STORY OF A JOURNEY: OSGi is no Astroparticle Physics...or is it?

Ilenia Salvadori
Data In Motion Consulting GmbH
About us:

- Founded in 2010;
- Located in Jena/Thuringia – Germany;
- Consulting, Independent RnD, Development, Training;
- Assisted Development on complex and distributed systems;
- Wide Range of Industries like, Medical, Transportation, Traffic, Public Sector, Smart City and Industrial IoT.
Who am I?

- I am a Physicist;
- Until last year I was investigating neutrino oscillations for the ANTARES/KM3NeT Collaborations;
- I had never heard about OSGi or Eclipse before.
Which were my “versatile” skills?

- Programming skills (mostly C++);
- Statistics and data analysis;
- Problem solving approach.
Why am I here today?

- I am not here to teach you anything;
- I want to share my first impressions on the OSGi technology and Eclipse framework as an “outsider”;
- Give a feedback after my first year working with these technologies.
My first impressions...

Was it love at first sight?

Event Admin

Dependency Injection

Java

RCP

Declarative Services

Promises

Config Admin

EMF
My first impressions...

Not really!

Event Admin

Dependency Injection

Java

RCP

Declarative Services

Promises

Config Admin

EMF

DATA IN MOTION
THINGS I HAVE LEARNED
An outsider's view of OSGi

• Modular architecture
An outsider's view of OSGi

- Modular architecture
- Application/Bundle Life-cycle
An outsider's view of OSGi

- Modular architecture
- Application/Bundle Life-cycle
- Dynamic Services
Modeling is a real mind exercise

- It forces you to deeply understand the problem you are facing;
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- You have to get how things are related to each other if you want to build a solid model;
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- You have to get how things are related to each other if you want to build a solid model;
- It teaches you how to recognize similar structures and generalize concepts;
Modeling is a real mind exercise

• It forces you to deeply understand the problem you are facing;

• You have to get how things are related to each other if you want to build a solid model;

• It teaches you how to generalize concepts;

• It is not so different from the work of a physicist, if you think about it...
The importance of a clean, documented and reusable code

Does it work? Yes, I am done.
The importance of a clean, documented and reusable code

Does it work? Yes, BUT...

Would another developer understand it?

Will I still understand it in a month?

Could that part be a separate method?

Did I test it?

Did I have to repeat the same logic more than once?

...
The hardest parts...

• Get familiar with all the terminology and the domain of the different features (still work in progress);
The hardest parts...

- Get familiar with all the terminology and the domain of the different features (still work in progress);

- Understand how to work with asynchronous programming;
What helped me the most...

- Documentation (reading specifications, books, a lot of googling);
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- Asking questions;
What helped me the most...

- Documentation (reading specifications, books, a lot of googling);
- Asking questions;
- A “physicist” approach!
Conclusions

- This was a changing year;
Conclusions

• This was a changing year;

• I am glad to be part of this community;
Conclusions

Just start.
Do not worry that you don’t have all the answers yet.

Alli Webb
Thanks for listening!

Visit our website at: https://www.datainmotion.de

Twitter: @motion_data
Images` References

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