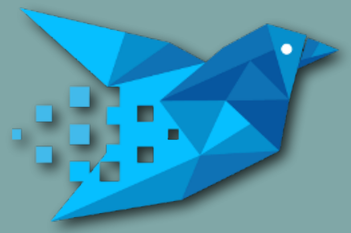
“

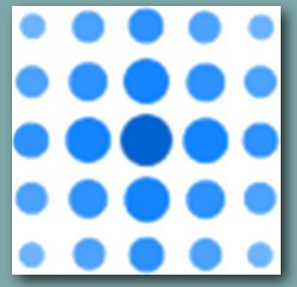
TRYING TO MANAGE TERMINOLOGY ON THE INTERNET IS HELL.

— Darrell O’Donnell

”



TRUST Over IP



START BUILDING CONSENSUS TODAY

SPEC-UP-T

Henk van Cann, Blockchainbird, @henkvancann

LF DECENTRALIZED TRUST

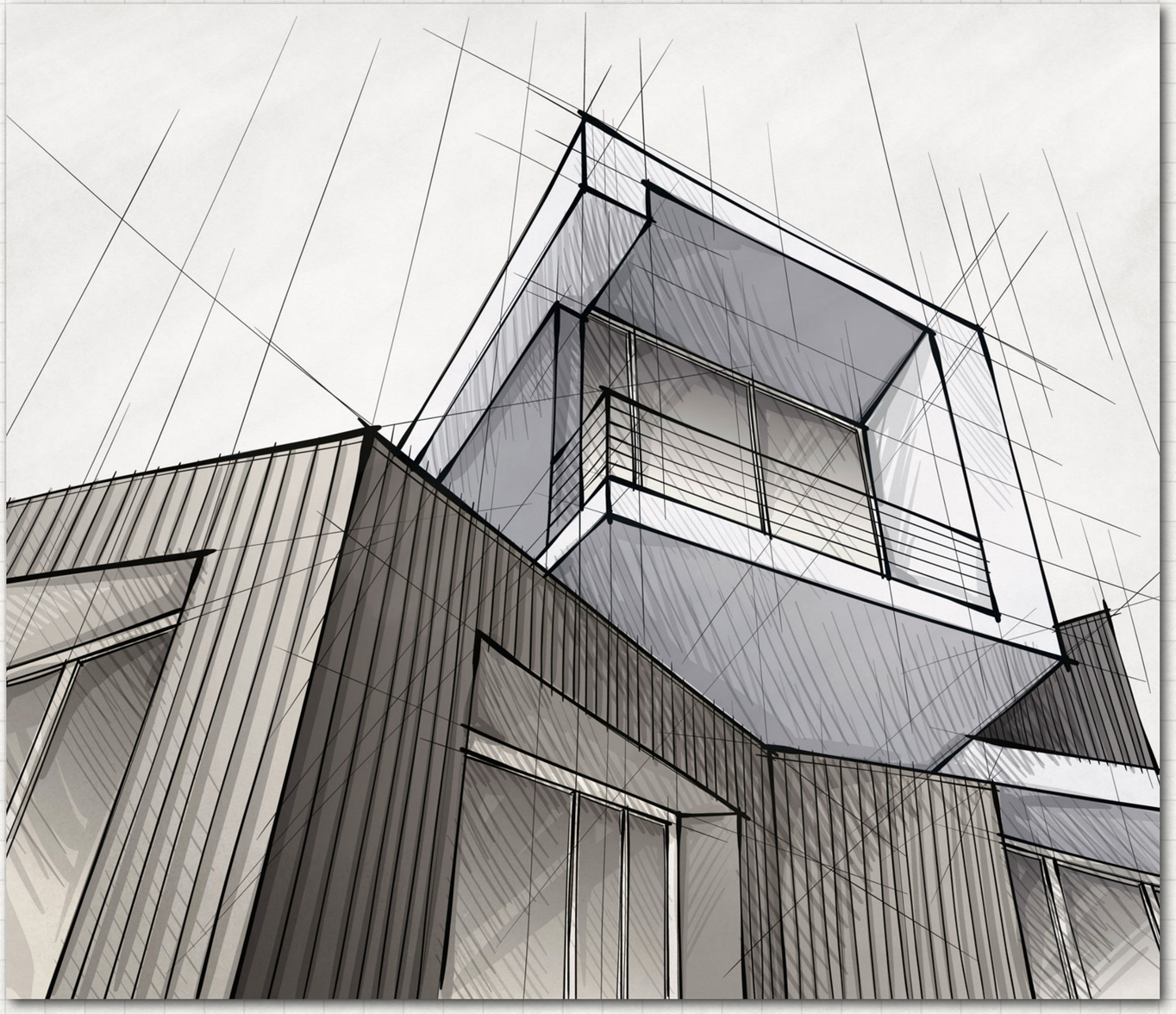
WHO ARE WE?

Henk van Cann, Blockchainbird, @henkvancann

WHY?

OPEN-SOURCE "EASY PEAZY" TECHNICAL SPECIFICATION

DANIEL BUCHNER, INVENTOR

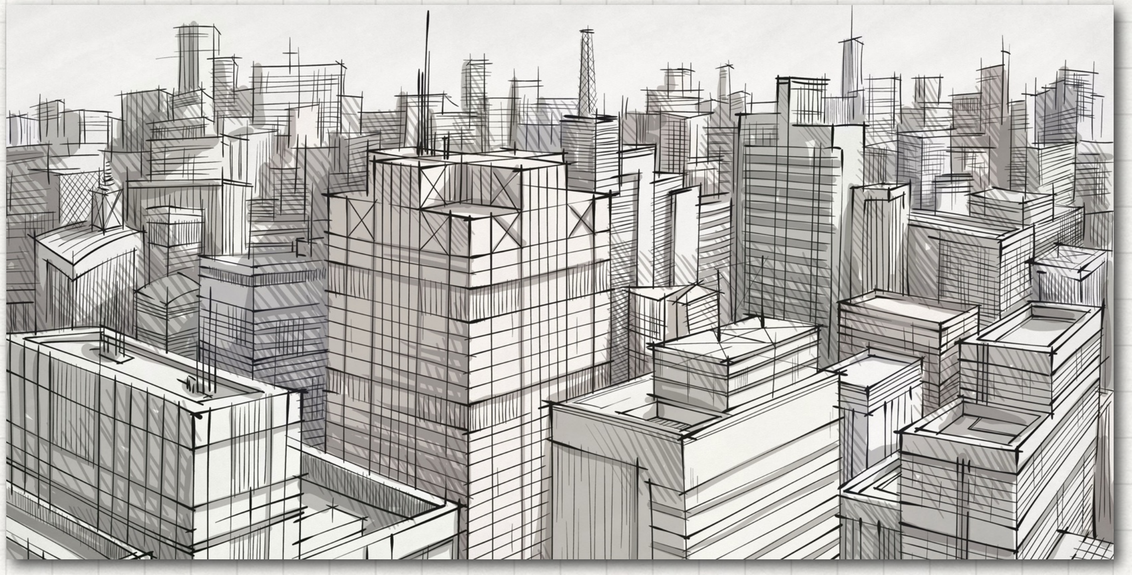


AGAIN, WHY?

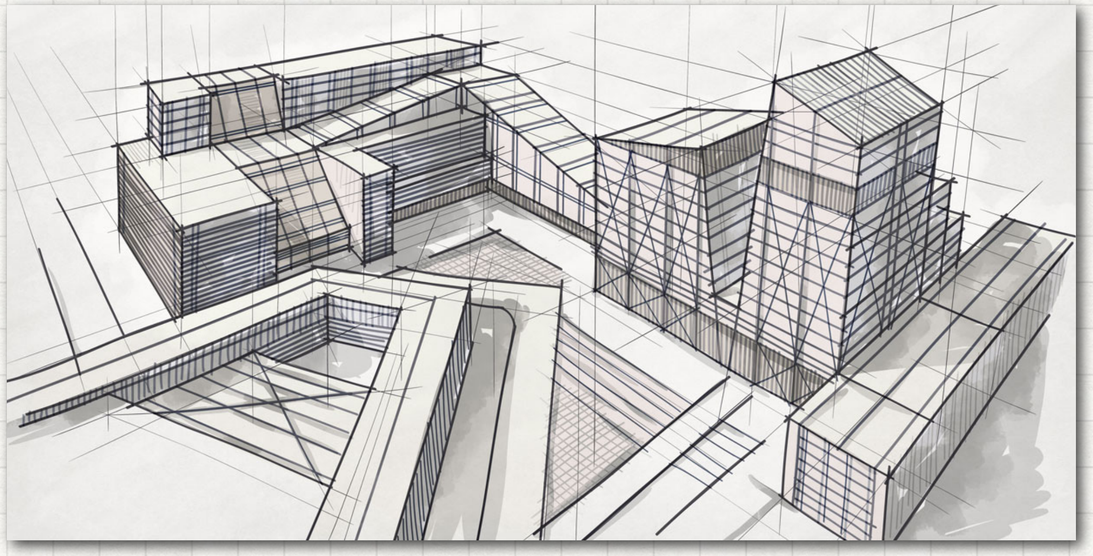
1. TEXT
2. IMAGES
3. REFERENCES
4. TERMS
5. SINGLE PAGE
6. WEBBASED
7. VERSIONED
8. HARVEST DEFINITIONS
9. NORMATIVE/INFORMATIVE LINKING
10. COMMANDLINE & GUI

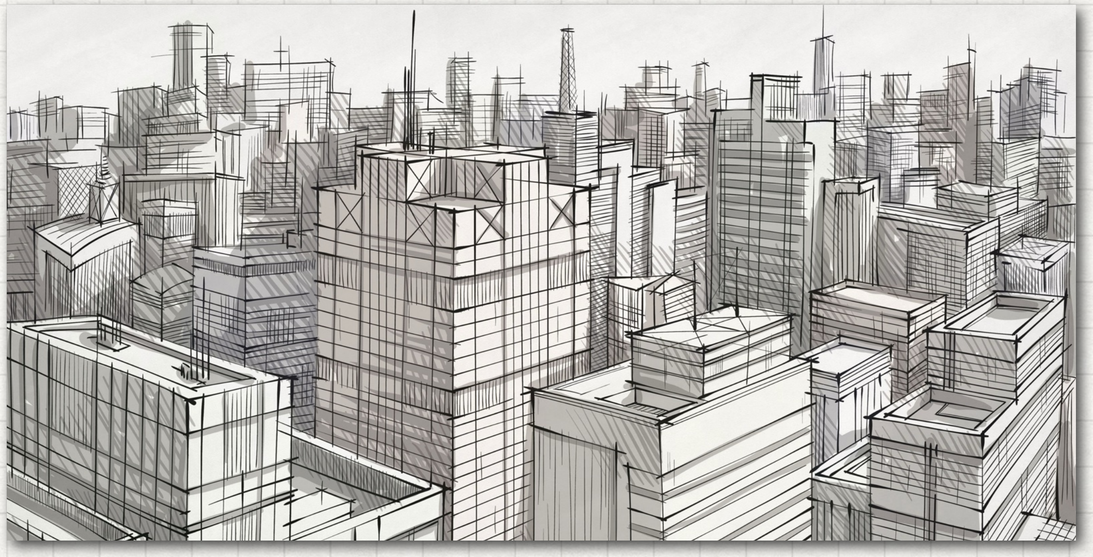
DANIEL BUCHNER, INVENTOR
KOR DWARSHUIS, DEVELOPER

OKAY, ONE LAST TRY, WHY?



WE'RE PART OF A COMMUNITY
WE'D LIKE TO BUILD CONSENSUS
ABOUT A NEW IDEA
WITH ANYONE.



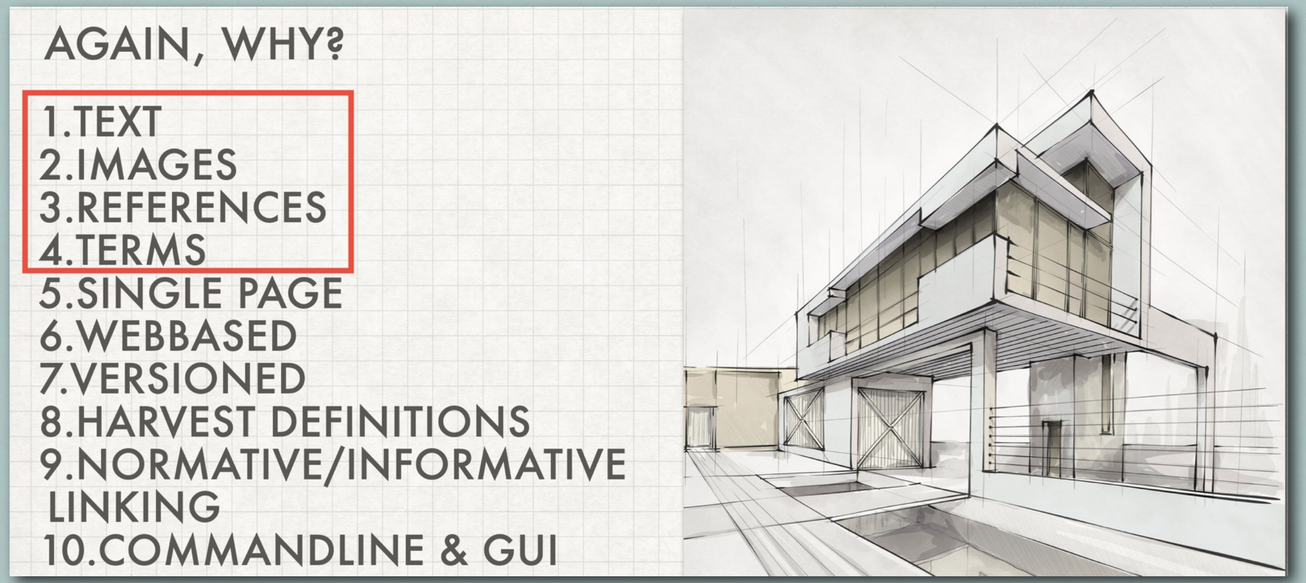


TRUST Over IP

MARKDOWN

READABLE AND WRITEABLE SOURCE, AUTO-CONVERTIBLE

- Markdown
- Spec-Up tags
- Spec-Up-T preprocessing
- GitHub Pages presentation
- DocX and PDF make-over



GITHUB PAGES

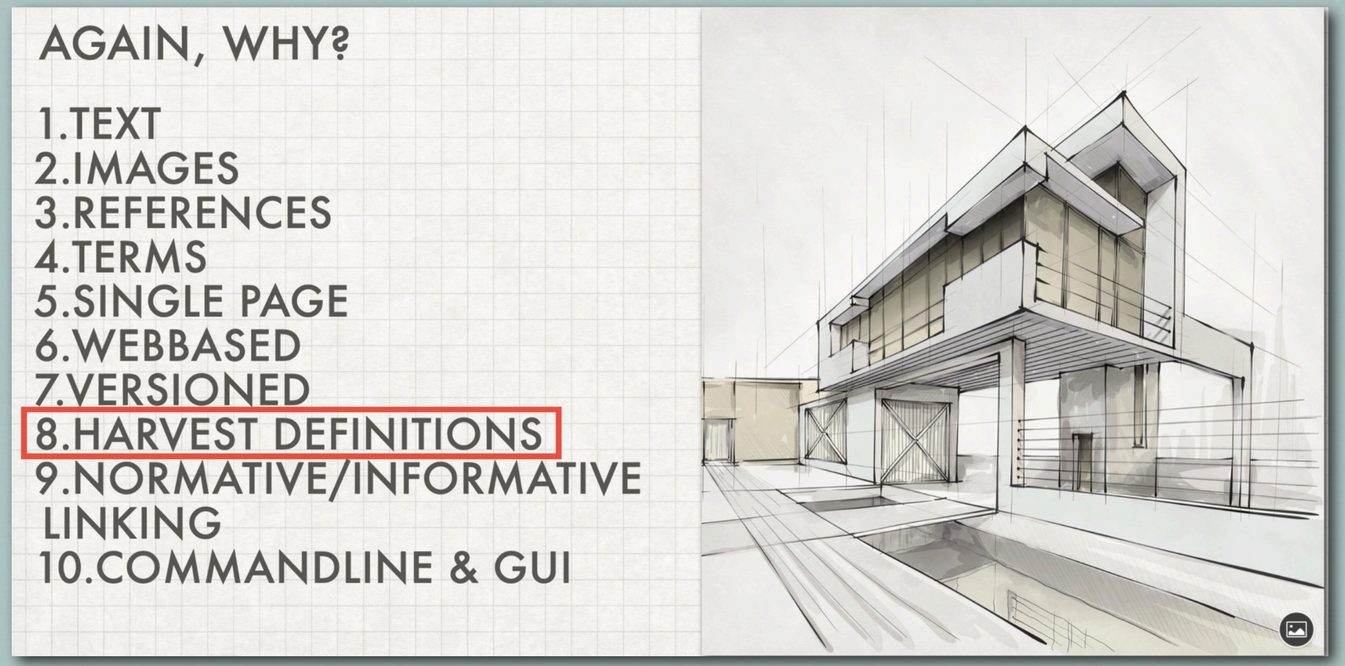
WEBPAGES, EDIT FUNCTIONALITY, ACTION SCRIPT, VERSIONED

- Git
- Remote and local
- Spec-Up-T preprocessing in GitHub Actions
- GitHub Pages presentation
- Up-time and global presence

SPEC-UP-T TAGS

DEF, REF, XREF, TREF, IREF, SPEC

- Define terms
- Reference terms locally
- XReference terms externally
- Transclude definitions (Tref)
- Use Tobie's spec clearinghouse



LINKING

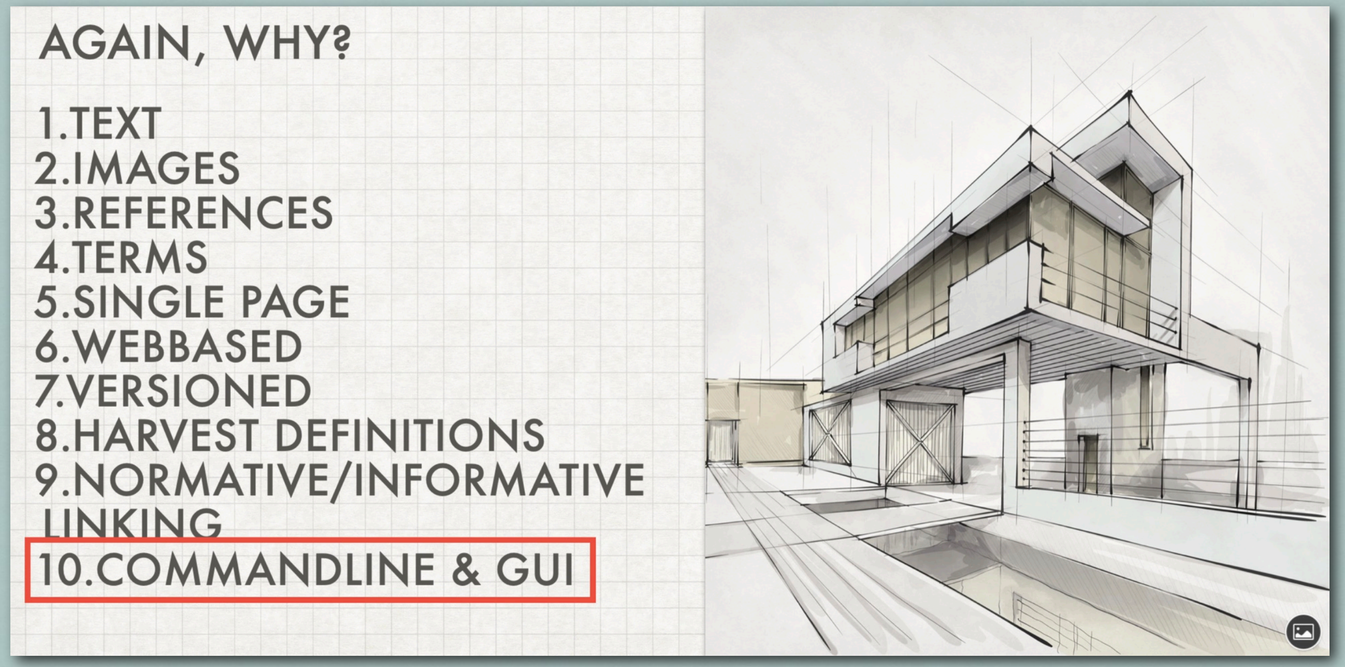
- Reference and trust
- Link and pray
- Check broken links
- Spec-Up-T Health checks

AGAIN, WHY?

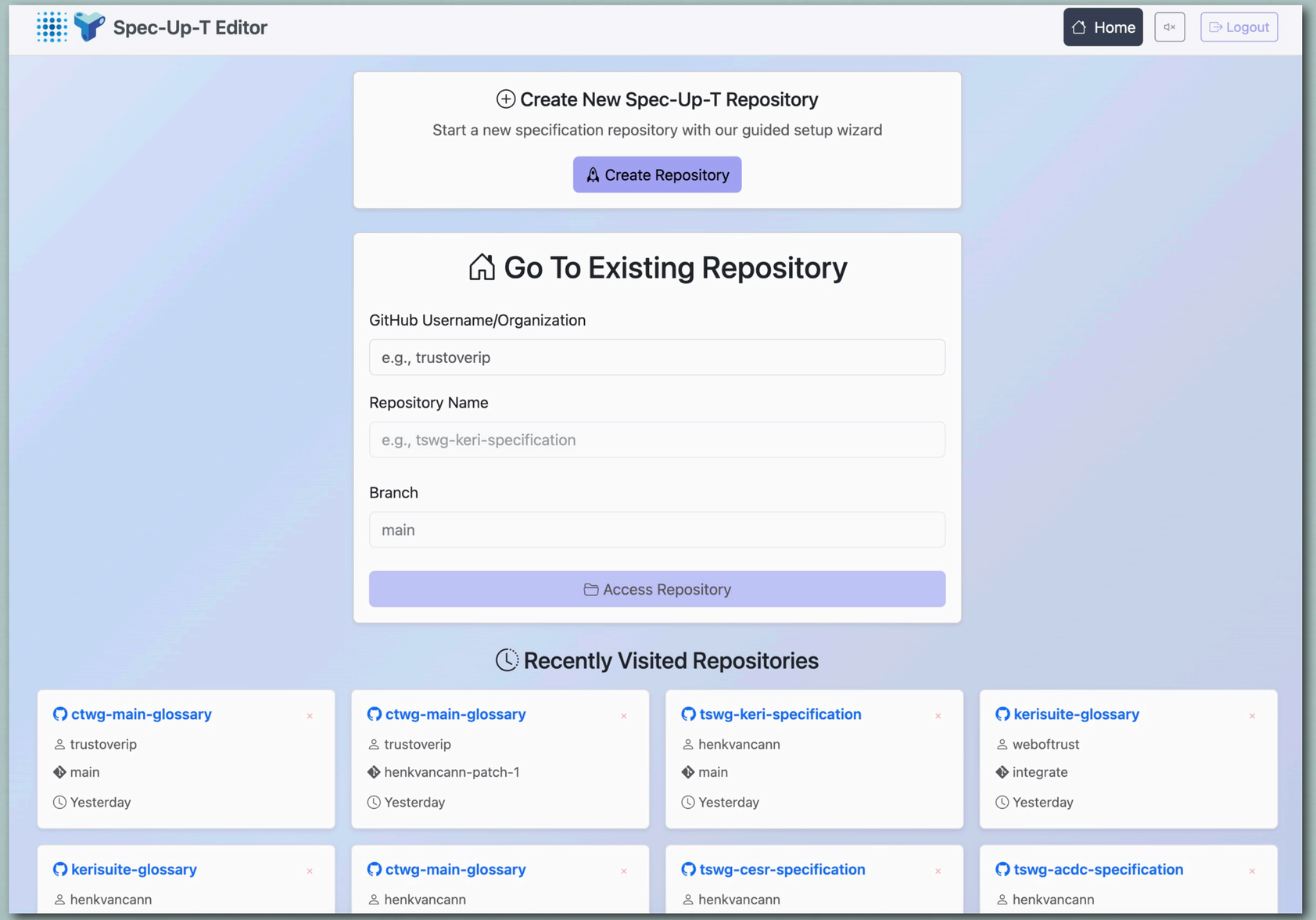
1.TEXT
2.IMAGES
3.REFERENCES
4.TERMS
5.SINGLE PAGE
6.WEBBASED
7.VERSIONED
8.HARVEST DEFINITIONS
9.NORMATIVE/INFORMATIVE LINKING
10.COMMANDLINE & GUI

WEB VERSION OF SPEC-UP-T

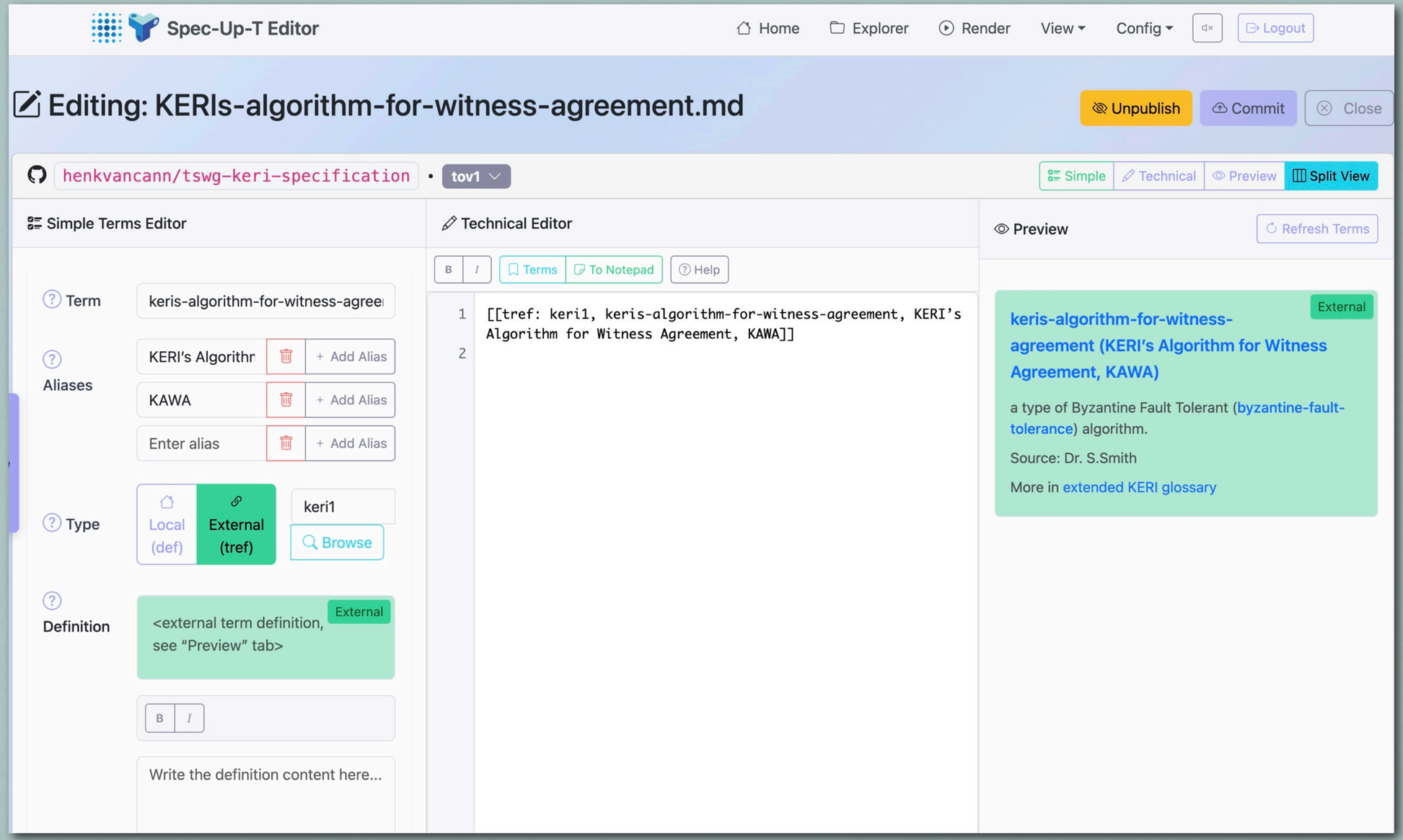
- Original Spec-Up: commandline
- GitHub standard functionality
- GitHub API custom-made functions
- GitHub Actions to generate
- User manual



WEB VERSION OF SPEC-UP-T



WEB VERSION OF SPEC-UP-T



TRUST Over IP

[[def:]]

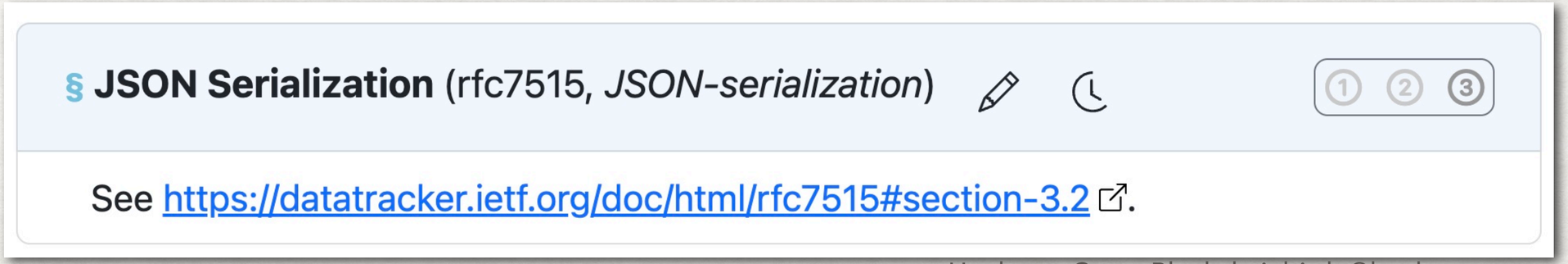
- Term in Key format
- How do you spell it
- Abbreviations and other aliases
- ~ {definition text}

You READ the full text
On click you GO TO links

Example

[[def: self-certifying-identifier, Self Certifying Identifier, SCID]]

- Key = <lowercase and - in between>
- Optional: Alias 1 = how the term will be presented
- Optional: Alias 2..n = how you can reference the term definition
- ~ definition text



[[tref:]]

(transclusion reference/definition)

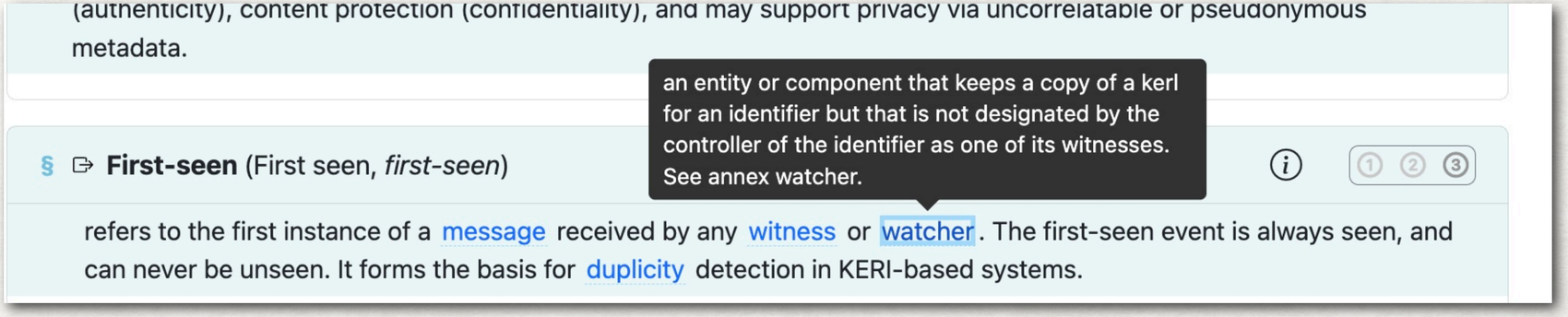
- Mnemonic Specification
- Term in Key format
- How do you spell it
- Abbreviations and other aliases
- ~ {definition text}

You READ the full text
On click you GO TO links

Example

[[tref: toip1, self-certifying-identifier, Self Certifying Identifier, SCID]]

- Spec = toip1 (*defined in specs.json*)
- Key = <lowercase and - in between>
- Optional: Alias **1** = how the term will be **presented**. Alias **2..n** = how you can **reference** the term transclusion



[[xref:]]

(external reference)

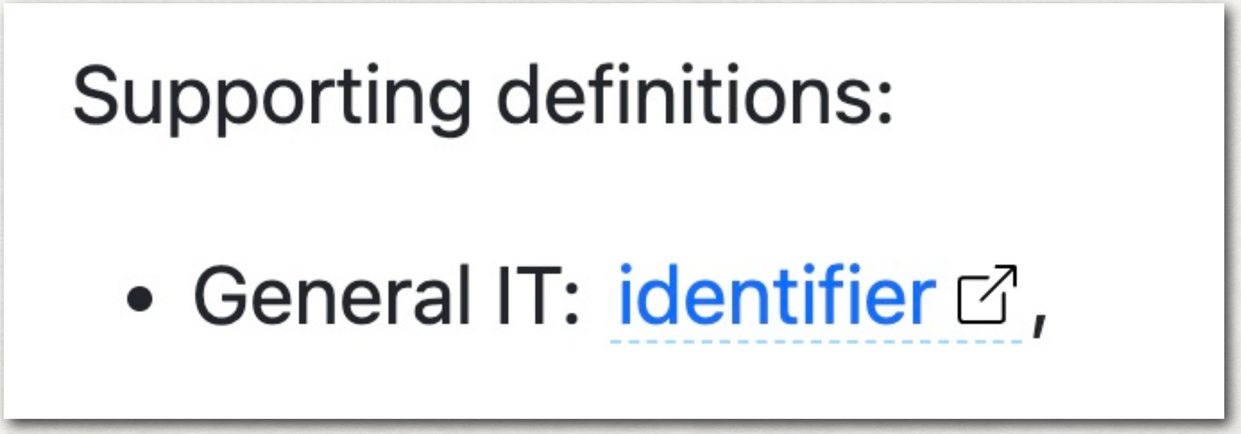
- Mnemonic Specification
- Term in Key format
- How do you spell it
- Pop-up definition text

On hover, you READ the POP UP
On click you GO TO either the main link or a link within the pop-up

Example

[[xref: toip1, self-certifying-identifier, SCID]]

- Spec = toip1 (*defined in specs.json*)
- Key = <lowercase and - in between>
- Optional: Alias 1 = how the term will be presented



[[ref:]]

- Term or alias
- Pop-up definition text

Example

[[ref: SCID]]

- Payload = key or alias
- Will match a def or tref !!

On hover, you READ the POP UP
On click you GO TO either the main link or a popped-up link

[[def:]]

[[tref:]]

[[ref:]]

[[xref:]]

URL

§ ***identifier***

A single attribute—typically a character string—that uniquely identifies an entity within a specific context (which may be a global context). Examples include the name of a party, the URL of an organization, or a serial number for a man-made thing.

Supporting definitions:

- General IT: identifier,
- Trust-over-IP: identifier.

§ **inception event** (inception events, *inception-event*)

A key event that provides the incepting information needed to derive an AID and establish its initial key state, as defined by the KERI specification.

More: WebOfTrust glossary.

TRUST Over IP

[[iref:]]

- Term or alias
- Inline inclusion of definition text

You READ the definition from the glossary again
No anchor
On click, you GO TO the provided links, also in the pop-up text

Example

[[iref: pre-rotation]]

- Payload = key or alias
- Will match a def or tref !!

JSON Serialization (rfc7515, JSON-serialization) GLOSSARY

See https://datatracker.ietf.org/doc/html/rfc7515#section-3.2.

§ **JSON Serialization** (rfc7515, *JSON-serialization*)

See https://datatracker.ietf.org/doc/html/rfc7515#section-3.2.

[link](URL)

[link](#anchor)

- Markdown and Html
- No Pop-up
- No versioning
- Yes, broken link checking

On click you GO TO links

Examples

Source [wikipedia](https://en.wikipedia.org/wiki/Autonomic_computing)

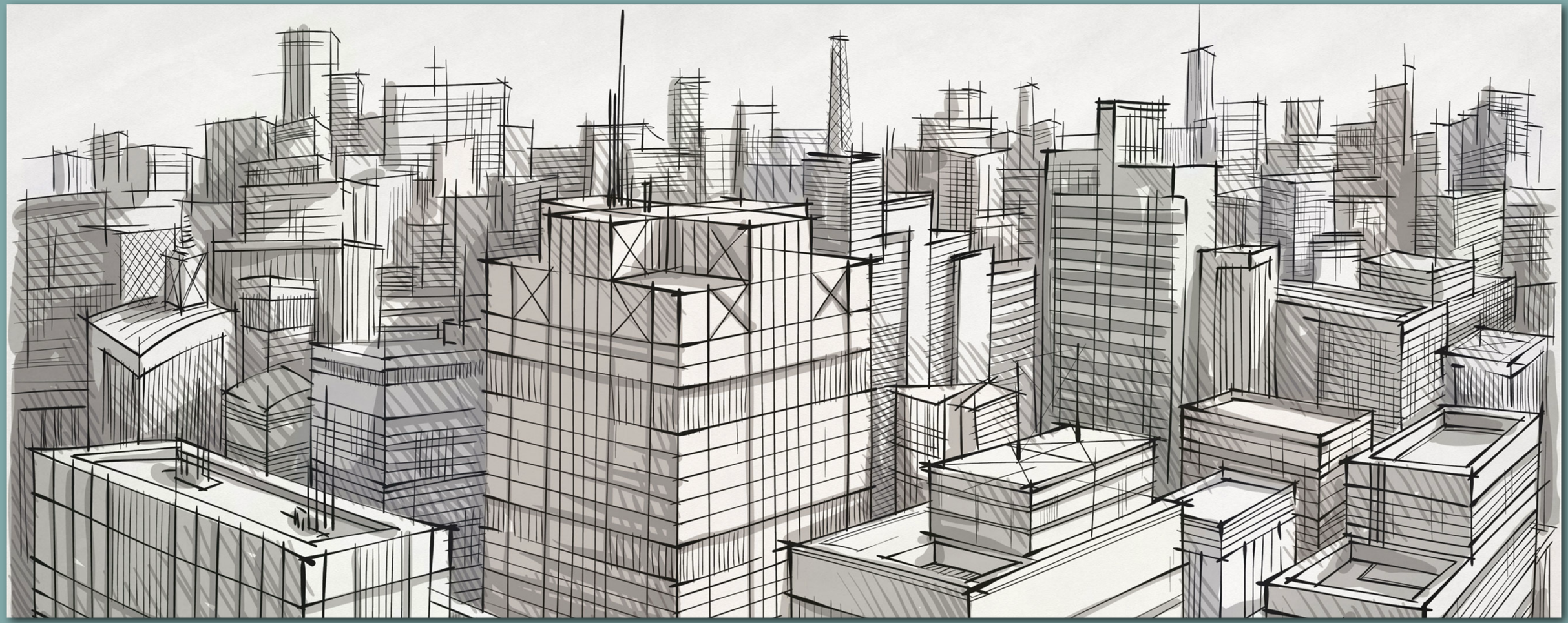
[RFC2119](#RFC2119)

[Seals](./tools/#deep-dive-into-seals)

- Payload = a link
- As is; so outdated at first use

SPEC-UP-T ECOSYSTEMS

HOW CONSENSUS AND FREEDOM WORK TOGETHER

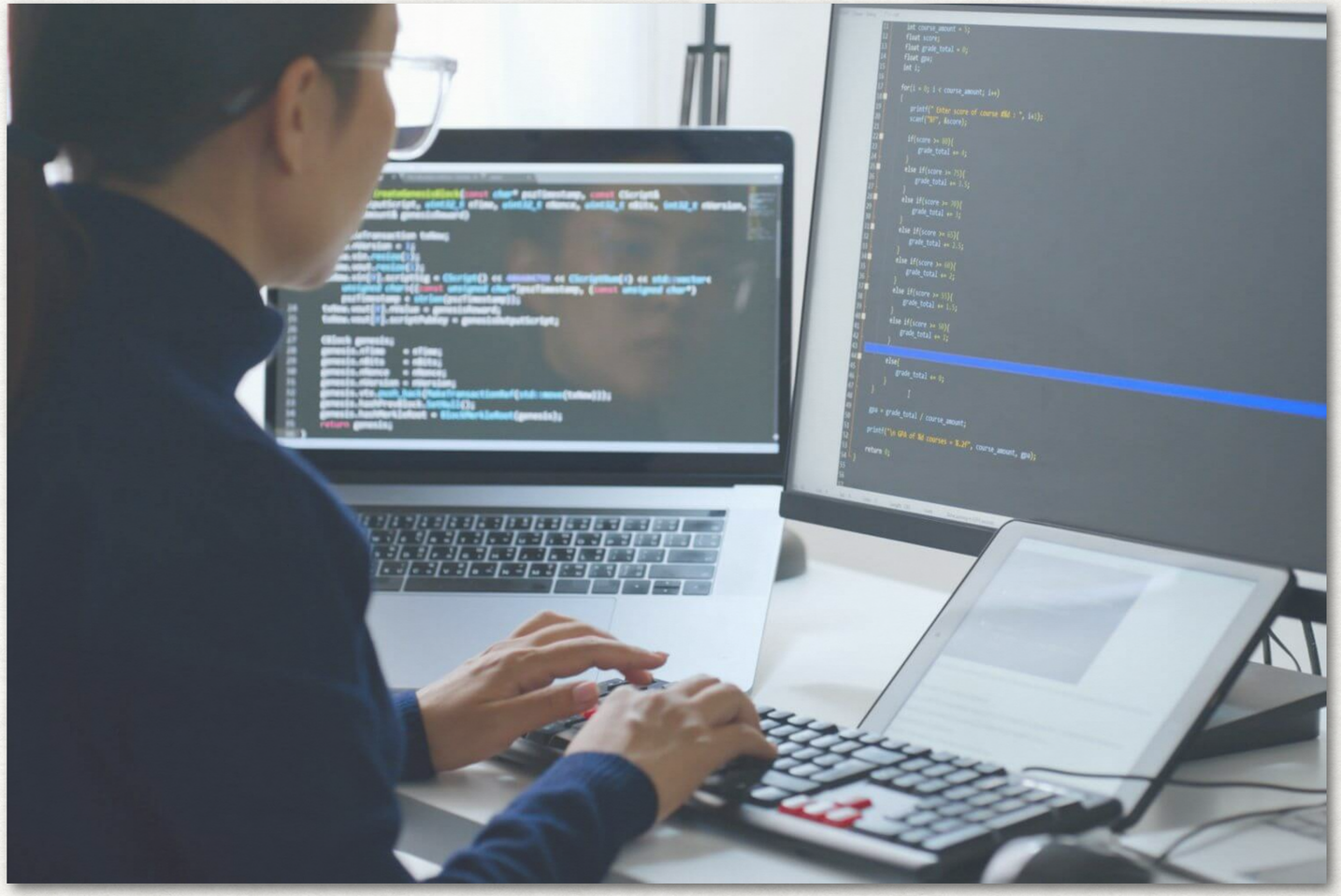


Henk van Cann, Blockchainbird, @henkvancann

SERVICE

SPEC-UP-T SPECIFICATION INTEGRATED WITH GLOSSARIES

- Project install & configuration
- Data intake and processing
- Education (3 online workshops)
- Custom development (optional)



Acknowledgement: picture from Expressdata.co.uk - CC4.0

WHAT IS A TECHNICAL SPECIFICATION?

TEXT, GLOSSARY, INLINE REFERENCES AND BIBLIOGRAPHY

- Text in markdown
- Images in markdown
- Extension in markdown (example mermaid)
- Specific tags in Spec-Up-T
- A glossary section
- External glossaries declared in specs.json
- Terms & definitions directory
- A GitHub repo
- Git commits locally or remotely

WHAT IS A WEB-BASED SINGLE-PAGE?

STATIC PAGE GENERATION WITH GITHUB ACTIONS AND PAGES

- Spec-up-T is built in Node.JS and NPM
- All changes are versioned using git
- All external references are backed up with local fallbacks
- *Broken link analysis pre- and post-generation*
- Healthcheck of the spec in its ecosystem
- A command-line menu to edit and test: generates a local index.html file.
- GitHub Actions to generate the Pages site remotely
- The single source of truth is the production version of any spec or glossary based on Spec-Up-T

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WHAT IS HARVESTING AND LINKING?

REUSE DEFINTIONS THAT FIT IN CONTEXT AND LINK TO NORMATIVE AND INFORMATIVE SOURCES

- Spec-up-T [[tref]] and [[xref]]
- Spec-up-T [[spec]] (*trust involved*)
- Markdown
- Html
- Broken links report during generation
- Broken links report in production

WHAT IS COMMAND-LINE AND WEB-BASED?

ANYONE WITH A GITHUB ACCOUNT SHOULD BE ABLE TO MANAGE SPEC-UP-T-BASED SPECIFICATIONS AND GLOSSARIES

- Command-line is an option
- Web-based is GitHub-based
- User rights determine workflow
- Teamwork: Git workflow and governance rules on top
- Healthchecks: consistency

“

WE’VE MANAGED TERMINOLOGY HELL ON THE INTERNET.

— Henk van Cann

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