The HL7 Europe FHIR Lab Guide, and what it can do for you

Webinar, 20 March 2024 16.00-17.00 CET

Online on Teams



The HL7 Europe FHIR Lab Guide, and what it can do for you Scene setting

The FHIR Lab IG

The EEHRxF

The EHDS





The HL7 Europe FHIR Lab Guide, and what it can do for you Speaker introductions

- Giorgio Cangioli, HL7 Europe
- Anderson Carmo, XpanDH Deputy project coordinator,
- Catherine Chronaki, HL7 Europe
- Jean-Michel Polfliet, Belgian eHealth Platform
- Verena Thaler, MedTech Europe
- Michaela Ziegler, ahdis (CH)









Housekeeping



- Your facilitator: Michael Strübin, HL7 Europe
- The webinar will be recorded
- To help ensure a successful webinar please
 - Stay muted
 - Feel free to use reactions/emojis during the presentations
 - Use the chat to make comments or raise your questions
 - Raise your hand if you'd like to speak
 - If you are invited to speak, please turn on your video and say who you are



The HL7 Europe FHIR Lab Guide, and what it can do for you Agenda

16.00 Welcome and introduction (**Michael Strübin**, *HL7 Europe*)

16.05 The HL7 FHIR Lab Guide: overview (Giorgio Cangioli, HL7 Europe Technical Lead)

16.20 Panel:

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THE HL7 EUROPE LAB REPORT FHIR IG

Giorgio Cangioli, HL7 Europe





Disclaimer

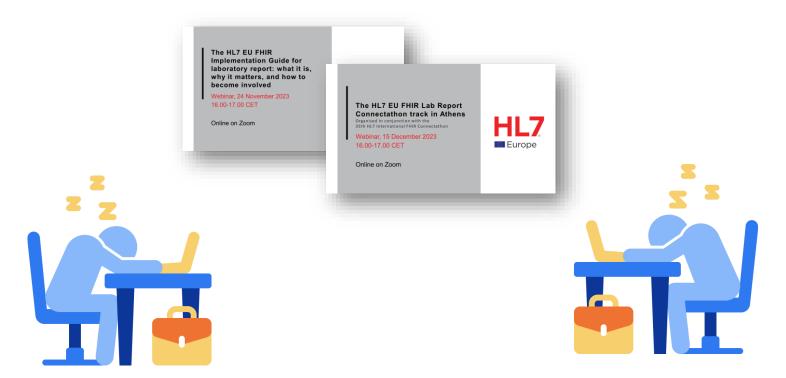




Any views or opinions expressed in this presentation are those of the author and do not necessarily represent official policy or position of the organizations and/or projects mentioned.



For those attending the previous webinars...





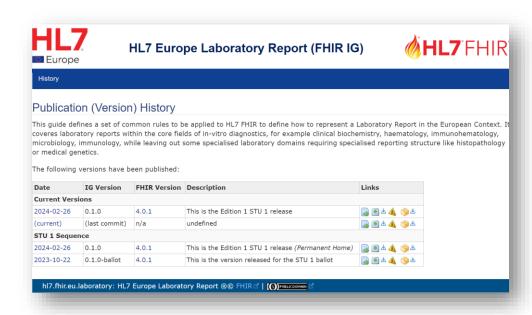
...Yes, we did it!





Published the HL7 Europe Lab Report FHIR IG!









and reports





report





EHDS - Art 5 Priorities



What this is about?



Laboratory Results



https://hl7.eu/fhir/laboratory

Common European rules for representing in HL7 FHIR a Laboratory Report

Facilitate the harmonization among the national initiatives

Support the development of the European-EHRxF



A cooperative work







The result of a participatory multi-stakeholders effort

Experts from several countries

European projects and initiatives engaged (e.g. XpanDH, MyHealth@EU)

Two collaborating focused sub-groups:

- functional requirements /semantic
- HL7 FHIR specifications

Tested and improved during the HL7 FHIR Connectathon in Athens (about 30 people in the track)





What's in it...







The data set









How data are represented in HL7 FHIR

Models to Profiles Mapping



HL7 FHIR Profiles

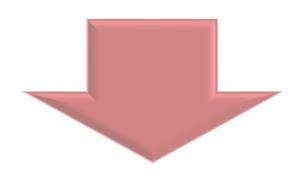
How to use HL7 FHIR

Obligations



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Balancing different (EU) requirements



Legally signed documents

Often structured and including different kinds of test results

Still HL7 CDA and document exchange infrastructures in use

HL7 FHIR REST consumers expect to get Laboratory Reports by **searching per DiagnosticReport**

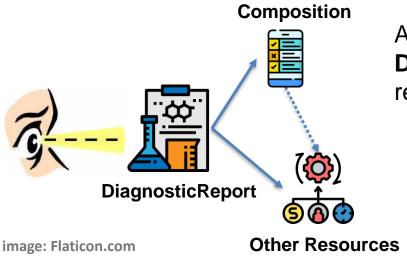
In R5 the DiagnosticReport refers the Composition





The Laboratory Report





A Lab **report** is always **represented by** a **DiagnosticReport**. This resource always refers a Composition

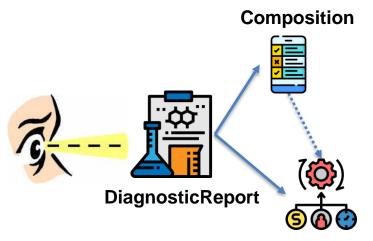
The **Composition defines** the report **structure** (it might be just a single section) and it acts as an "index" for all the used resources

REST Perspective



The Laboratory Report





The **Composition defines** the report **structure** (it might be just a single section) and it acts as an "index" for all the used resources

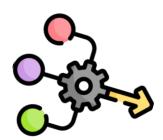


image: Flaticon.com Other Resources

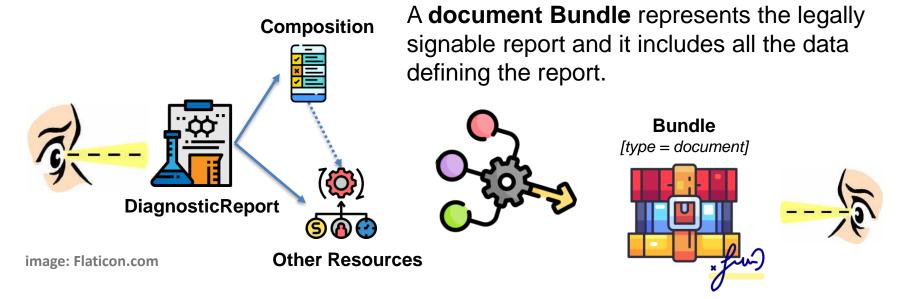
REST Perspective

It is the mean for assembling the report as a document (document Bundle)



The Laboratory Report





REST Perspective

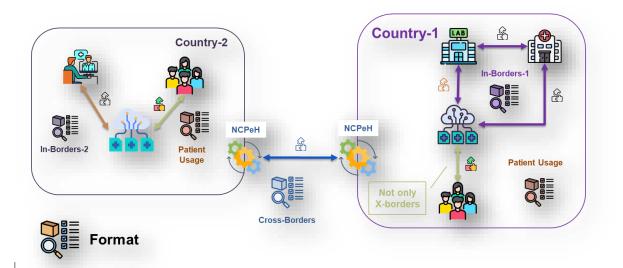
Document Perspective



Why this is important?



 Needs and expectations are different and there is not a one-fits-all solution



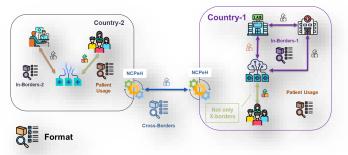




Why this is important?

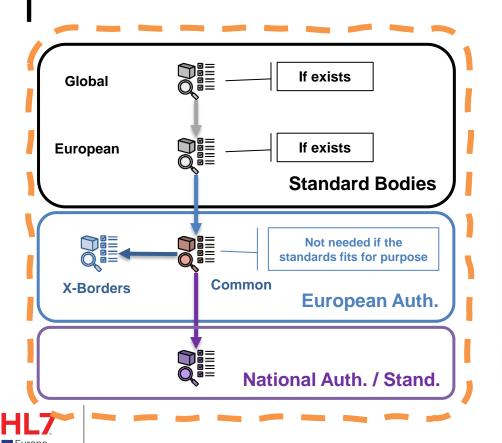


- Needs and expectations are different and there is not a one-fits-all solution... but.. no European interoperability without:
 - common rules
 - specifications serving these situations





The vision



Coherent set of specifications sharing common rules

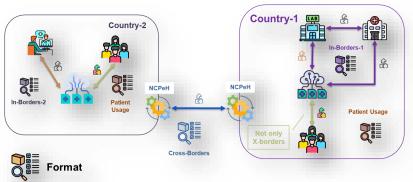


image: Flaticon.com

Instantiating the vision

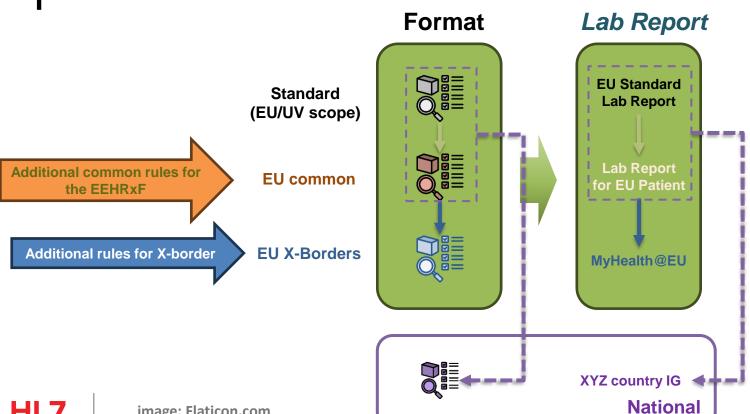




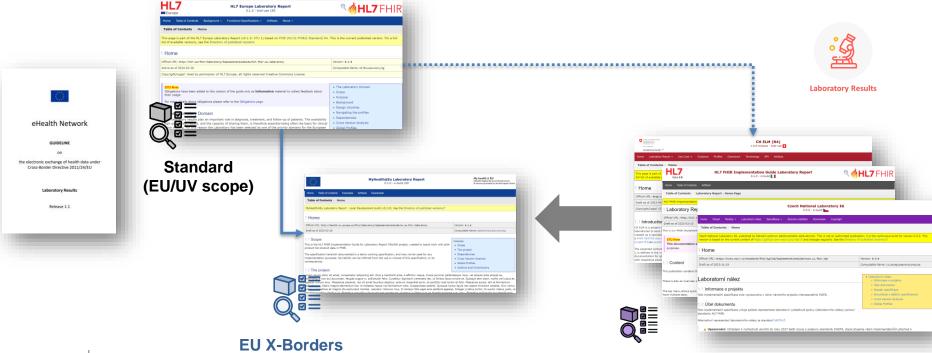






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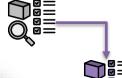
The vision made real...

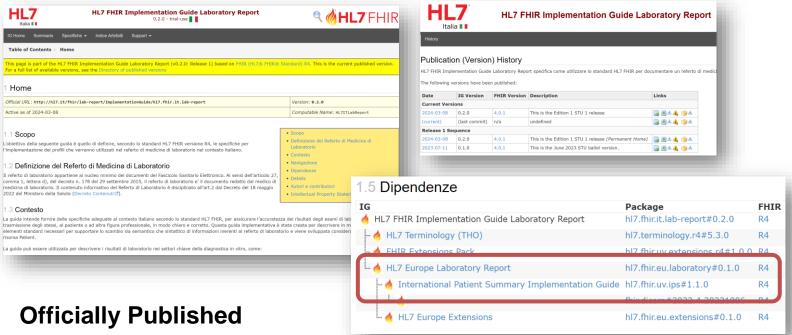




National Guides

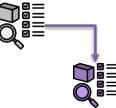
A vision made real..

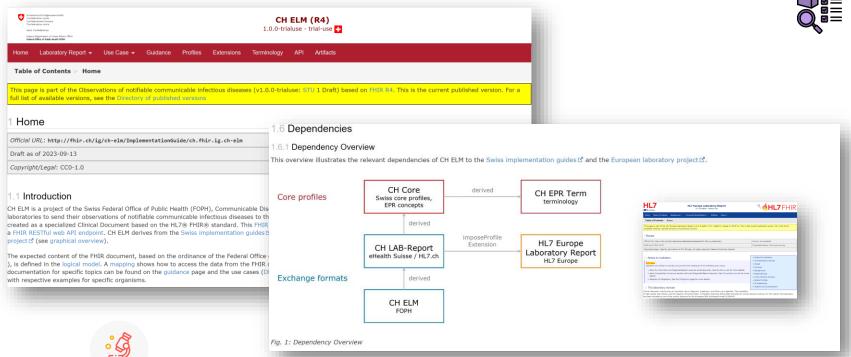






A vision made real..







Laboratory Results

A vision made real..



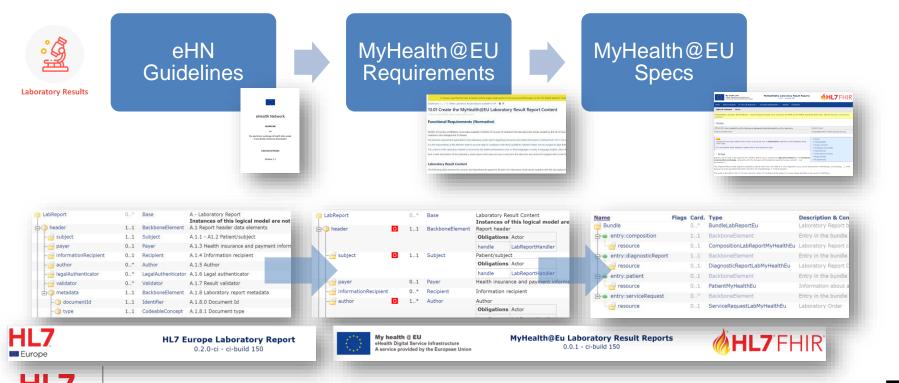






The MyHealth@EU guide

Europe

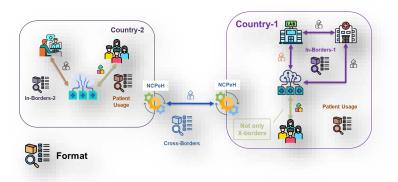


Why this is important?



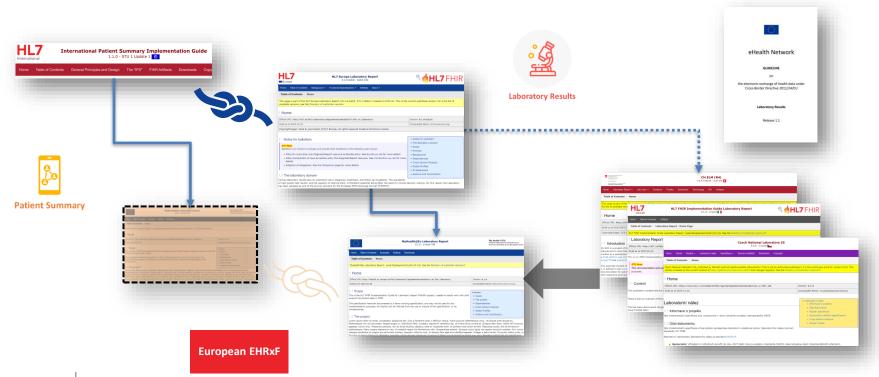


- Serving different needs for the same domain is a basic requirement... but this is not enough..
- .. data should be reusable across domains



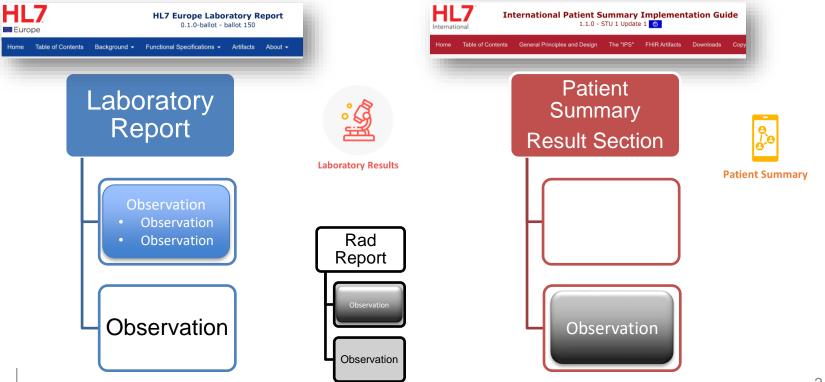


Enable data reusage





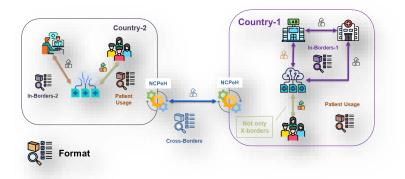
Enable data reusage





Take-away messages

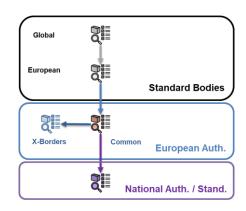
- There are no one-fits-all solutions for the "format"
- Need of sharing common rules (i.e. standards), enabling data reuse across domains, and covering the national expectations.

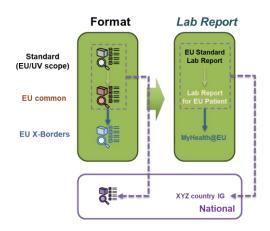




Take-away messages

 The way to fulfill all these expectations is that of having a coherent set of layered specifications based on common standards







Take-away messages

 The Laboratory Report experience gives evidence of the added value and the concreteness of this approach!







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2019 - ahdis

eHealth Solution Consultant

2022 - Lecturer Interoperability (FHIR) - Medical Informatics

Bern University of Applied Sciences

2019 - BSc Medical Informatics
Bern University of Applied Sciences
HL7 FHIR® Proficient, 2023

2008 - Physiotherapist FH University Hospital Zürich

Sports physiotherapist, 2011

HL7 Switzerland

Technical Manager since 2023

IHE Suisse

Member

https://www.ahdis.ch/





Home Laboratory Report ▼ Use Case ▼ Guidance Profiles Extensions Terminology API Business Rules Artifacts

Laboratory Report

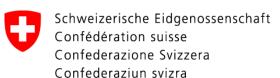
in Switzerland

CH ELM is a project of the Swiss Federal Office of Public Health (FOPH), Communicable Diseases Division, to enable laboratories to send their observations of notifiable communicable infectious diseases to the FOPH electronically.

CH Core derived CH EPR Term Core profiles Swiss core profiles, terminology **EPR** concepts derived imposeProfile HL7 Europe Extension CH LAB-Report Laboratory Report eHealth Suisse / HL7.ch HL7 Europe Exchange formats derived CH ELM **FOPH**



Interoperability in Switzerland



ehealthsuisse

Swiss Competence and Coordination Centre of the Confederation and the Cantons













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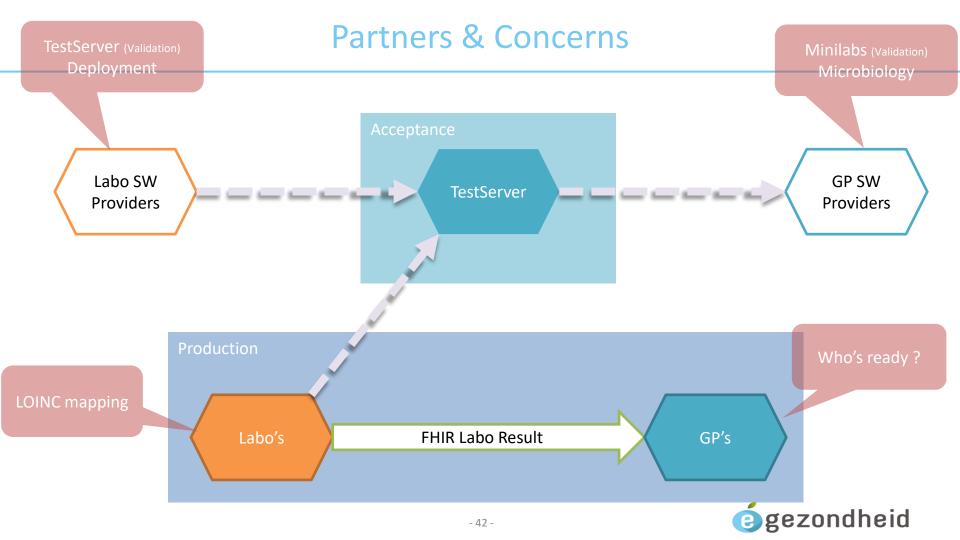


Project Digitalisation of the Lab Results (20 March 2024)

- Jean-Michel Polfliet
 - Head of eHealth Platform Standard Team Belgium
 - HL7-Belgium Co-Chair
 - DIGIRELAB Project Facilitator







Project Status

- GP SW Providers
 - V Minilabs (Validation) Done
 - V Deployment Starting
- Labo's SW Providers
 - V Testserver (Validation) Done
 - V Deployment Ongoing
- Labo's
 - **V** Deployment and Validation − Ongoing
 - **V** LOINC Mapping Ongoing

- Phases
 - Phase 1:
 - Labo to Prescriber via eHealthBox (Secured Mailbox)
 - Phase 2:
 - Request Laboratory report from any Practitioner via Hubs
 - Phase 3:
 - Request Laboratory result based on one LOINC Code from any Practitioner via Hubs



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About MedTech Europe

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OUR MEMBERS



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50 medical technology associations

Verena Thaler

Manager Data Governance



v.thaler@medtecheurope.org



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Vision comes to live through 4 main scopes



Establishing a scalable public infrastructure for digital health innovation



Demonstrating real-life interoperable digital solutions for individuals, researchers, health services, and the workforce across borders



Establishing a Pan-European ecosystem of digital health



Creating and validating a framework for further exploitation of the public infrastructure for digital health innovation.

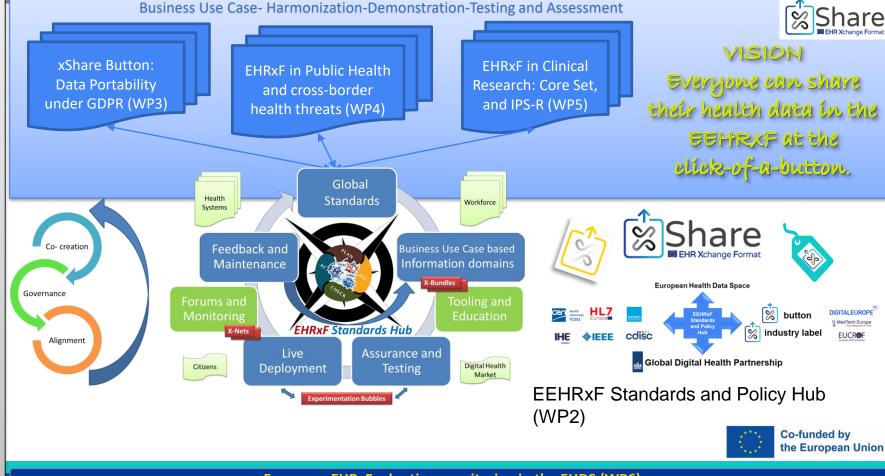
Expanding Digital Health through a pan-European EEHRxF-based Ecosystem

XpanDH project supports an expanding ecosystem of individuals and organizations that are developing, experimenting and adopting the European Electronic Health Record Exchange Format (EEHRxF) providing a crucial contribution to the European Health Data Space. It is a 2-year Coordination and Support Action financed by the Horizon Europe Framework Programme.



https://xpandh-project.iscte-iul.pt/

WP8 Communication, dissemination and Stakeholder Engagement



European EHRxF adoption monitoring in the EHDS (WP6)

Capacity Building, Cybersecurity & Privacy, and Innovative Procurement (WP7)

xShare Industry Label, Policy Recommendations and Business Viability (WP9)

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Thank you



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