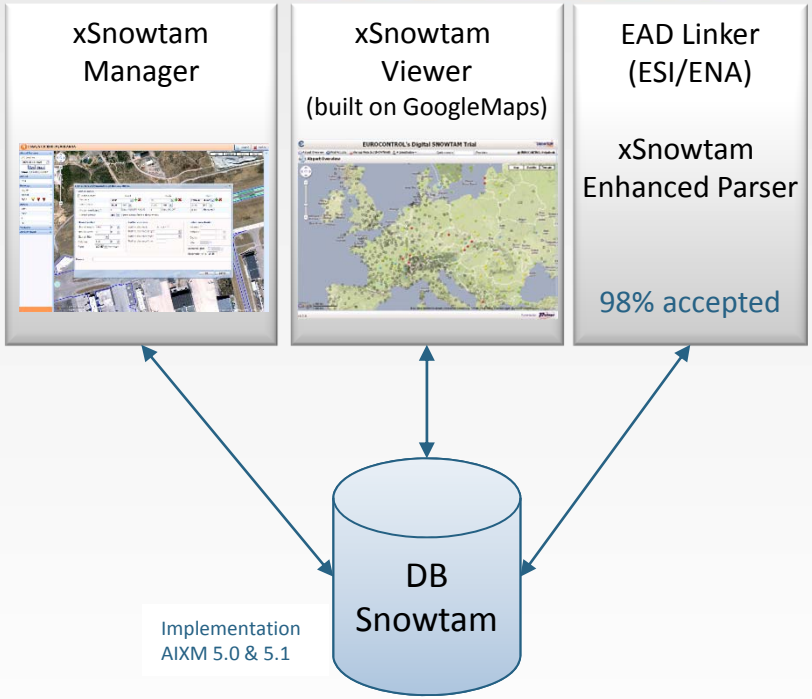
Digital NOTAM Workshop
20 May 2014

# Digital SNOWTAM WFS service

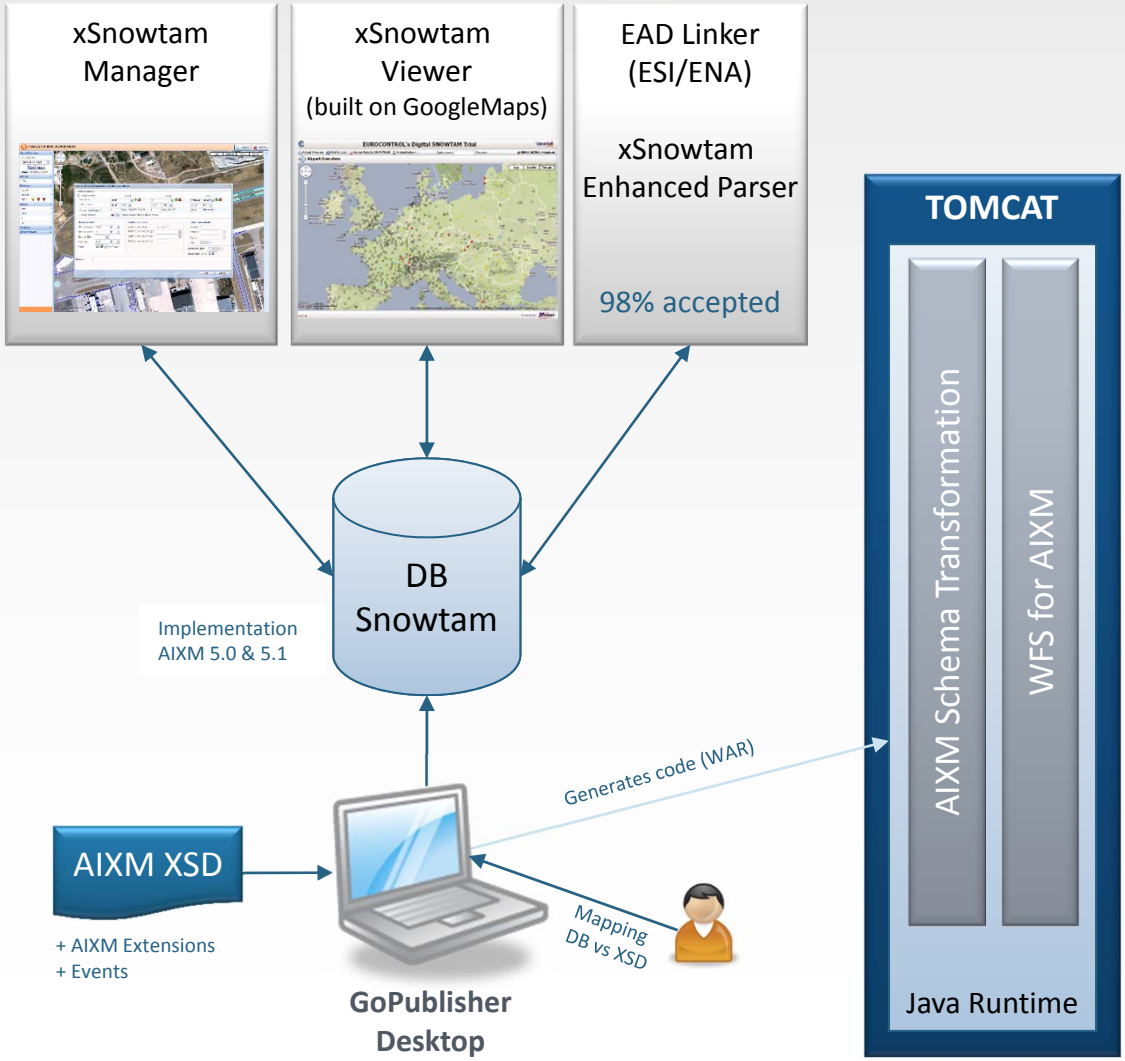
# Presentation topics

- Pre-Operational xSnowtam application
- WFS Design Time
- WFS Run Time
- User Test Time
- Demo
- User Implementation Time
- Other NOTAM or AIXM Architecture
- Known limitation
- Conclusion
- Questions & Answers

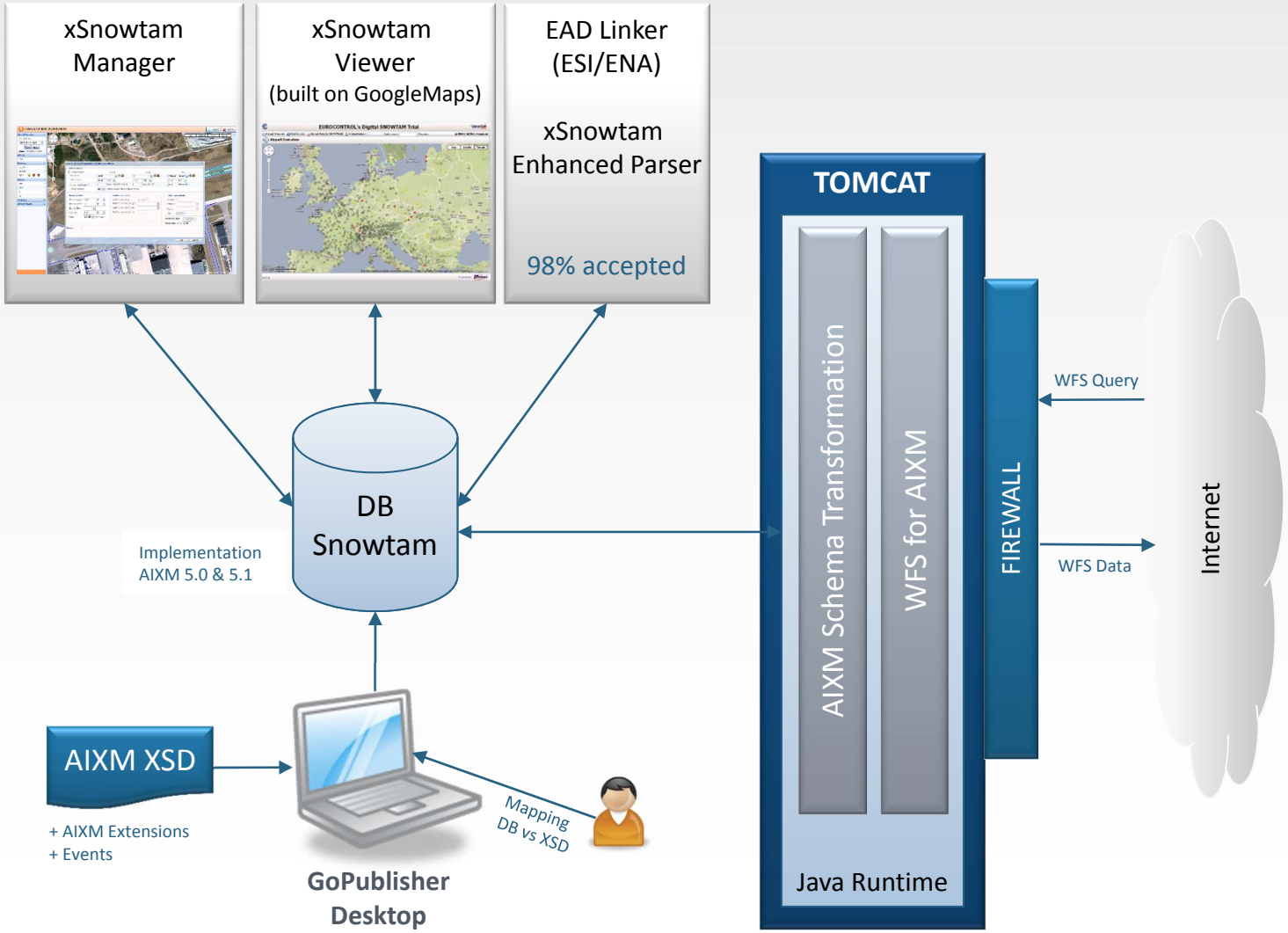
# xSNOWTAM : Pre-Operational system



# SNOWTAM WFS : Design Time



# SNOWTAM WFS : Run Time



# SNOWTAM WFS : User Test Time

xSnowtam Manager

xSnowtam Viewer (built on GoogleMaps)

EAD Linker (ESI/ENA)

xSnowtam Enhanced Parser

98% accepted

DB Snowtam

Implementation AIXM 5.0 & 5.1

AIXM XSD

+ AIXM Extensions
+ Events

Mapping DB vs XSD

GoPublisher Desktop

TOMCAT

AIXM Schema Transformation

WFS for AIXM

Java Runtime

FIREWALL

WFS Query

WFS Data

Internet

CLIENT (WEB + WFS)

POST-MAN

WFS Query

WFS Data

Plugin RESTin Chrome

Pulsar consulting

# DEMONSTRATION WITH 3 QUERIES

# SNOWTAM WFS : User Implementation Time

xSnowtam Manager

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DB Snowtam

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CLIENT (WEB + WFS)

POST-MAN

Plugin REST in Chrome

CLIENT

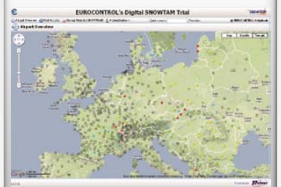
AIXM-WFS Viewer

WFS-Compliant Tool
Example Snowtam Viewer
- Airport
- Runway
- Aprons
- Contaminations
- Etc.

# WFS : Other NOTAM or AIXM Architecture

xSnowtam Manager

xSnowtam Viewer (built on GoogleMaps)



EAD Linker (ESI/ENA)

xSnowtam Enhanced Parser

98% accepted

NOTAM DB

Implementation AIXM 5.0 & 5.1

AIXM XSD

+ AIXM Extensions
+ Events

Generates code (WAR)

Mapping DB vs XSD

GoPublisher Desktop

TOMCAT

AIXM Schema Transformation

WFS for AIXM

Java Runtime

FIREWALL

WFS Query

WFS Data

Internet

CLIENT (WEB + WFS)

POST-MAN

WFS Query

WFS Data

Plugin RESTin Chrome

CLIENT

NOTAM-WFS Viewer

WFS Query

WFS Data

WFS-Compliant Tool
Example NOTAM Viewer
- Airport
- Runway
- Aprons
- Etc.

# Known limitation

- LIMITATION ON TEMPORALITY
  - GoPublisher  doesn't implement yet the AIXM Temporality Concept
  - Waiting for OGC final specs/validation on WFS Temporality Implementation
  - «….these requirements are not specific to AIXM 5, but more generally apply to any data model featuring temporality. To overcome these shortcomings, a proposal is made for an extended type of WFS query: a dynamic feature query"
  - Expected for Q4 2014

  - Work around : we used database Views built on temporal criteria « Now »
  - They hide the temporality to the WFS queries
  - But only bring or 'present' data valid « Now » (at the moment of the WFS query)

# Conclusions

- We walked thru the steps that brought xSNOWTAM-WFS system live: Design Time, Run Time, User Test Time, User Implementation Time, then a generalization for other NOTAM or AIXM Architectures
- To show WFS-compliant systems are reality today, the industry can build pretty easily similar WFS-systems, following the needs.

- You can play with our system, please register with Eddy Porosnicu, you'll receive the necessary to connect to our xSNOWTAM-WFS Test system
- Please note there are fake data, and not to many, we can give support in indicating meaningfull queries

# QUESTIONS