

15.12.2025

W3C Web of Things Community Group Online Meetup 32:

From WoT to Chain: Enabling Zero-Trust Oracles for Blockchain IoT Applications



**Ivan Dimitry
Ribeiro Zyrianoff**

Research fellow at the
IoT Prism Lab of
University of Bologna

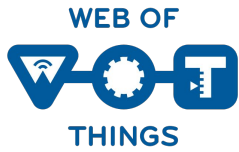
Agenda

- Welcome
- News from the WoT CG
- Presentation from IoT Prism Lab by Ivan Zyrianoff
 - From WoT to Chain: Enabling Zero-Trust Oracles for Blockchain IoT Applications
 - Q&A Session
- Discussion
- Wrap up

Intro slides are publicly available:

<https://docs.google.com/presentation/d/1bYQHcKImeMGR2CT3MWXJwDegtzpbZq5AKTssvVhR5Ww/edit?usp=sharing>

W3C Community Contributor License Agreement (CLA)



We would like to remind you that contributions to the CG are subject to W3C Community Contributor License Agreement. Please visit:

<https://www.w3.org/community/about/process/cla/>

These include contributions to the repository or any reports we may write in the future.

Welcome to the Meetup

Greetings

WoT CG Co-Chairs:

Ege Korkan

- Email: ege.korkan@siemens.com
- GitHub: [@egekorkan](#). [LinkedIn](#), [X](#), [Mastodon](#)



Cristiano Aguzzi

- Email: relu.cri@gmail.com
- GitHub: [@relu91](#). [LinkedIn](#), [X](#), [Mastodon](#)

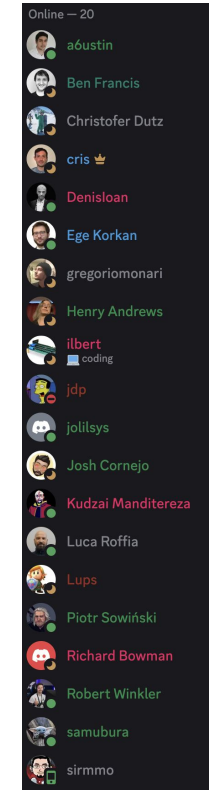


Meeting Logistics

- Minute Taking:
 - Visible at <https://hackmd.io/@egekorkan/w3c-wot-cg-minutes>
 - Editable by scribes, commentable by everyone
 - Ege will be scribing today
- Questions: Use chat. We will respect the order

Engage with the Community

Discord: <https://discord.gg/RJNYJsEgnb>



177 people are
there already!

Stay Informed

Subscribe to:

- Calendar: <https://www.w3.org/groups/cg/wot/calendar>
- YouTube: <https://www.youtube.com/@WoTCG>

Check:

- GitHub repository: <https://github.com/w3c/wot-cg>
- Homepage: www.w3.org/community/wot/
- Administrative information: <https://www.w3.org/groups/cg/wot>
- W3C WoT: www.w3.org/WoT/

Skip all that, join the group


CG Participation requires no W3C membership, thus it is free.

You create a W3C account and go to our homepage at

<https://www.w3.org/community/wot/>

JOIN OR LEAVE THIS GROUP


Tutorial: What is WoT?


What is WoT Tutorial
GitHub

What is WoT


Welcome to the tutorial page of Web of Things created by W3C Web of Things Community Group

Start the tutorial




Structure of the tutorial

Throughout this tutorial, you can learn about the Web of Things, its applications and tools for newcomers. All topics start with basic and advanced concepts. Then, hands-on exercises demonstrate the concepts with off-the-shelf libraries.




What to expect

It is aimed to make newcomers learn about Web of Things and speed their learning process. Each section is short, therefore you can learn about WoT bit by bit. At any time, you can come back and use this page as reference. This material does not consist of only explanations but is also supported with code snippets that you can work on and try by yourself.




Learning Objectives

At the end, you will have all the tools in your belt to build WoT applications. With all these tools, you can build actual software such as dashboards, protocol proxies and translators, smart internet-connected devices, mash ups of WoT devices and services, in many domains such as Smart Homes, Factory Automation.




Official WoT Page

This site is intended for the use of beginners to learn about the Web of Things concepts. The official site of Web of Things can be found at w3.org/WoT/.



Contribute & Collaborate

This tutorial is a community-driven effort and always evolving. Each stage in our workflow is reviewed collaboratively as it progresses through storyboards, scripts, videos, and website updates. You can contribute directly to its development by providing feedback and opening issues through GitHub. Our [GitHub project](#) allows everyone to see the progress and the ongoing work.



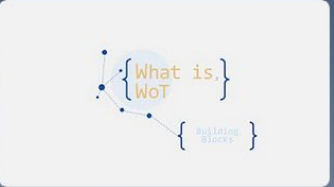
Stay Connected

Stay up to date with the tutorial's progress and connect with the community. We host a weekly call to share updates and ideas. You can also join our Discord server or follow the latest developments in our GitHub repository.

[Weekly Call](#) | [Discord](#)

WoT Tutorial Links	Community	External Resources
Introduction	W3C WoT Community	Thing Description Specification
Preliminary Series - YouTube	WoT CG Discord	CG GitHub
Main Series - YouTube	WoT CG YouTube	WoT Landing Page

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What is WoT Tutorial

by Web of Things Community Group

Playlist • 4 videos • 19 views

The core of the tutorial that explains the standards, how to use them and more!

Play all

Building Blocks | What is WoT

Web of Things Community Group • 105 views • 5 months ago

6:13

Applications in Smart Homes and Smart Cities | What is WoT

Web of Things Community Group • 55 views • 5 months ago

5:10

Applications in Industrial and Agriculture Systems | What is WoT

Web of Things Community Group • 37 views • 3 months ago

4:53


Thing Description Introduction | What is WoT

Web of Things Community Group • 86 views • 3 months ago

3:01


More videos in preliminary technologies!






Welcome | What is WoT

Web of Things Community Group • 107 views • 1 year ago




Playlists and Headers | What is WoT

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JSON Introduction | What is WoT

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JSON in Practice | What is WoT

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JSON Schema in Practice - Advanced Topics | What is WoT

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JSON Schema Validators | What is WoT

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CG Logos & Network Topologies | What is WoT

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Link Slide

- [CG Homepage](#)
 - [Calendar](#)
 - [Discord](#)
 - [YouTube](#)
 - [GitHub](#)
 - [Mailing List](#)
- [W3C WoT Homepage](#)
- [Tutorial Homepage](#)

[Today's Intro Slides](#)

News from the CG

Everything from this group in the last year



<https://www.w3.org/2025/11/TPAC/demo-wot-cg-update.html>

Collaboration with the Standardization

Still needs 100% confirmation and change to charter, but going forward:

- Plugfests will be organized by the WoT CG, opening it up to everyone
- Individual WoT Binding Specifications can be written in the CG

More in recent Pull Request: <https://github.com/w3c/wot-cg/pull/227>

Events

- Over the holiday period: Let's collect Thing Models of devices around us!
See more at the event instructions:
<https://github.com/w3c/wot-cg/tree/main/Events/2025-12-TM-Challenge>
- Office Hours: Join in and ask questions to chairs, get implementation advice!
 - Every Thursday alternating between 9am CEST and 5pm CEST

Presentation and Question Session

Video Recording

We will be recording the speaker and stop the recording at the start of the Q&A session

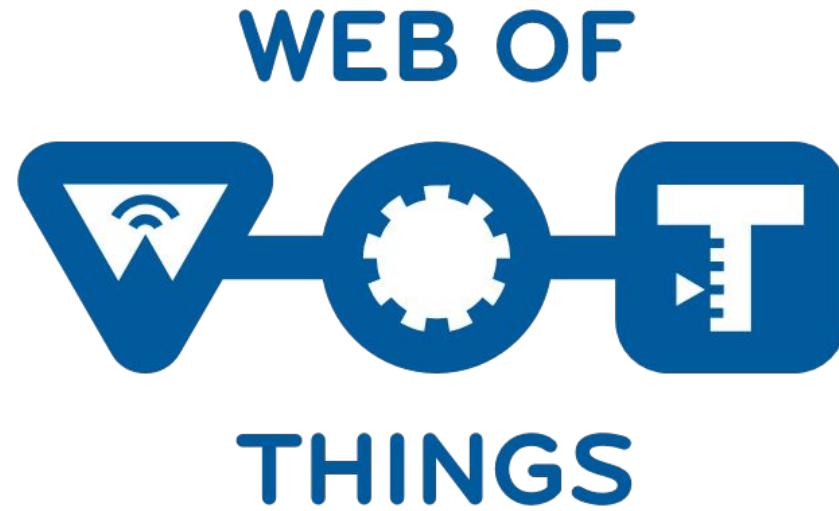
Speaker

Ivan Zyrianoff ([GitHub](#) | [LinkedIn](#)) from [IoT Prism Lab at the University of Bologna](#)

Ivan is a Research Fellow from the University of Bologna and a member of the IoT-Prism lab. He received a Ph.D. in structural and environmental health monitoring and management from the University of Bologna in 2024.

He was involved in numerous national and European projects centered on IoT applied to different contexts. His current research topics encompass interoperability for the Internet of Things, Edge Computing, and Edge Caching.





When asking questions, please briefly introduce yourself

From WoT to Chain: Enabling Zero-Trust Oracles for Blockchain IoT Applications

Meeting Minutes

Available after the meeting in our repository.

Official Position at
Company

John Doe



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John Doe

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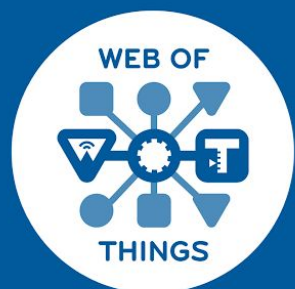
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