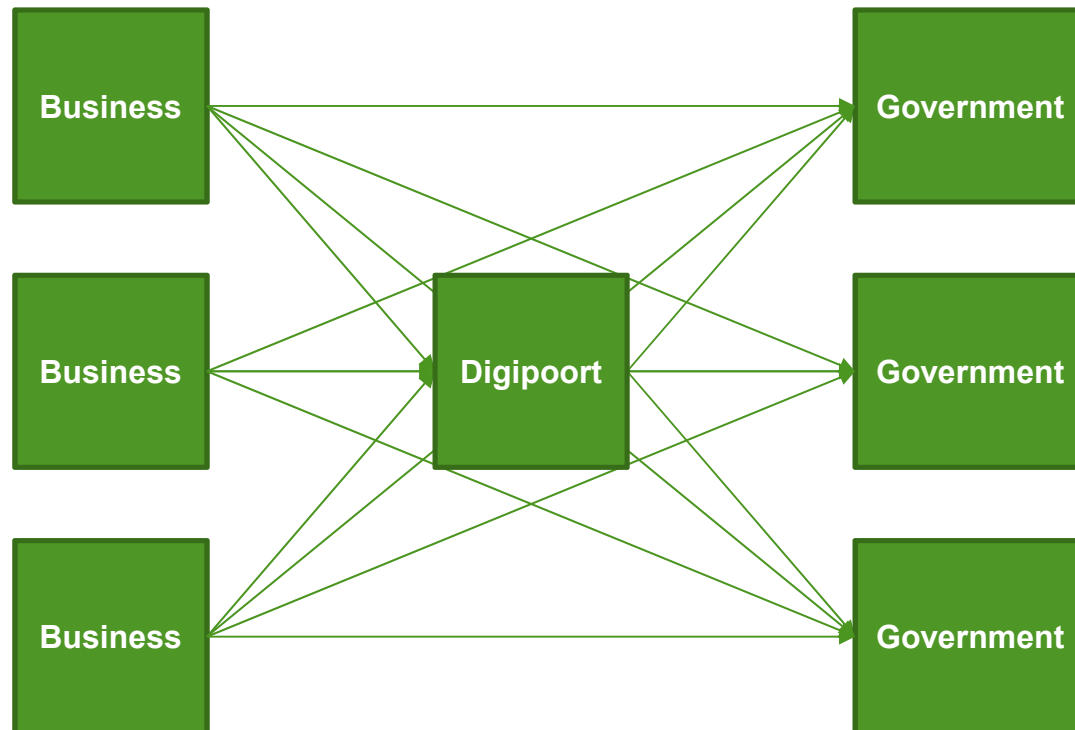
Without Digipoort





Why use Digipoort?

With Digipoort





Why use Digipoort?

Standardisation





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What is Digipoort?

October 12, 2016



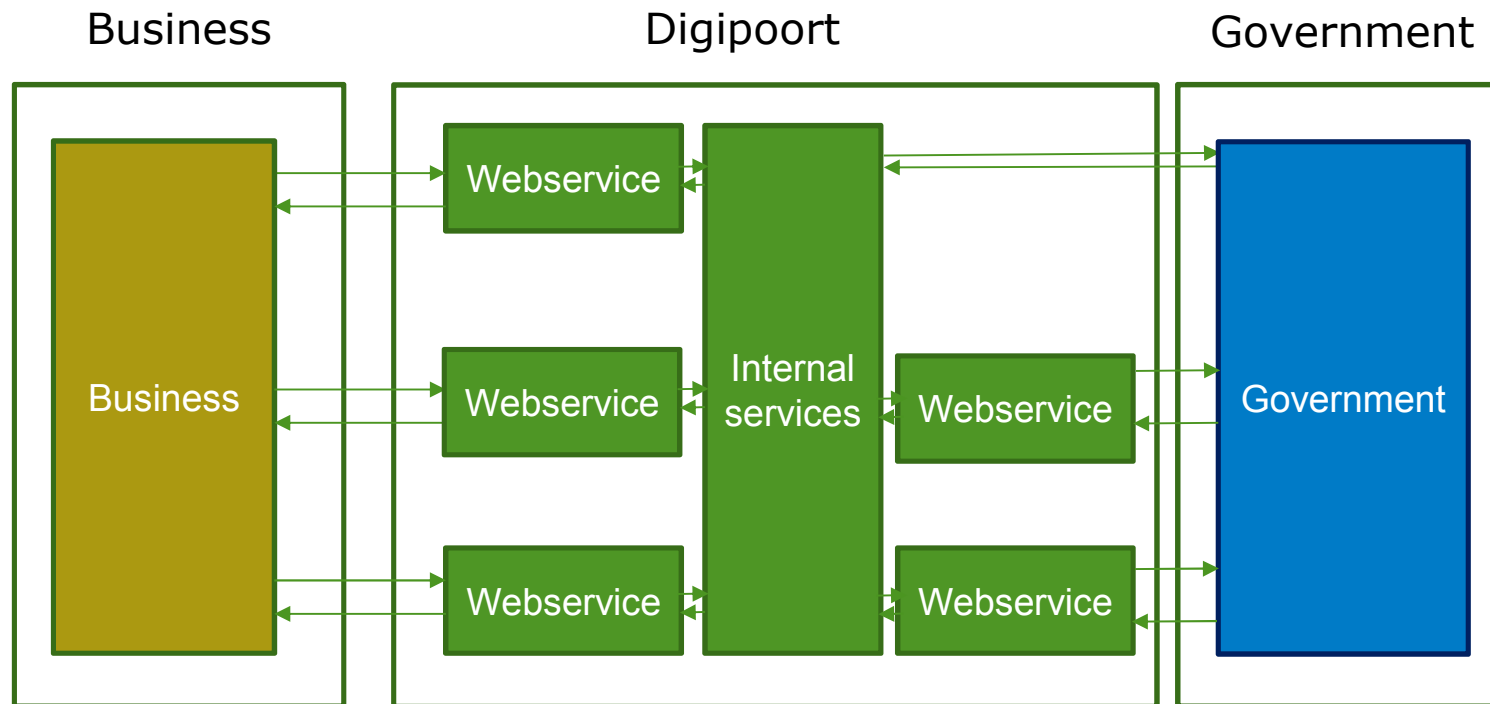
What is Digipoort?

Electronic postoffice

- Primarily between businesses and government
- Webservices
- Internal Services (e.g. XBRL validation)
- Open standards (e.g. SOAP, XML, HTTPS)

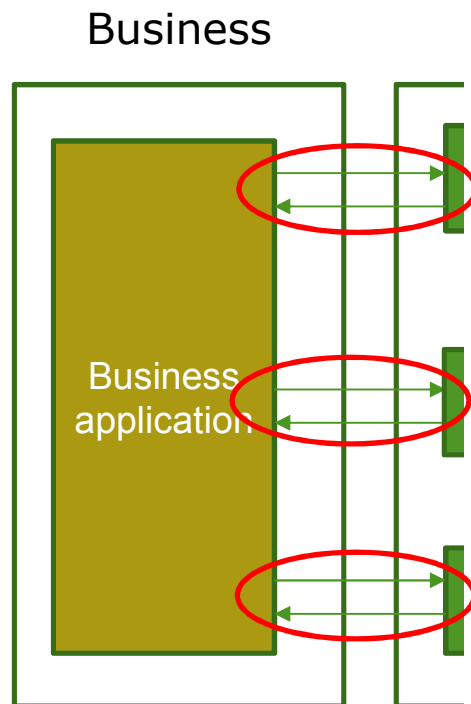


What is Digipoort?





What is Digipoort?

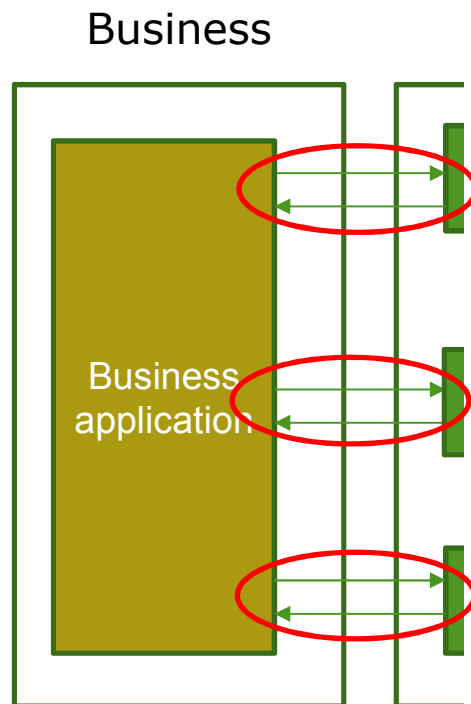


Transport layer:

- TCP/IP
- HTTPS
- Two-way TLS (mutual trust)
- Synchronous



What is Digipoort?



Message layer:

- SOAP
- XML
- WS-Security
- WS-Addressing



Webservices

Interaction between softwaresystems

Open standards

- HTTPS
- XML



Webservices

WUS interface

- **WSDL**
 - *Technical description of the webservice*
- **UDDI**
 - *Discovery of the webservice*
- **SOAP**
 - *Messaging using webservices*

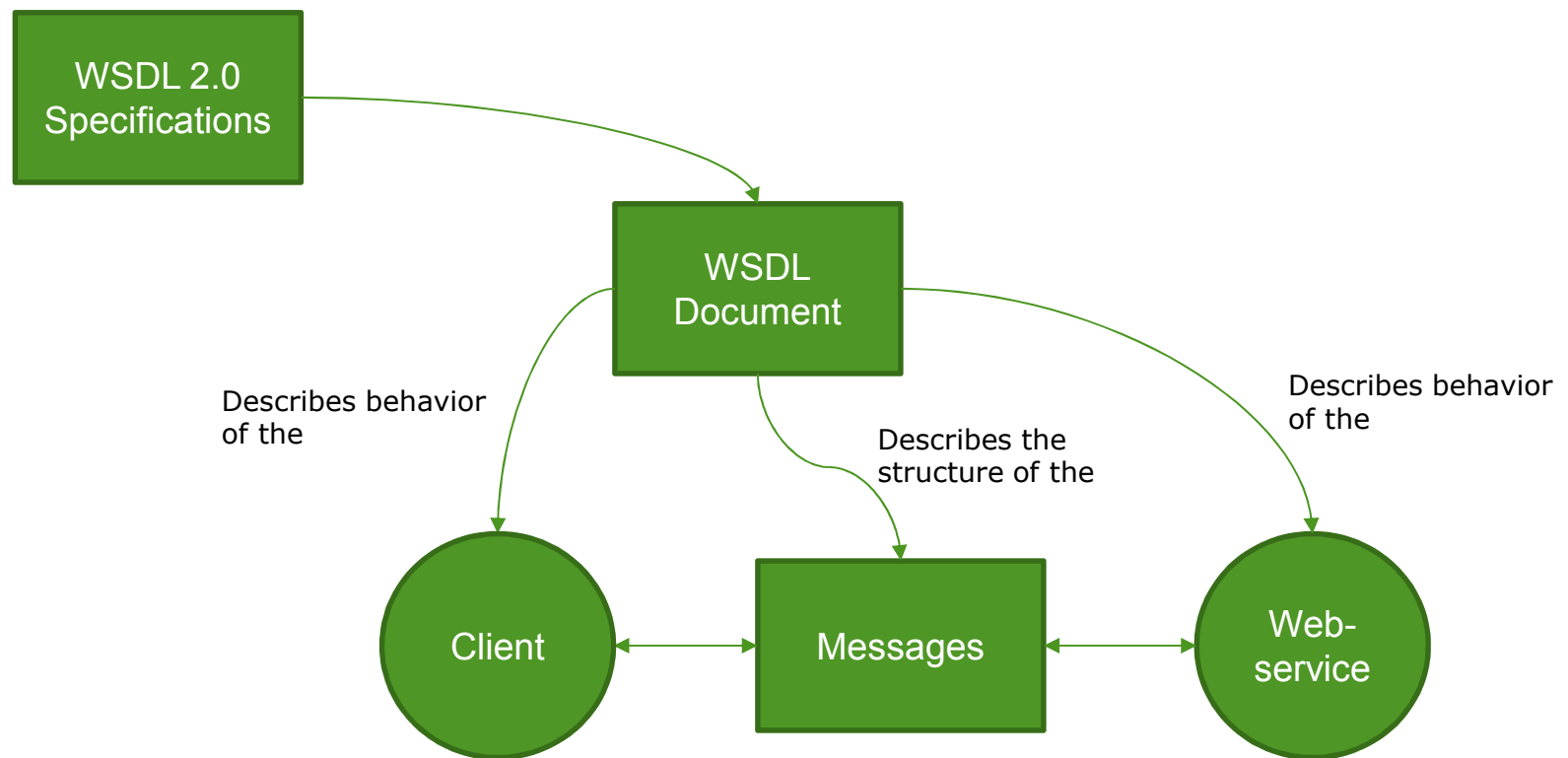
WS-Security

WS-Addressing



Webservices

WSDL





Webservices

SOAP

Simple Object Access Protocol

- Communication
 - ...in xml
 - ...between softwaresystems
 - ...over HTTP or HTTPS (in our case, HTTPS)



Webservices

WS-Security

XML signature

- Integrity
 - Altering message not possible after signature
- Authenticity
 - Message must have been sent by the signer

www.w3.org



Webservices

WS-Addressing

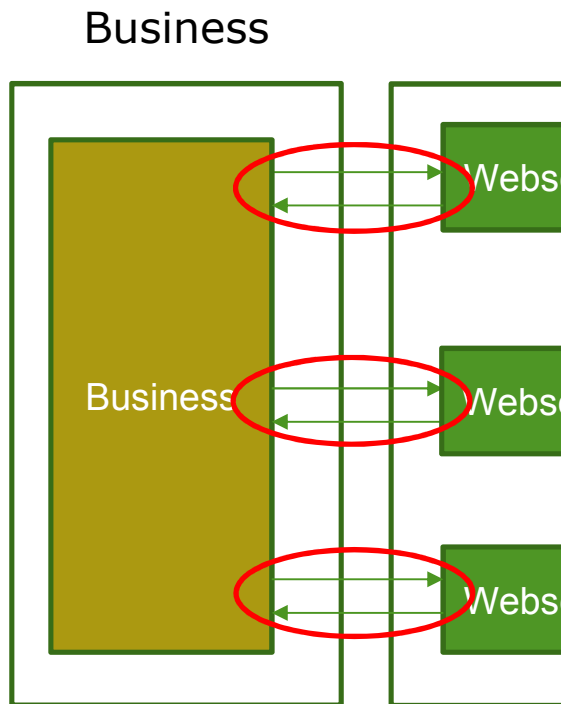
Routing of the messages

- Destination of the message
- Requested action
- Destination of the response
- Correlation between message and response



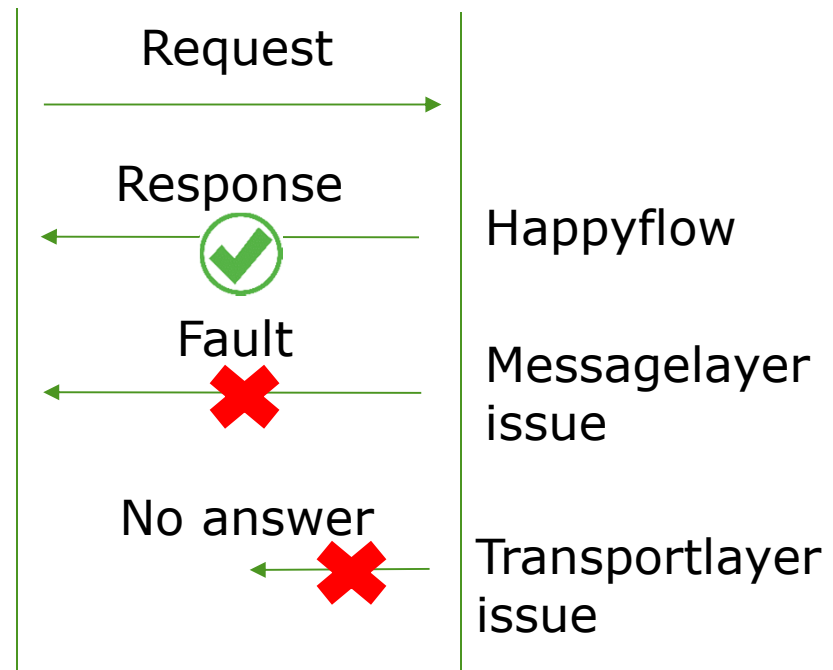
Webservices

Webservice conversation



Client

Webservice





Webservices

Documentation

ENG_Koppelvlakbeschrijving WUS 2.0 Bedrijven_v1.2

- General description of the WUS interface

Service descriptions

- Functional description of a specific webservice

WSDL

- Technical description of the webservice

XSD

- XML schema definition



Webservices

Summary

Open standards

- WSDL
- SOAP
- WS-Security
- WS-Addressing

Documentation



Logius
*Ministerie van Binnenlandse Zaken en
Koninkrijksrelaties*

What do you need to
connect to Digipoort?

October 12, 2016



Connecting to Digipoort

You will need to:

1. Establish a TCP/IP connection
2. Establish a two-way TLS connection
 - a. Using a PKIo services server certificate
3. Send the Request
4. Process the Response



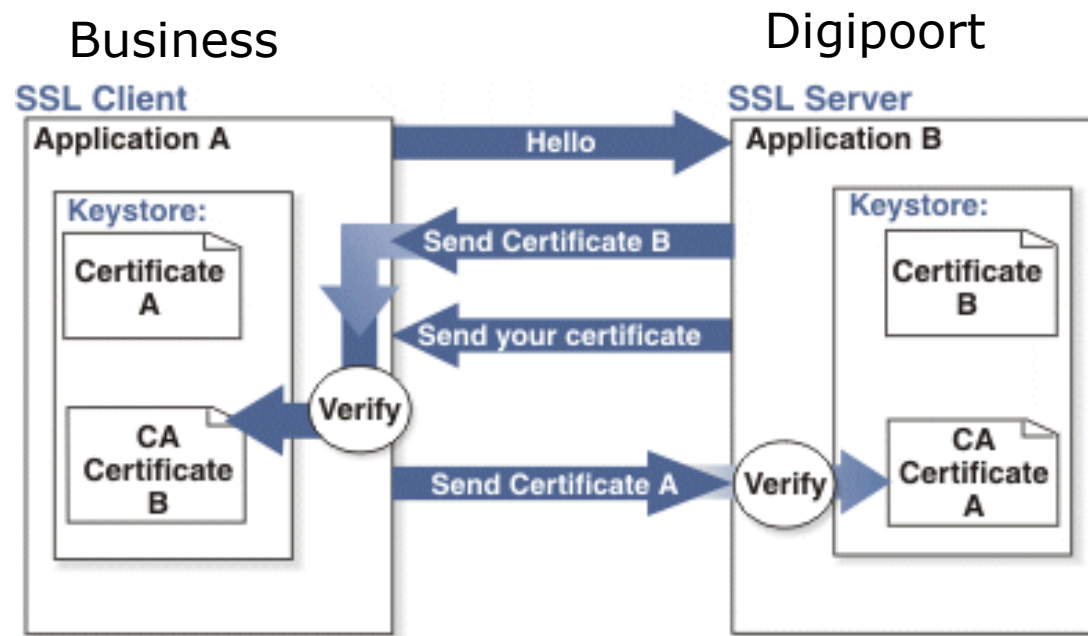
Establish a TCP/IP connection

- Digipoort Webservices listen on port 443
- Digipoort Webservices are open to all IP-addresses
- For our IP-addresses, see the documentation



Establish a two-way TLS connection

- Use TLS1.2
- Use a PKIo services server certificate
 - For testing, Logius testcertificate is ok





Send the SOAP Request

- Use HTTP POST
- Send a SOAP envelope
 - SOAP header containing WS-Security and WS-Addressing
 - SOAP body containing service-specific request



Process the SOAP Response...

- Receive a SOAP envelope
 - SOAP header containing WS-Security and WS-Addressing
 - SOAP body containing service-specific response
- Different webservices have different Responses
 - Process the content of the response message

...or Process the SOAP Fault

- Receive a SOAP envelope
 - SOAP header containing WS-Addressing
 - SOAP body containing service-specific fault
- Different webservices have different Faults
 - Process the content of the fault message



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Certificates

- What is a certificate?
- Obtaining a certificate
- Usage within Digipoort

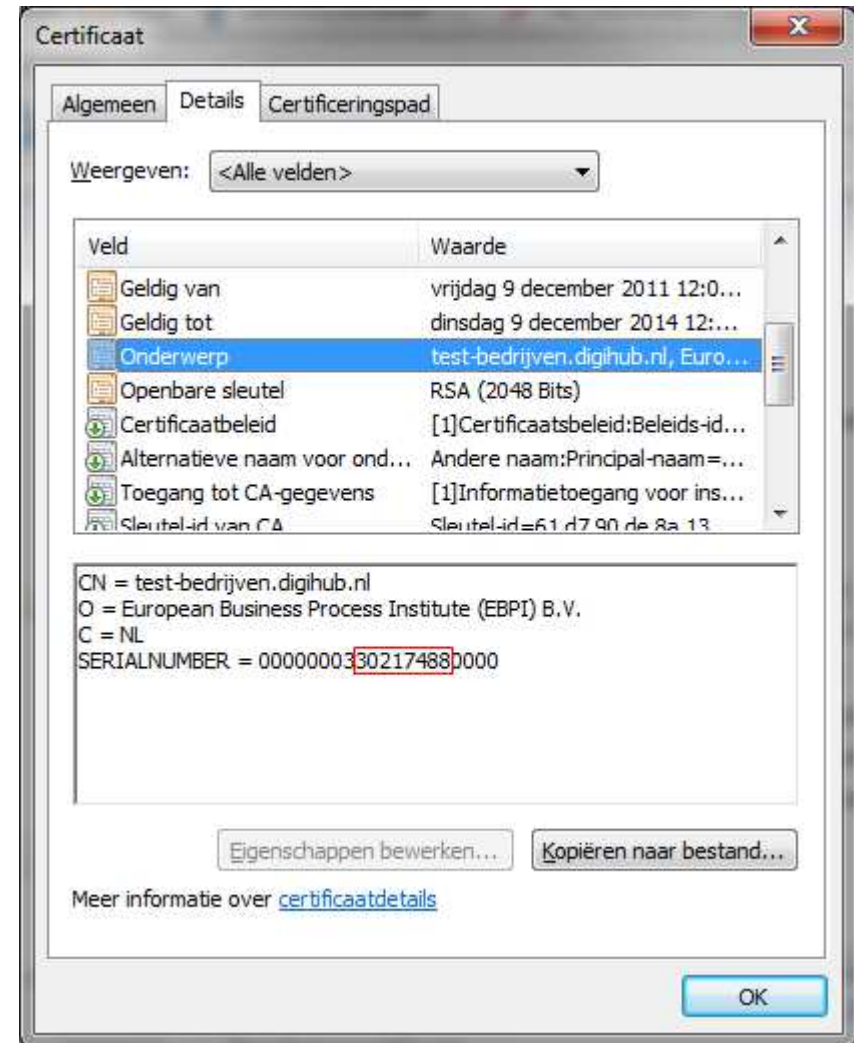


Certificates

What is a certificate?

Electronic passport

- Name of the owner
- Public key of the owner
- Validity (startdate, enddate)
- Certificate Revocation List
- Hash of the certificate
- SERIALNUMBER containing identifying number of organization





Certificaten

What is a certificate?

PKIOverheid

Public key infrastructure of the government

- PKIOverheid services certificate
- Reliable by law
- Specific CSP's

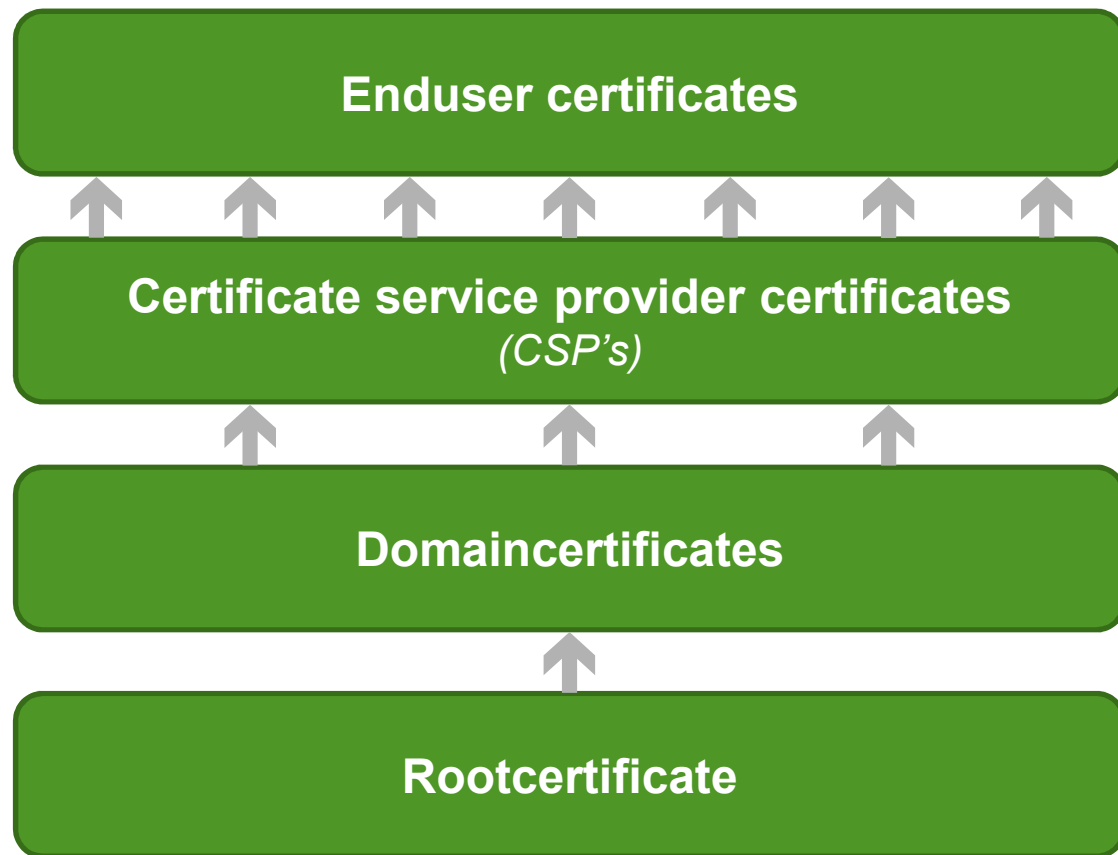




Certificates

What is a certificate?

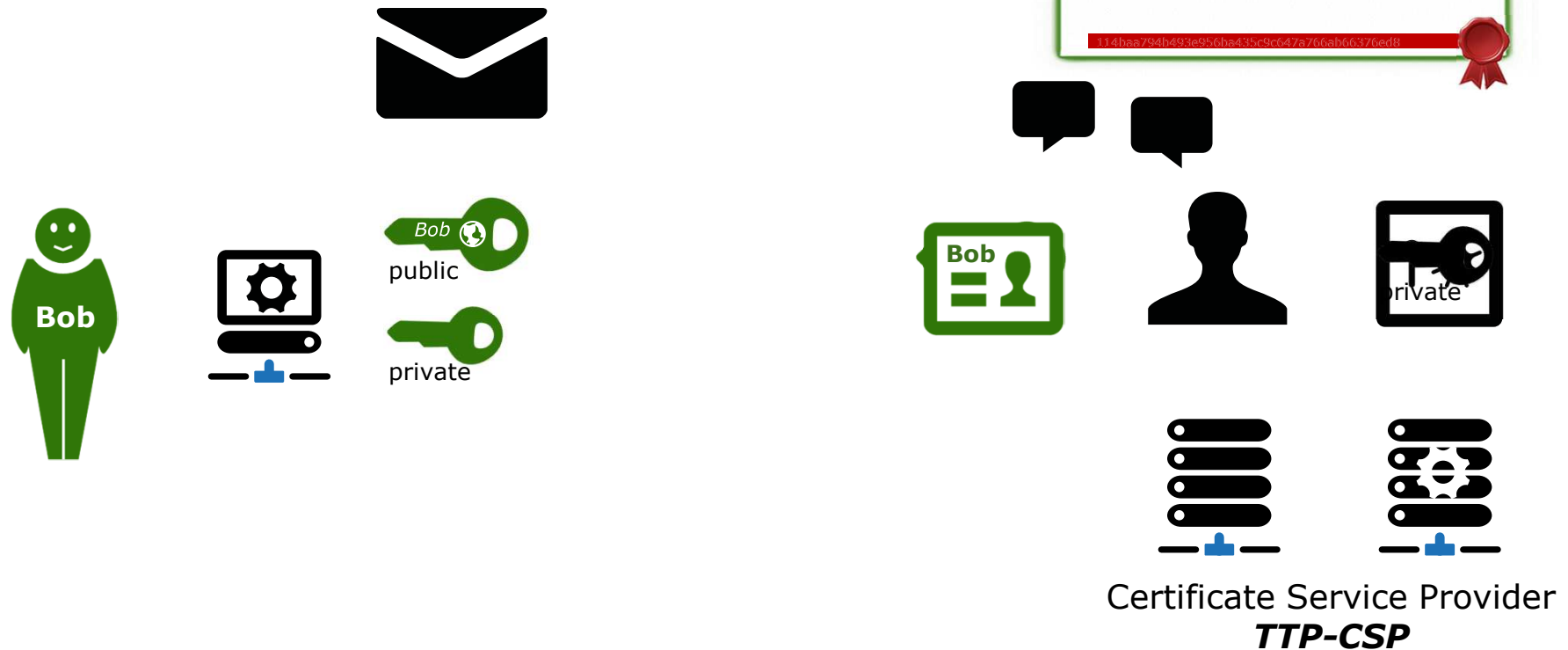
Chain of Trust





Certificates

Obtaining a certificate





Certificates

Usage within Digipoort

Establishing two-way TLS connection

- Determine identity
- Encryption of traffic

Generating an XML signature

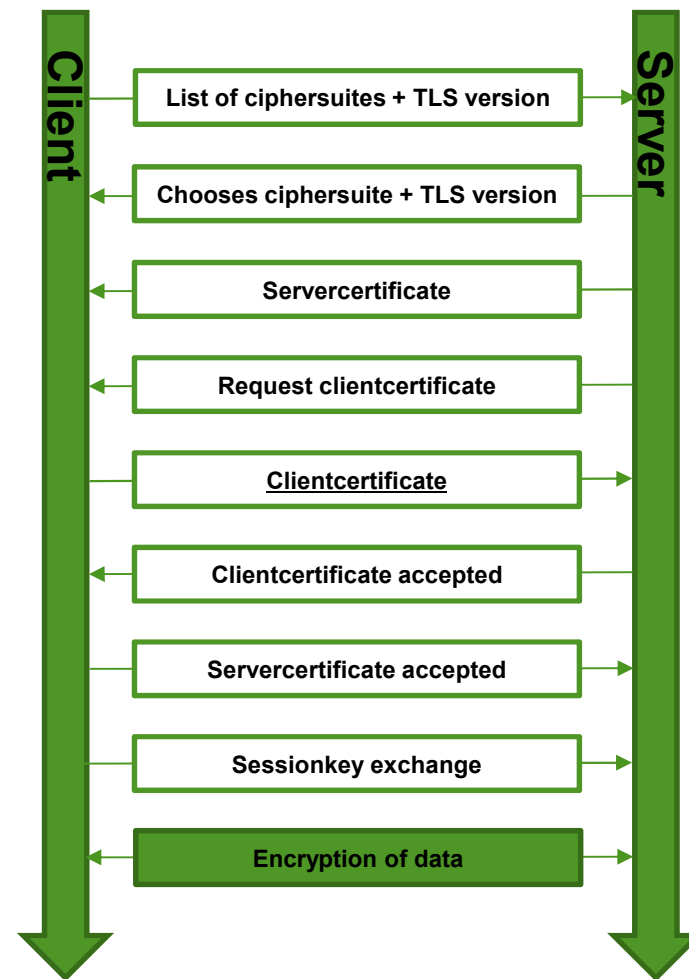
- On the SOAP message (WS-Security)



Certificates

Usage within Digipoort

Establishing two-way TLS connection





Certificates

Usage within Digipoort

Adding an XML digital signature to a message

Guarantees reliability between:

- Sender - Digipoort
- Digipoort - Recipient



Certificates

Summary

- Identity
- Reliable
- PKIO services server certificate
- Encryption
- Signature



PKIo services server certificate

- KvK-number (Chamber of commerce number) is the standard in PKIo services server certificates
- Foreign companies have no KvK-number and need to use the FI-number (Fiscal number from the DTA)
- If using Digipoort for DWT, the FI-number needs to be registered in the Logius OIN (Overheid Identificatie Nummer) register, register of Government Identification Numbers.
 - DTA will register your number in the register



PKIo services server certificate

What foreign organizations need to do:

If a KvK-number is available

- no extra actions and registration is needed

If no KvK-number is available

- Inform the Certificate Service Provider (CSP) that:
 - you need a PKIo services certificate based on a FI-number
 - your FI-number is registered in the Logius “OIN register”



PKIo services server certificate

Requirements for acquiring a PKIo certificate:

- Proof of name and existence of organization of (locale) Chamber of Commerce
- A copy of the identity of the certificate manager
- If wanted a representative of the certificate manager can be appointed.
- This person needs to be authorized and a copy of his/her identity is needed
- Face to face check
 - By a notary in your country
 - By representative in NL
 - Check the possibilities with the CSP (Certificate Service Provider)



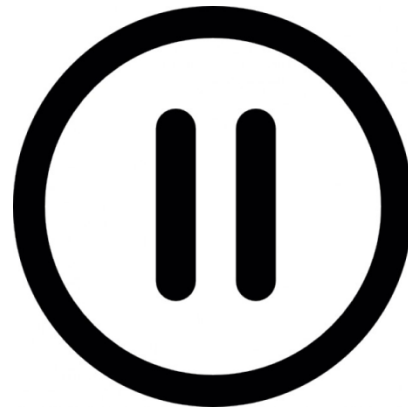
PKIo services server certificate

Current CSP's for PKIo certificates

- Digidentity (www.digidentity.eu)
- ESG (www.de-electronische-signatuur.nl)
- KPN (certificaat.kpn.com)
- QuoVadis (www.quovadisglobal.nl)



Pause



October 12, 2016



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The technique behind Digipoort (for DWT)

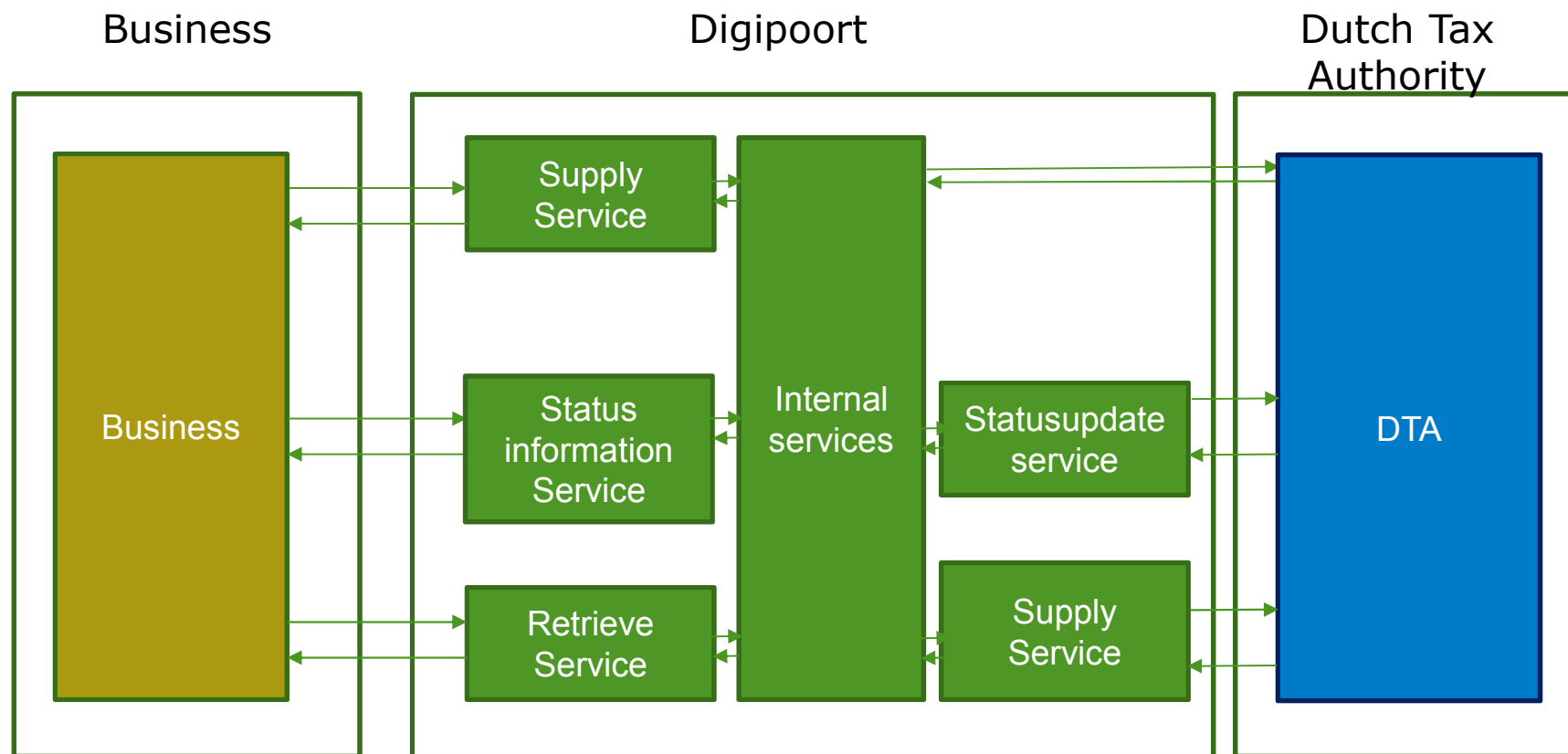
- Digipoort
 - Processes
 - Services
 - Statusses

October 12, 2016





The technique behind Digipoort (for DWT)



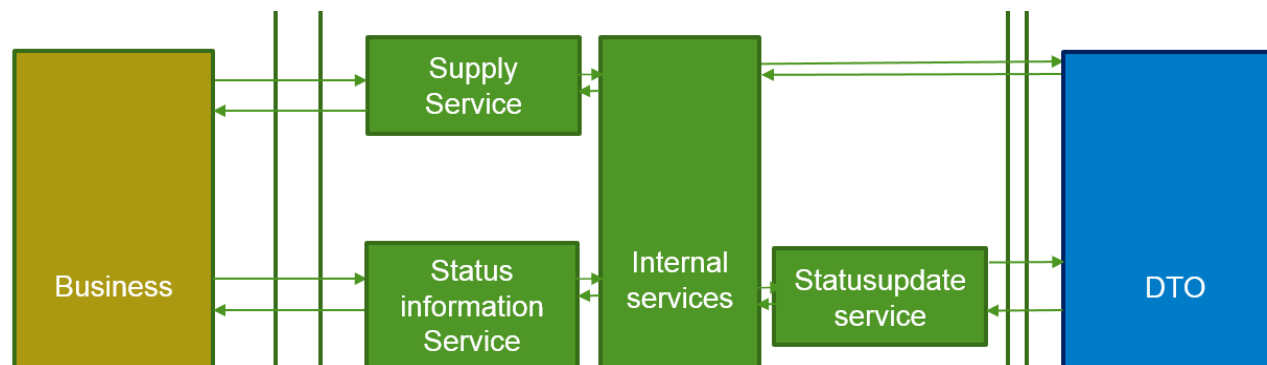


The technique behind Digipoort (for DWT)

Processes

Supply process

- Sending an XBRL message to Digipoort
 - Registration BO and Collective Reclaim
- Checking the status of the message



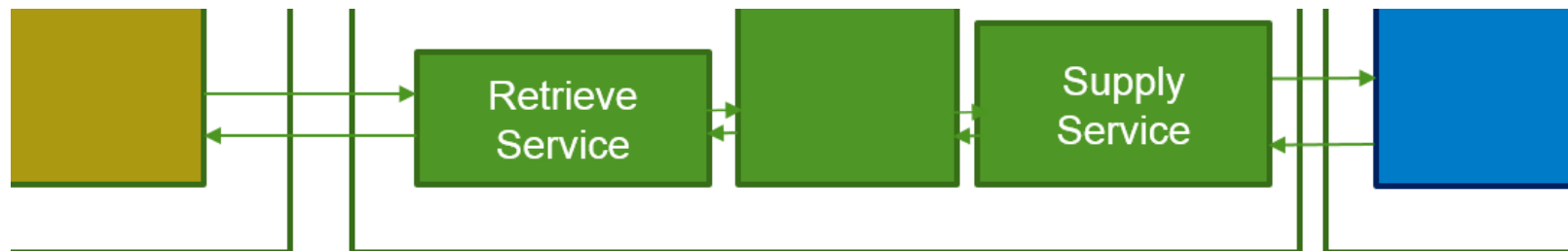


The technique behind Digipoort (for DWT)

Processes

Retrieve process

- Retrieving an XBRL message from Digipoort
 - Confirmation and Collective Decree





Services

Three different webservices

Supply Service

- Supplying the message to Digipoort

Statusinformation Service

- Requesting the status of the supplied message

Retrieve Service

- Retrieving message from Digipoort



Services

Three different webservices

Supply Service

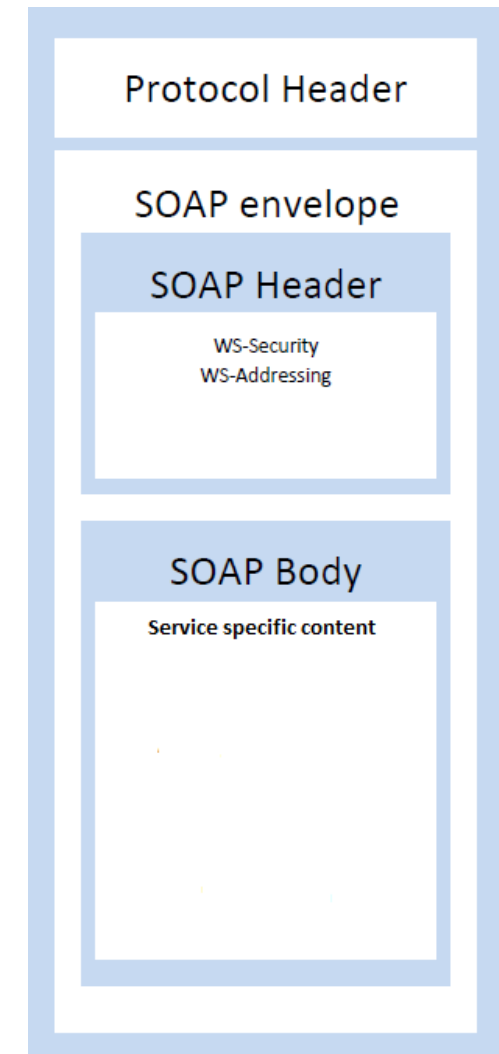
Statusinformation Service

Retrieve Service

Same principal:

Send Request

Receive Response/Fault





Services

WS-Security

Open standard of www.w3.org

Enveloped signature

Elements:

<Security>

 <BinarySecurityToken/>

 Contains base64 encoded certificate

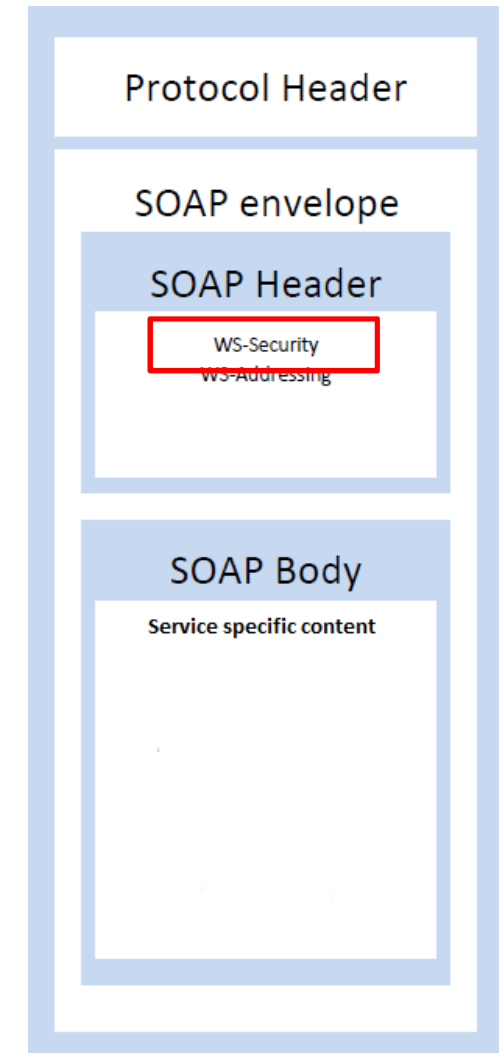
 <Timestamp/>

 Timestamp of signature

 <Signature/>

 Contains multiple hash values and
 signaturevalue

</Security>





Services

WS-Security

```
<wsu:Timestamp wsu:Id="TS-43">
  <wsu:Created>2013-03-01T10:26:42.167Z</wsu:Created>
  <wsu:Expires>2013-03-01T10:36:42.167Z</wsu:Expires>
</wsu:Timestamp>

<ds:Reference URI="#TS-43">
  <ds:Transforms>
    <ds:Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#">
      <ec:InclusiveNamespaces PrefixList="wsse wsa ns soapenv"
        xmlns:ec="http://www.w3.org/2001/10/xml-exc-c14n#" />
    </ds:Transform>
  </ds:Transforms>
  <ds:DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1" />
  <ds:DigestValue>68HSeXtXmRiv1P/vh7h515c9Shk=</ds:DigestValue>
</ds:Reference>
```



Services

WS-Addressing

Open standard of www.w3.org

Elements:

<Addressing>

<Action/>

Contains the action which is being called

<Message-ID/>

Unique identifier of the message (uuid)

<To/>

Contains the endpoint of the web service

<ReplyTo/>

Optional field. See WSDL.

</Addressing>

See WSDL for the specific content





Supply Service

Dutch: AanleverService

Used to send an XBRL instance to Digipoort

DWT_Collective_Reclaim

DWT_Registration_BO

Size limit for DWT = 5 MiB (including base64 encoding + soap envelope)

Base64 encoding $\approx$ 33% file size increase

Size limit XBRL instance $\approx$ 3,5 MiB

MiB (mebibyte) = 1.048.576 bytes

MB (megabyte) = 1.000.000 bytes



Supply Service

AanleverRequest

```
<soap:Envelope>
  <soap:Header>
    <wss:Security />
    <wsa:Addressing />
  </soap:Header>
  <soap:Body>
    <aanleverRequest />
  </soap:Body>
</soap:Envelope>
```





Supply Service

Element / childelement	Translation	Content
berichtsoort	Message type	DWT_Collective_Reclaim or DWT_Registration_BO
aanleverkenmerk	supplier reference number	Optional reference number for your own administration
identiteitBelanghebbende / nummer	Identity stakeholder / number	The FI number (must match identifier in XBRL instance)
identiteitBelanghebbende / type	type	FI
rolBelanghebbende	Role stakeholder	Intermediar
berichtInhoud / mimeType	Message content / mimeType	text/xml
berichtInhoud / bestandsnaam	Filename	Name of the XBRL file
berichtInhoud / inhoud	Content	Base64 encoded XBRL instance



Supply Service

AanleverRequest

```
<soap:Envelope>
  <soap:Header>
    <wss:Security />
    <wsa:Addressing />
  </soap:Header>
  <soap:Body>
    <ns:aanleverRequest>
      <ns:berichtsoort>DWT_Registration_BO</ns:berichtsoort>
      <ns:identiteitBelanghebbende>
        <ns:nummer>123456789</ns:nummer>
        <ns:type>Fi</ns:type>
      </ns:identiteitBelanghebbende>
      <ns:rolBelanghebbende>Intermediair</ns:rolBelanghebbende>
      <ns:berichtInhoud>
        <ns:mimeType>text/xml</ns:mimeType>
        <ns:bestandsnaam>DWT_message_1.xbrl</ns:bestandsnaam>
        <ns:inhoud>eGJybCBpbnN0YW5jZQ==</ns:inhoud>
      </ns:berichtInhoud>
    </ns:aanleverRequest>
  </soap:Body>
</soap:Envelope>
```



Supply Service

AanleverResponse

```
<soap:Envelope>  
  <soap:Header>  
    <wss:Security />  
    <wsa:Addressing />  
  </soap:Header>  
  <soap:Body>  
    <aanleverResponse />  
  </soap:Body>  
</soap:Envelope>
```





Supply Service

AanleverResponse

WS-Addressing

Differences in relation to request

- RelatesTo instead of ReplyTo
 - Contains messageId of Request
- Content of the body



Supply Service

AanleverResponse

```
<soap:Envelope>  
  <soap:Header>  
    <wss:Security />  
    <wsa:Addressing />  
  </soap:Header>  
  <soap:Body>  
    <aanleverResponse />  
  </soap:Body>  
</soap:Envelope>
```





Supply Service

AanleverResponse

Element: kenmerk

Characteristics:

- *Unique identifier of the supply process*
- *Needs to be used in the Statusinformation service*
- *Logius will ask for this identifier when asked for support*

Example:

`<ns:kenmerk>`

bbc212a2-594e-4079-a75f-6916db6c1802

`</ns:kenmerk>`



Supply Service

AanleverResponse

Element: tijdstempelAangeleverd

Characteristics:

- Required: Yes
- *When the message has been processed by the DTA succesfully, this timestamp will be the official time of delivery.*

Example:

```
<ns:tijdstempelAangeleverd>  
    2016-10-01T00:00:00.000Z  
</ns:tijdstempelAangeleverd>
```



Supply Service

AanleverResponse

Element: berichtsoort

Element: identiteitBelanghebbende

Element: rolBelanghebbende

The content will be identical to the content of the Request



Supply Service

AanleverResponse

```
<soap:Envelope>
  <soap:Header>
    <wss:Security />
    <wsa:Addressing />
  </soap:Header>
  <soap:Body>
    <ns:aanleverResponse>
      <ns:kenmerk>bbc212a2-594e-4079-a75f-6916....</ns:kenmerk>
      <ns:berichtsoort>DWT_Registration_BO</ns:berichtsoort>
      <ns:tijdstempelAangeleverd>2016-...</ns:tijdstempelAangeleverd>
      <ns:identiteitBelanghebbende>
        <ns:nummer>123456789</ns:nummer>
        <ns:type>Fi</ns:type>
      </ns:identiteitBelanghebbende>
      <ns:rolBelanghebbende>Intermediair</ns:rolBelanghebbende>
    </ns:aanleverResponse>
  </soap:Body>
</soap:Envelope>
```



Supply Service

AanleverFault

SOAP fault

- faultcode
- faultstring
- faultactor
- detail
 - aanleverFault
 - foutcode
 - foutbeschrijving

```
<soap:Body>
  <soap:Fault>
    <faultcode />
    <faultstring />
    <faultactor />
    <detail>
      <aanleverFault>
        <foutcode />
        <foutbeschrijving />
      </aanleverFault>
    </detail>
  </soap:Fault>
</soap:Body>
```



Supply Service

AanleverFault

Element: foutcode

Characteristics:

- *Digipoort Faultcode consisting of 3 letters and 3 numbers*

Example:

`<ns:foutcode>`

ALS100

`</ns:foutcode>`



Supply Service

AanleverFault

Element: foutbeschrijving

Characteristics:

- Description of the faultcode
- *For translation, see documentation*

Example:

`<ns:foutbeschrijving>`

Het verzoek voldoet niet aan de koppelvlak specificaties en kan hierdoor niet door Digipoort worden verwerkt.

De volgende fout is opgetreden:

Het opgegeven berichtsoort is onbekend

`</ns:foutbeschrijving>`



Supply Service

AanleverFault

```
<soap:Body>
  <soap:Fault>
    <faultcode />
    <faultstring />
    <faultactor />
    <detail>
      <aanleverFault>
        <ns:foutcode>ALS100</ns:foutcode>
        <ns:foutbeschrijving>
          Het verzoek voldoet niet
        </ns:foutbeschrijving>
      </aanleverFault>
    </detail>
  </soap:Fault>
</soap:Body>
```



Supply Service

Summary:

Use supply service to send your XBRL instance

Happyflow:

Save the 'kenmerk' for use in statusinformation and future reference

Errorflow:

Save the error code and description

Look at document for translation and take corresponding action



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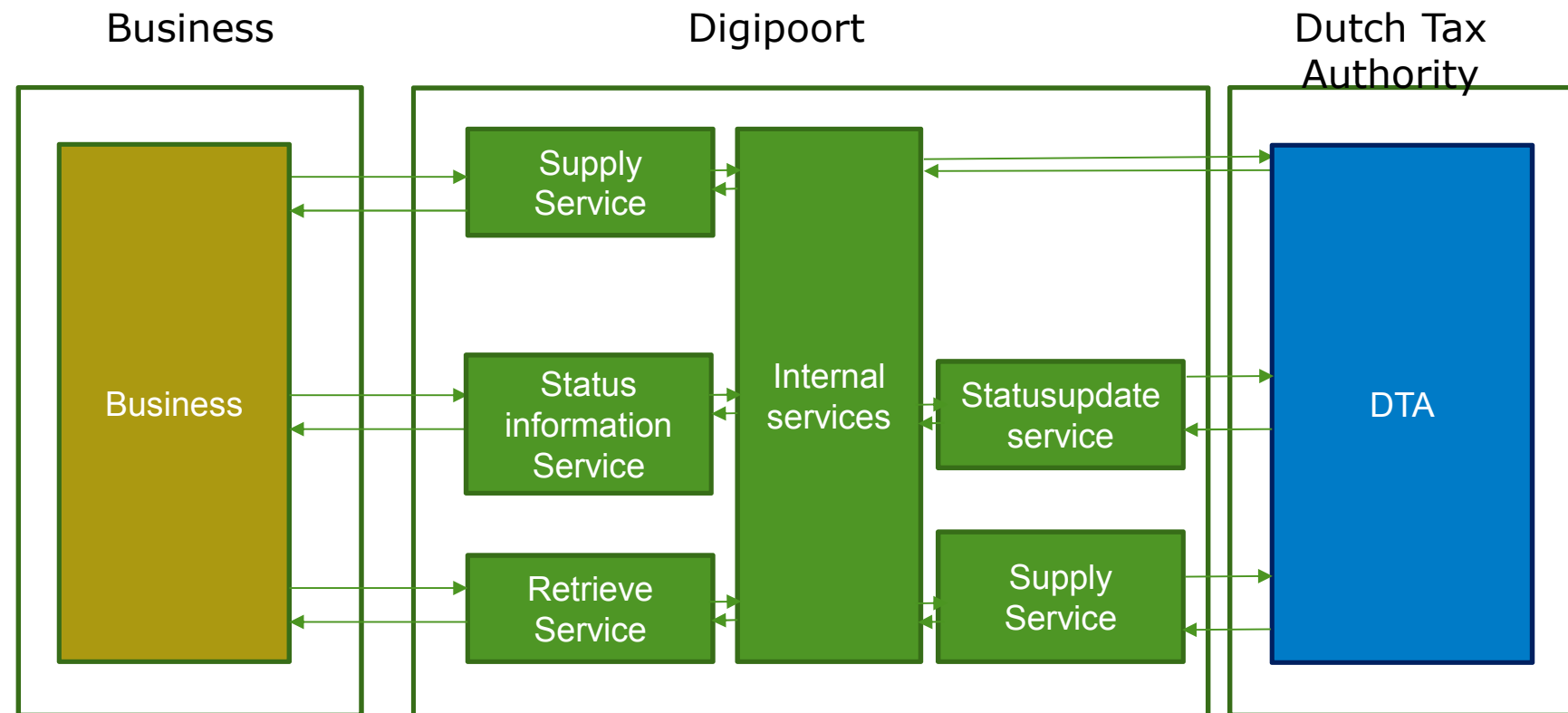
Statusses

What is the status of your message?



Statusses

What are statuses?





Statusses

What are statuses?

Supplying the message to Digipoort does not necessarily mean a successful delivery to the DTA.

Your message will go through several services

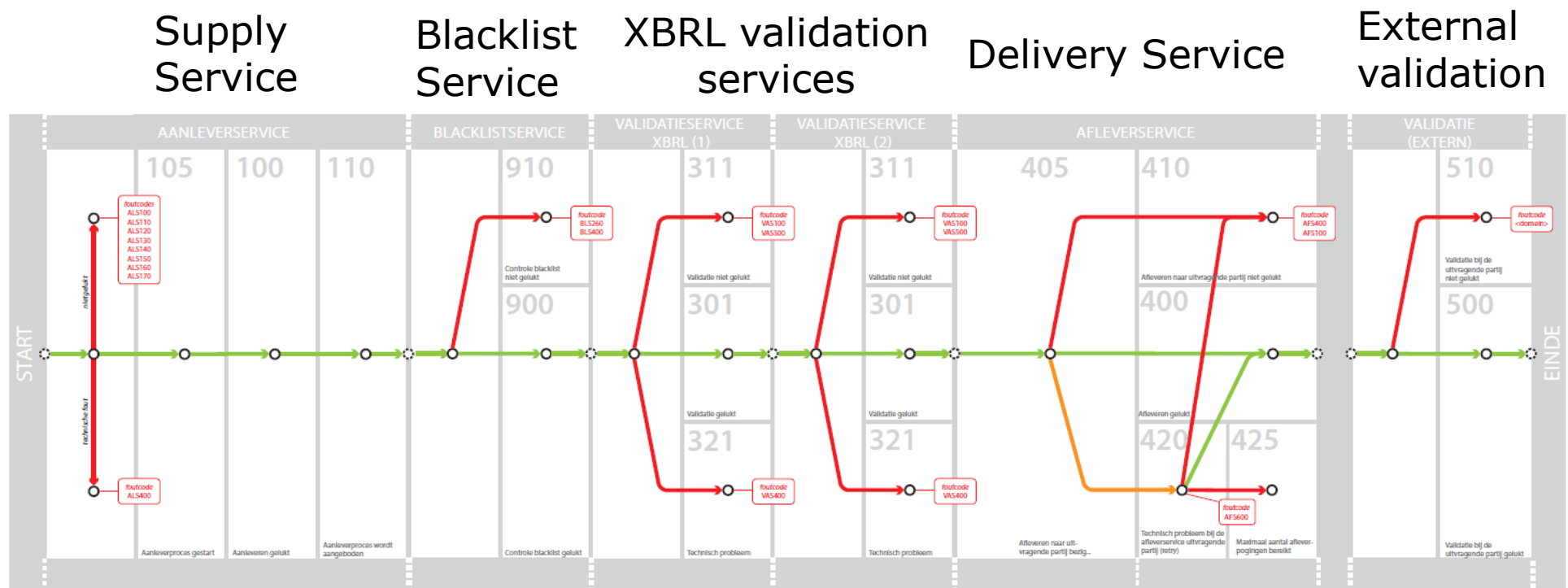
Every service has its own statuses

With the Statusinformation Service you can see the statuses of your message



Statusses

Statusflow of DWT messages (Registration BO and Collective Reclaim)





Statusses

Statusses of DWT messages

105, 100, 110 – Supply Service (success)

900 – Blacklist service (success)

910 – Blacklist service (error)

301 – XBRL validation (success)

311 – XBRL validation (functional error)

321 – XBRL validation (technical error)

405 – delivery service (pending)

400 – delivery service (success)

410 – delivery service (technical error)

420 – delivery service (error, retry (max 72x, 1 hour interval))

425 – delivery service (error, no more retries)

500 – external validation (success)

510 – external validation (failure)



Statusses

Statusses of DWT messages

Examples:

Happyflow – message will go through:

105, 100, 110, 900, 301, 301, 405, 400, 500

Errorflow – XBRL validation error:

105, 100, 110, 900, 311

Errorflow – DTA gives error after validation

105, 100, 110, 900, 301, 301, 405, 400, 510



Statusses

Statusses of DWT messages

Statusses are accompanied by a description

See documentation for translation

Use the Statusinformation Service to view the statuses (+description) of your message



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Statusinformation Service

How to check the statuses



Statusinformation Service

Two types of request messages:

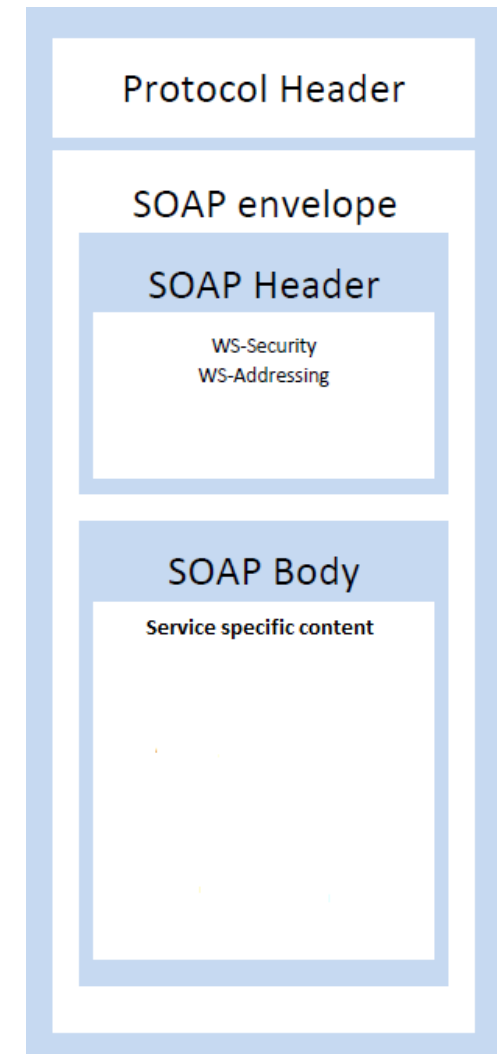
getStatussenProcesRequest:

Returns all statuses of the message with the supplied 'kenmerk'

getNieuweStatussenProcesRequest:

Only return 'new' statuses of the message with the supplied 'kenmerk'

'new' = status which has not been returned yet





Statusinformation Service

Method: getStatussenProces

Message: getStatussenProcesRequest

```
<soap:Envelope>
  <soap:Header/>
  <soap:Body>
    <getStatussenProcesRequest>
      <kenmerk/>
    </getStatussenProcesRequest>
  </soap:Body>
</soap:Envelope>
```



Statusinformation Service

Method: getNieuweStatussenProces

Message: getNieuweStatussenProcesRequest

```
<soap:Envelope>
  <soap:Header/>
  <soap:Body>
    <getNieuweStatussenProcesRequest>
      <kenmerk/>
    </getNieuweStatussenProcesRequest>
  </soap:Body>
</soap:Envelope>
```



Statusinformation Service

Message: getStatussenProcesResponse

```
<soap:Envelope>
  <soap:Header />
  <soap:Body>
    <getStatussenProcesResponse>
      <getStatussenProcesReturn>
        <StatusResultaat>
          <kenmerk/>
          <identiteitBelanghebbende>
            <nummer/>
            <type/>
          </identiteitBelanghebbende>
          <statuscode/>
          <tijdstempelStatus/>
          <statusomschrijving/>
        </StatusResultaat>
      </getStatussenProcesReturn>
    </getStatussenProcesResponse>
  </soap:Body>
</soap:Envelope>
```



Statusinformation Service

<StatusResultaat> - element is present for every status

- <kenmerk/>
- <identiteitBelanghebbende>
 - <nummer/>
 - <type/>
- </identiteitBelanghebbende>
- <statuscode/> - e.g. 100
- <tijdstempelStatus/> timestamp of status
- <statusomschrijving/> description of status
- <statusFoutcode> *only in case of errorstatus*
 - <foutcode> *error code, e.g. VAS500*
 - <foutbeschrijving> *error description*
- </statusFoutcode>
- <statusdetails/> *optional, contains message from government*

</StatusResultaat>



Statusinformation Service

Further notes:

StatusinformatieFault contains errorcode and description

Use the same certificate as the one used to supply the message

Request status until message has reached a final status



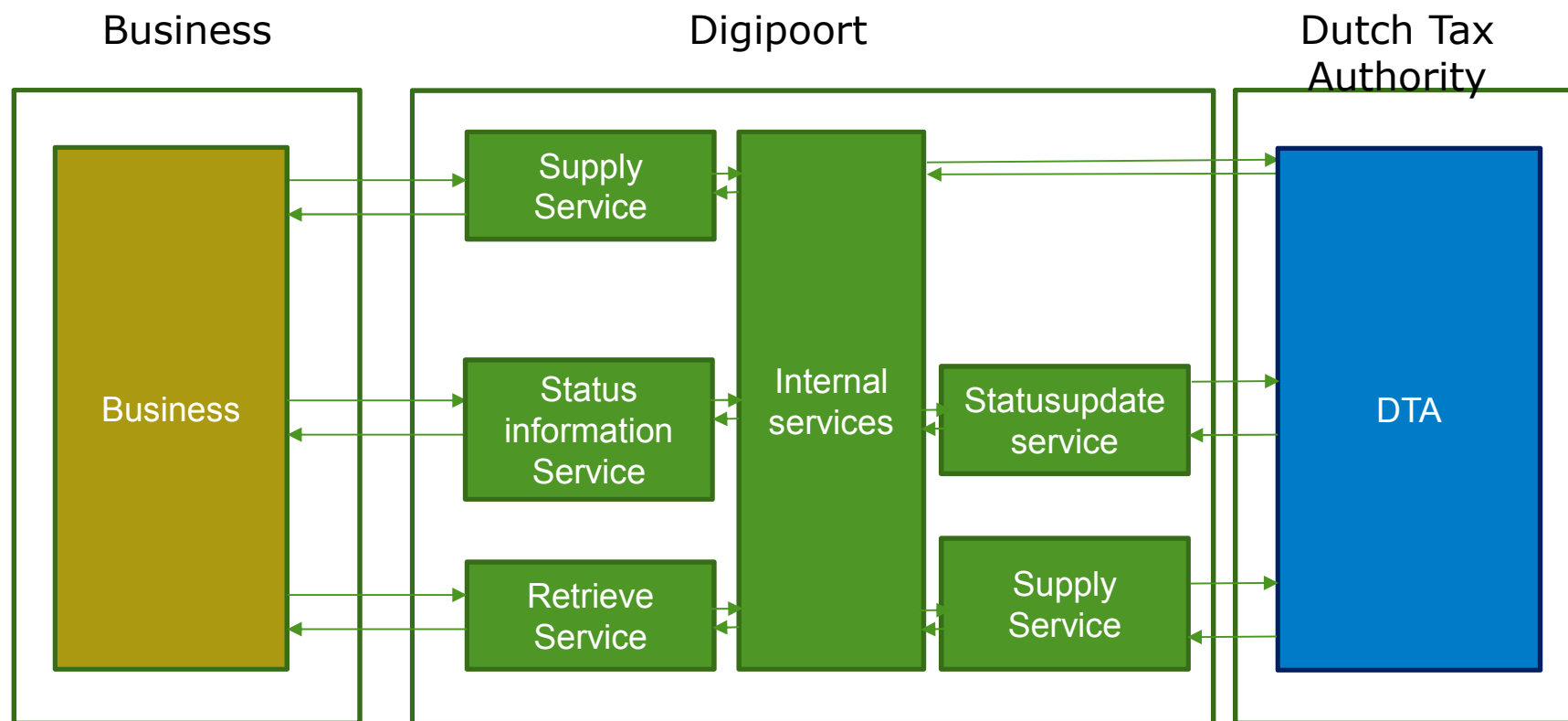
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Retrieve Service

How to retrieve messages from
Digipoort



Retrieve Service





Retrieve Service

Used to retrieve messages from Digipoort

Messages which have been sent by the DTA

Message types:

DWT_Confirmation_BO

DWT_Collective_Decree



Retrieve Service

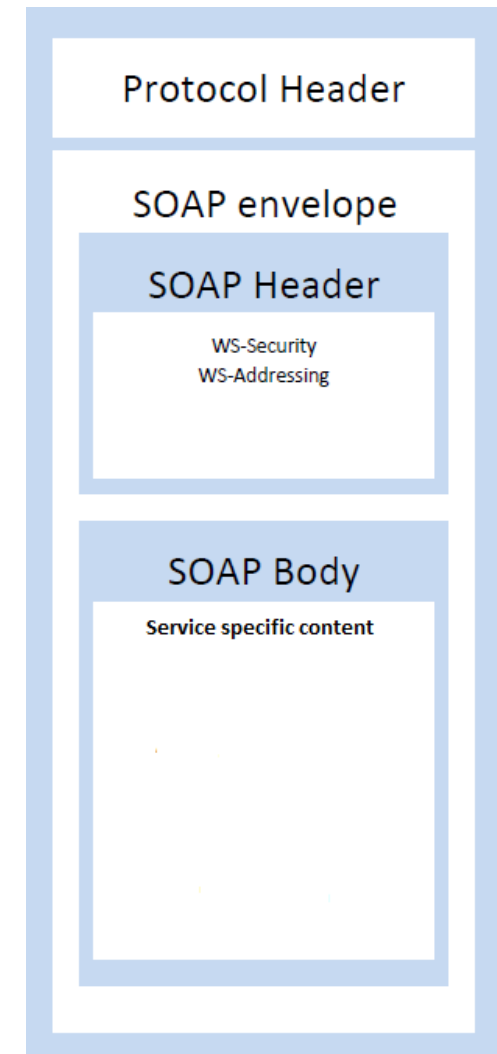
Two-step process:

1) getBerichtenLijst

Obtain a list with identifiers (kenmerk) of messages you can retrieve

2) getBerichtenKenmerk

Use a kenmerk from step 1 to retrieve a message





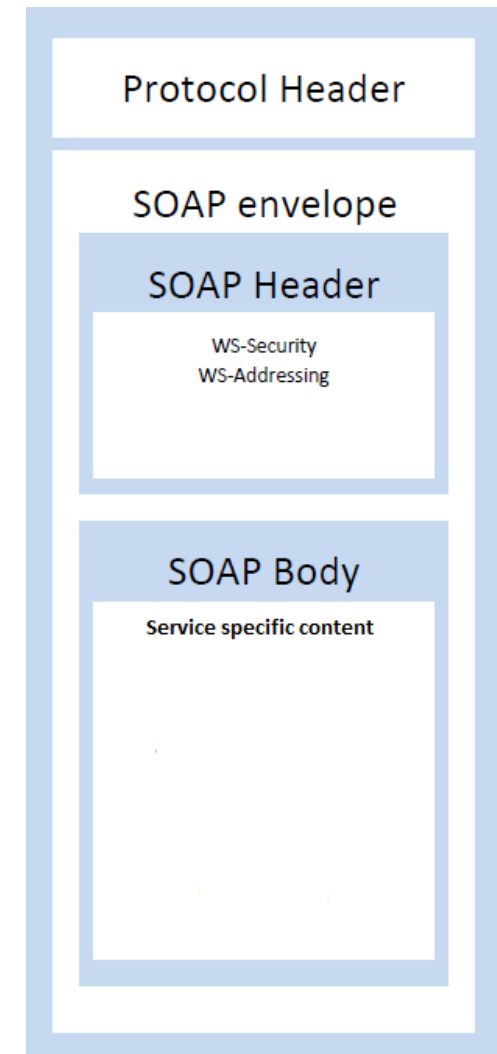
Retrieve Service

1) getBerichtenLijst

```
<Body>  
  <getBerichtenLijstRequest>  
  </getBerichtenLijstRequest>  
</Body>
```

'empty request'

Your identity is determined by the
subject.SERIALNUMBER in your certificate





Retrieve Service

1) getBerichtenLijst

Example response:

```
<getBerichtenLijstResponse>
  <getBerichtenLijstReturn>
    <BerichtLijstResultaat>
      <berichtsoort>DWT_Confirmation_BO</berichtsoort>
      <identiteitBelanghebbende>
        <nummer>123456789</nummer>
        <type>Fi</type>
      </identiteitBelanghebbende>
      <kenmerk>12345678-abcd-efgh-ijkl-mnopqrustuvw</kenmerk>
    </BerichtLijstResultaat>
  </getBerichtenLijstResponse>
```



Retrieve Service

2) getBerichtenKenmerk

```
<Body>  
  <getBerichtenKenmerkRequest>  
    <kenmerk>12345678-abcd-efgh-ijkl-mnopqrstuv<kenmerk>  
  </getBerichtenKenmerkRequest>  
</Body>
```

Your identity is determined by the subject.SERIALNUMBER in your certificate



Retrieve Service

2) getBerichtenKenmerk

```
<Body>  
  <getBerichtenKenmerkResponse>  
    <getBerichtenKenmerkReturn>  
      <BerichtResultaat>  
  
        </BerichtResultaat>  
      </getBerichtenKenmerkReturn>  
    </getBerichtenKenmerkResponse>  
  </Body>
```



Element / childelement	Translation	Content
Kenmerk	Identifier	Identifier of message
berichtsoort	Message type	DWT_Collective_Decree or DWT_Confirmation_BO
aanleverkenmerk	supplier reference number	Reference number of supplier
identiteitBelanghebbende / nummer	Identity stakeholder / number	The Fi number
identiteitBelanghebbende / type	type	Fi
rolBelanghebbende	Role stakeholder	Intermediar
identiteitAanleveraar	Identity of message supplier	Contains the OIN of the message supplier (00000002003214394002)
berichtInhoud / mimeType	Message content / mimeType	text/xml
berichtInhoud / bestandsnaam	Filename	Name of the XBRL file
berichtInhoud / inhoud	Content	Base64 encoded XBRL instance



Retrieve Service

Further notes:

Use the retrieve service on a daily basis to check for new messages

First use `getBerichtenLijst`, then `getBerichtenKenmerk`

Unreceived messages will be stored indefinitely

After you successfully receive a message, you have 2 hours to receive it again. After 2 hours it will no longer be retrievable.



DWT on Digipoort

Summary:

- 1) Request a PKIo services server certificate
- 2) Read the documentation on the WUS interface, the service descriptions, and the message specification
- 3) Implement WSDL/XSD files, implement WS-Security & WS-Addressing

Supply service = send XBRL instance

Statusinformation service = check status of supplied message

Retrieve service = retrieve messages sent by DTA



Demonstration

Demonstration using SoapUI



Logius
*Ministerie van Binnenlandse Zaken en
Koninkrijksrelaties*

Questions?

October 12, 2016



Contact information

Logius service centre:

Servicecentrum Logius

0900 555 4555 (10 ct p/m)

Weekdays from 08.00 tot 17.00 CEST

Contactform (mail): <https://www.logius.nl/contact/>



Maintenance and incident information

- Register at Logius for receiving maintenance and incident messages
 - For incidents:
<http://logius.a1.mailplus.nl/genericservice/code/servlet/React?wpEncId=BhjdqUBv6E&wpMessageId=12059&userId=3100101&command=viewPage&activityId=preview&encId=1>
 - For maintenance:
<http://logius.a1.mailplus.nl/genericservice/code/servlet/React?wpEncId=KgsIDqz4KL&wpMessageId=12175&userId=3100101&command=viewPage&activityId=preview&encId=1>
 - Planned maintenance:
<https://www.logius.nl/ondersteuning/onderhoud/>
 - Information about incidents:
<https://www.logius.nl/ondersteuning/storingen/>



Code documentation

.Net / C#:

<http://aansluiten.procesinfrastructuur.nl/site/binaries/content/assets/documentatie/ontwikkelondersteuning/wus-connection-test-stubs-final-1.0.pdf>

Java:

<http://aansluiten.procesinfrastructuur.nl/site/binaries/content/assets/documentatie/ontwikkelondersteuning/wus-connection-test-stubs-final-1.0-java.zip>



Review & Closing

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