

# Deliverable D3.2:

## *Prototype SWIM-enabled applications*

### What is the contribution of this deliverable to the overall goals of BEST?

→ Please refer to the document “BEST Results: Overview” to get an overall picture of the relationship between BEST deliverables and project objectives.

Deliverable D3.2 is responsible for developing an experimental prototype (SWIM enabled application) which demonstrates the usefulness of semantic technologies in combination with SWIM. It uses specifications and developments in D1.1, D2.1 and D2.2 to realise benefits of semantic technologies in a SWIM setting. The prototypes are based on the use case scenarios defined in D3.1. This includes a semantic data container management platform and an integrate scenario into an existing SWIM application. To get an overview of container data containers and their feature respectively facets a list of all data container is provided.

### Current Status of the Deliverable

Approved.

### What items does the deliverable contain?

When we talk about a “Deliverable” in BEST, we mean not only the formal document describing the work done, but also any associated technical artefacts such as software, models, ontologies, diagrams etc.

Item#	Brief Description	What it can be used for
1	Semantic Container Management Platform (experimental prototype)	The semantic data container management platform enables the user to create and maintain semantic data containers. Therefore, it supports to view, refresh, delete or modify existing container, and to create new either primary or secondary container. Ability to filter containers by name or to show existing data containers from other ontologies. This overview provides only information about the descriptive metadata without providing insights about the administrative metadata.

3	Semantic Container Use Case Scenarios (experimental prototype)	Implementation of the Semantic Container Use Case Scenarios defined in D3.1 demonstrating the main benefits of a semantic data container.
4	Future Work	Exploratory research gives a wider view. Therefore, this chapter discusses things that are beyond the scope of this deliverable but should be mentioned for future work.

## What details can I find in the deliverable document?

Details about what?	Reference
Experimental Prototype	Chapter 4
Implementation strategies	Chapter 3
Scenario Setup	Chapter 5
Illustration of the applied development approach	Chapter 4.1 & 4.2
Future work (exploratory research)	Chapter 6

## How can I access parts of the deliverable that are not part of the formal document?

Title [and direct link to publication, where available]	Event/ Presentation	Main Authors	Published	Date/Place at	Remarks
<a href="#">"Ontology-based data description and discovery in a SWIM environment."</a>	Integrated Communications, Navigation, and Surveillance (ICNS) 2017	Christoph Schuetz	Paper officially published via IEEE	April 18-20, 2017, Washington DC, USA	Won the "Best in track" award. Presented and published.
<a href="#">"Semantic Data Containers for Realizing the Full Potential of System Wide Information Management", focuses on the use-cases of a SWIM container system."</a>	Digital Avionics Systems Conference (DASC) 2017	Eduard Gringinger	Paper officially published via IEEE	21/09/2017, St. Petersburg, Florida, USA	Presented, published.
<a href="#">"Towards a value-added information layer for SWIM: The semantic container approach"</a>	ICNS 2018	Eduard Gringinger, Christoph Schuetz, Bernd Neumayr, Michael Schrefl, Scott Wilson	Paper officially published via IEEE	April 10-12 2018, Washington DC, USA	Presented, published.

<p>“Semantics-Based Summarization of ATM Information to Manage Information Overload in Pilot Briefings”</p>	<p>31st Congress of the International Council of the Aeronautical Sciences (ICAS) 2018</p>	<p>Christoph Schuetz, Bernd Neumayr, Michael Schrefl, Scott Wilson, Eduard Gringinger</p>		<p>01/09/2018, Belo Horizonte, Brazil</p>	<p>Paper accepted. Abstract was among the limited number (around 20 out of 860) selected by members of the ICAS Programme Committee for consideration for the Special Issue. This special issue will be published in the Aeronautical Journal (the world’s oldest aeronautics journal currently in production)!</p>
<p>BEST project poster II <a href="http://project-best.eu/publications.html">http://project-best.eu/publications.html</a></p>	<p>SID Belgrade, 2017</p>	<p>Multiple consortium members</p>	<p>Published at the project's website</p>	<p>28 – 30 November 2017, Belgrade</p>	<p>Presented, Published.</p>