



Sharing follow-up XR Developer Network

Paul Melis, SURF
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30 October, 2023

| Agenda

10:00 - Intro & Developer Network update (Paul Melis, SURF)

10:15 - NPuls Pilothub XR (Esther van der Linde, SURF)

10:25 - XR Development and Sharing practices at BUAS (Wilco Boode, BUAS)

10:45 - Co-development call to action (Tim Tijs, Saxion)

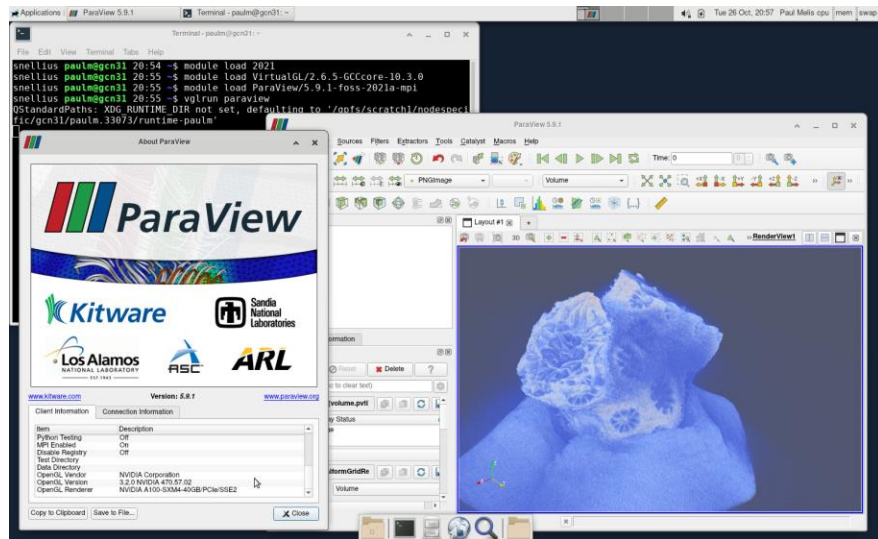
10:55 - Break

11:00 - Discussions

- Making an inventory of available XR developer materials
- Sharing "amongst friends"
- National XR Day 2024

12:00 - Lunch

About me



Visualization Advisor @ SURF

- High-Performance Computing & Visualization group
- Support HPC users with data visualization, courses, viz infrastructure, etc

SURF

Background:

- Computer Science MSc (UTwente)
- Sci-viz & VR @ RuG and UvA (2003-2009)
- At SURF since 2009 (SARA, SURFsara before)



XR Innovation @ SURF

- Technical focus (devices, platforms, tools, etc.)
- XR on Tour
- Co-organizer National XR Day '23, VARR Out '18 and '19
- Publications related to XR
- Developer Network coordinator

| XR Developer Network - Why



Technical focus

Different from existing (NL) communities organized around *domain, sector, institute, ...*



Exchange

Knowledge, Experiences, Tips & tricks, Feedback, Help, Code, Data, ...



Opportunities

Software reuse, Co-development, Shared procurement, ...



Long(er)-term XR strategy

Methods, standards, platforms, ...

Links to other technologies, such as AI, 5G

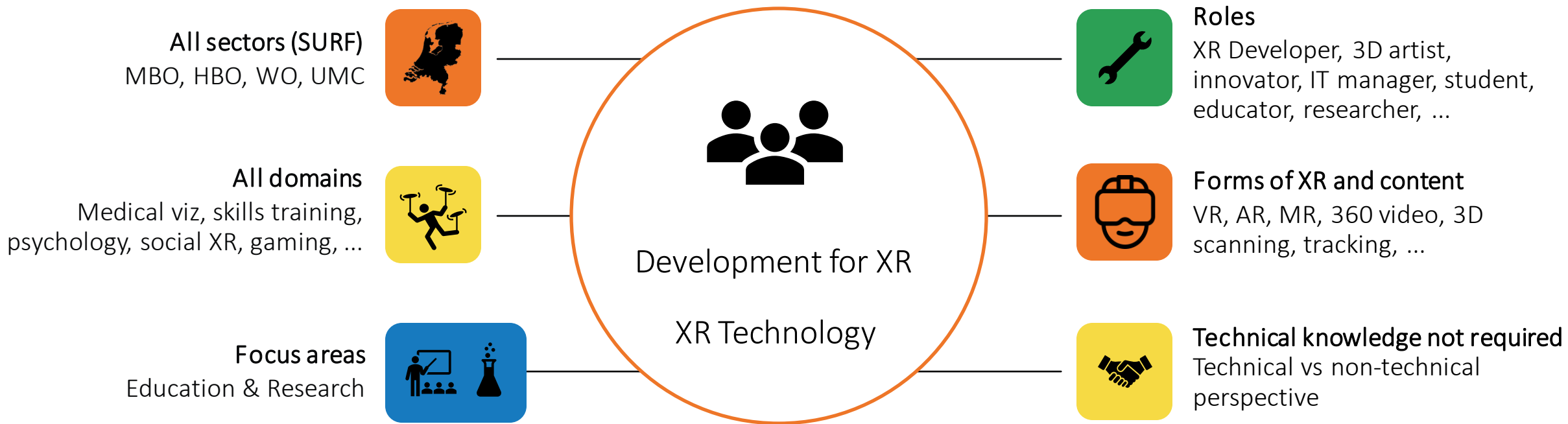
Links to large-scale programs, such as NPuls, DUTCH, CIIC

Links to international XR developments

Links to XR market developments

...

| XR Developer Network - For whom



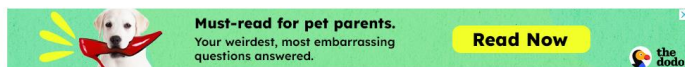
| New faces?

- About yourself
- Interest in the XR Developer Network

| Since the last devnet meeting & NXR...



Since the last devnet meeting & NXR...



GAMING / ENTERTAINMENT / POLICY

Unity has changed its pricing model, and game developers are pissed off



unity

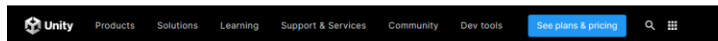
/ Developers will be charged a flat rate based on how many times their game is installed, no matter if that install is attached to a sale.

By [Ash Parrish](#), a reporter who has covered the business, culture, and communities of video games for seven years. Previously, she worked at Kotaku.

Sep 13, 2023, 12:24 AM GMT+2 | 28 Comments / 28 New



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An open letter to our community

By [Marc Whitten](#) September 22, 2023 in News | 3 min. read



Topics covered

[Company announcement](#) [Editor](#) [Unity Enterprise](#) [Unity Personal](#) [Unity Pro](#)

Share in [Twitter](#) [Facebook](#) [LinkedIn](#)

To our community:

I'm Marc Whitten, and I lead Unity Create which includes the Unity engine and editor teams.

I want to start with this: I am sorry.

GAMING / ENTERTAINMENT / CREATORS

Epic is changing Unreal Engine's pricing for non-game developers

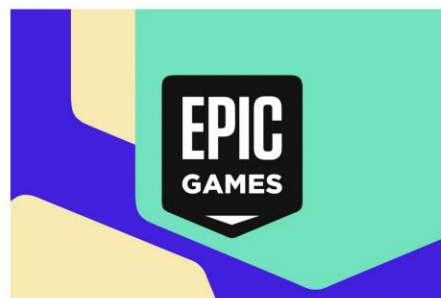


Illustration by Alex Castro / The Verge

/ The change will happen sometime next year and will charge some users on a per-seat model, similar to Photoshop pricing.

By [Mia Sato](#), platforms and communities reporter with five years of experience covering the companies that shape technology and the people who use their tools.

Oct 5, 2023, 9:42 PM GMT+2 | 14 Comments / 14 New



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| XR Developer Network update

- Developer Network announced 22/12/2022
- Activities 2023
 - 30/3 - *Sharing brainstorm @ Saxion Reality Check Festival*
 - 5/7 - *Try a Device! Session @ National XR Day*
 - 13/9 - *Blog summarizing sharing brainstorm*
 - (21/9 - *Webinar Network Technology & XR*)
 - 11/10 - *Towards sharing developer XR materials @ SURF Utrecht*
- 39 names on the member list
 - 3 MBO, 16 HBO, 12 WO, 3 UMC, 5 Other
 - *Room for more!*

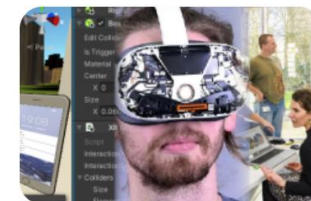
Artikel

22 december 2022 • 👁 785

Announcing the SURF XR Developer Network!

... Announcing the SURF XR **Developer Network!** SURF is initiating the XR...

 Paul Melis



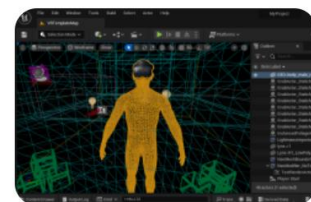
Artikel

13 september 2023 • 👁 105

Towards sharing developer XR materials

... Towards sharing **developer** XR materials
Summary Below is a bullet-wise summary ...

 Paul Melis



SURF

| Goals coming months

- (Paul) More focus on regular activities and growing the network
- Revive the idea of a "core team"
 - Steer the network: decide on focus and topics, make connections, ...
 - Practical stuff to organize the meetings, e.g approach speakers
 - Chair a meeting
- Improve online presence
 - Overall SURF XR activities on surf.nl/xr
 - Add Developer Network landing page
 - Communities.surf.nl - event information, blogs
 - Discourse forum for continuous (technical) interaction – almost there

| Activities

- Plan meetings (and their topics) ahead, and with a more regular schedule:
 - Meeting every 2-3 months, mix of online and in-person
- Proposed meeting topics:
 - *AI for XR*
 - *Web-based XR development and deployment*
 - *No-code XR tools & environments*
 - *Ethics and XR*
 - *Practical privacy issues*
 - *Beyond Unity & Unreal*
 - ...
- Hardware evaluation
 - Upcoming: Quest 3 (Q4 2023), Lynx R1 (Q1 2024?)
 - *Would like to do this with multiple interested parties, focus more on use for E&R*
 - Publish a blog with shared experiences & conclusions
- Other ideas for activities:
 - Lab visits
 - Experiments, e.g. hold a meeting in MS Mesh / VRChat

Explore on a platform
you can trust



Explore VR on a platform you can trust,
with enhanced privacy features that
encrypt your data and supervision tools
that keep content friendly for everyone
in the family.

[Learn more](#)

NPuls - Pilothub XR

Esther van der Linde, SURF

XR Development and Sharing practices at BUAS

Wilco Boode, BUAS

Co-development call to action

Tim Tijs, Saxion

Discussion topics

| Last meeting: discussion/brainstorm

- Sharing what exactly? And with whom?
- Reasons and/or goals for sharing?
- What are incentives you need (if any) to start sharing?
- What would you ask back (if anything) from the party you're sharing with?
- What are current issues keeping you from sharing? (practical, technical, legal, ...)



Groups of, say, 3-5

30 minutes of time

Quick round of intro within
your group (1 min)

A post-it per category

| Summary of sharing discussion @ RCF

- **Reasons for sharing:**
 - Avoid reinventing the wheel
 - Learn from each other (technical approach, experiences, etc)
 - Show what you're working on, get recognition
- **Asked in return:**
 - Keep reuse open (i.e. apply open-source license)
 - Connection from those reusing to original developer
- **Types of materials to share:**
 - Source code (including plugins, blueprints, ...)
 - Assets (but can be legally tricky....)
 - PoCs, failed experiments, incomplete results, ...
 - Knowledge
- **Hurdles:**
 - Time
 - Providing support
 - Purchased assets and plugins
 - Control over access
 - Discoverability, centralized
 - Legal/IP issues
 - Lack of standards
 - Shareable unit (file, library, plugin, full project)
 - Different approaches between groups/institutes/domains

| Proposed next steps

- Short term:
 - Make inventory of currently available materials
 - Share the inventory amongst the developer network (and perhaps publicly)
- Medium term:
 - Working more towards *sharing amongst friends*
- Long term:
 - Scouting the road to co-development



| Inventory of available XR developer materials

- Goals
 - Become aware of what's already there, and what others are working on
 - Avoid reinventing the wheel, promote reuse
 - Learn from each other's technical approaches

Are we okay with creating such a list and sharing it amongst each other?

- Data per list entry (proposal):

Item name

Producer / institute

Short description, state

Screenshot (if applicable)

High-level technical information

Software/hardware dependencies

License, reuse conditions & restrictions

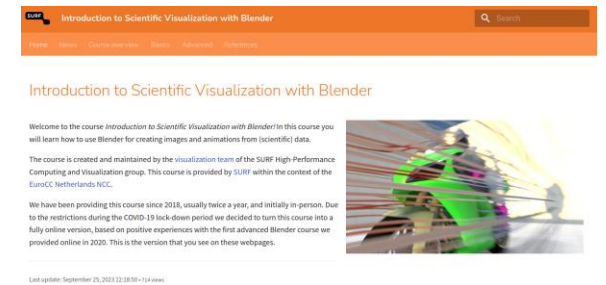
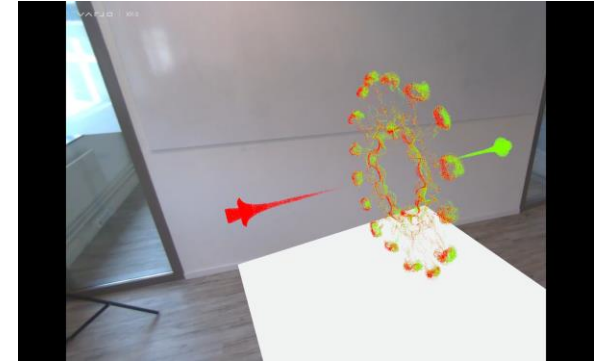
URL (if openly shared)

Contact person(s)

- Would this be a public list, or friends-only at first?
- What type of materials to include, and what not?
 - Code, plugins, assets, ...
 - Failed experiments
 - Best practices?
 - Course material?

| SURF

- Simple 3D model viewer [Varjo XR-3 demo]
- Vortex ring simulation player [demo]
- Introduction to Scientific Visualization with Blender [course]



| Sharing amongst friends?

- How much focus to place on this?

Versus sharing publicly?

- Whom to include amongst "friends"?



| National XR Day 2024

- Will be at the University of Twente
- Wednesday 3 July 2024
- Co-organized by SURF, UTwente and Saxion

- Developer Network activities?



Any other things to discuss?



Thank you!

Do you (or someone you know) want to want to join the XR Developer Network?

Have them send an e-mail to

xr@surf.nl

to register!

Ideas for Developer Network meetings?

Contact

xr@surf.nl

Paul Melis

 paul.melis@surf.nl

 [@PMel3D](https://twitter.com/PMel3D)

 [@paulmelis@mastodon.gamedev.place](https://mastodon.gamedev.place/@paulmelis)

SURF



A man with a beard and sunglasses is pointing directly at the camera. His hand is in the foreground, and the word "SURF" is overlaid on it in white capital letters on a black rounded rectangular background. The background is blurred, showing a light green wall and a wooden door frame.

SURF