# STOP-IT

**T8.2:**
**Feedback questionnaire (FLs)**

KWR
www.stop-it-project.eu

The following questions, directed at the end user (FL), aim at validating the performance of a tool within the STOP-IT platform, based on a set of **traits**, given as numbered sections, along with their partial characteristics, given as individual questions.

To fill this questionnaire, please provide:

- your ranking, in case of grading questions. If needed, an explanation of the different grades is provided below each question.
- your feedback, in case of open questions or conditional (Yes/No) answers.

Most questions are based on a grading/ranking evaluation that ranges from 1 (poor performance) to 5 (great performance). Open questions supplement some sections, allowing you to provide feedback back to STOP-IT tool developers.

# 1. Introduction

Please fill in the required information.

Demonstration Event Date:      __ / __ / ____      Follower/utility name:
…………………………………..

First Name:                            Last Name:
…………………………………………….      …………………………………….

Job Role in the FL:
……………………………………….

What is your expertise and role in the water utility?

☐    Manager / board member
☐    Risk manager / risk officer / asset manager
☐    Asset or SCADA operator, maintenance officer
☐    Other (please specify): ……………………………………………………………

Which is the tool that was demonstrated and that you are reviewing (**already filled, no need to fill it**)

| | | | | | |
|---|---|---|---|---|---|
| ☒ | RIDB | Risk Identification Database | ☐ | CVT | Computer Vision Tools |
| ☐ | InfraRisk CP | InfraRisk for Cyber Physical threats | ☐ | FCAC | Fine-grain Cyber Access Control |
| ☐ | AVAT | Asset Vulnerability Assessment Tool | ☐ | Smart-Locks | Access Control System using Electronic Locks |
| ☒ | SP | Scenario Planner | ☐ | HPD | Human Presence Detection using WiFi signals |
| ☒ | RAET | Risk Analysis and Evaluation Toolkit | ☐ | CTsS | Cyber Threat Sharing Service |
| ☒ | RRMD | Risk Reduction Measures Database | ☐ | RTAD | Real-Time Anomaly Detector |
| ☒ | STP | Stress Testing Platform | ☐ | XL-SIEM | Cross Layer Security Information and Event Management |
| ☒ | FTE | Fault Tree Editor | ☒ | KPItool | Key Performance Indicators tool |
| ☐ | Jdct | Jammer Detector | ☐ | OPWS | Optimised Public Warning System |
| ☐ | NTSA | Network Traffic Sensors and Analysers | ☐ | WQSP | Optimisation Tool for Sensor Placement and Management |
| ☐ | RSDP | Real-time sensor data protection | ☐ | FTCS | Fault-tolerant Control Strategies for Physical Anomalies affecting the SCADA system |

☐    Other (Please specify):
…………………………………………………………………………..

## 2. Ease of access

This set of questions gives insights on aspects of the data input the tool requires and works with.

**The tools that you accessed came through a web or cloud service, accessible online**.
How would you rate the process of accessing the VM in terms of:

a.) Loading time needed

| (very long) | | (reasonable) | | (very fast) |
|:---:|:---:|:---:|:---:|:---:|
| 1 | 2 | 3 | 4 | 5 |
| ☐ | ☐ | ☐ | ☐ | ☐ |

b.) Dependence on browsers/other online services

| (absolute dependence) | | (partial dependence) | | (absolute independence) |
|:---:|:---:|:---:|:---:|:---:|
| 1 | 2 | 3 | 4 | 5 |
| ☐ | ☐ | ☐ | ☐ | ☐ |

**Absolute dependence:** The demonstrated tool is able to run only in a specific browser version and/or is dependent on other web services (besides the STOP-IT platform) to be accessed. Example: a tool that is able to run only in Internet Explorer and requires the user to install Shockwave Player.

**Partial dependence:** The demonstrated tool is generally able to run in frequently used browsers and web technologies, with some exceptions (e.g. cannot be run in Chrome/Firefox).

**Absolute independence:** The demonstrated tool is able to run independent of the browser type and its version and is independent of any other web services, besides the STOP-IT platform.

### 2.1. Open Questions

Did you encounter any problems during the access of the Virtual Machine through your system, or during the online access of individual tools?

| Yes (major issues) | Yes (minor issues) | No |
|:---:|:---:|:---:|
| ☐ | ☐ | ☐ |

**In case you answered yes** to the previous question, please explain the issues encountered:

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## 3. Facilitation of user learning

This set of questions gives insights on whether the learning material provided along with the tool during its demonstration was satisfactory or not.

Was learning material (e.g. a tutorial, documentation, examples) provided to you during the demonstration phase, in order to facilitate your understanding and learning process involved with the tool?

| Yes | No |
|:---:|:---:|
| ☐ | ☐ |

**In case you answered yes** to the previous question, how would you rate this material in terms of:

a.) Its value in facilitating your understanding of the tool:

| (not helpful) | | (somewhat helpful) | | (very helpful) |
|:---:|:---:|:---:|:---:|:---:|
| 1 | 2 | 3 | 4 | 5 |
| ☐ | ☐ | ☐ | ☐ | ☐ |

**Not helpful:** the material did not make it easier to understand the functionality of the tool and I am still confused on many aspects of the tool.
**Somewhat helpful:** the provided material simplified the learning process somewhat, but many aspects of the tool use remain challenging.
**Very helpful:** the provided material simplified the learning process significantly and helped me understand the tool functions considerably.

b.) The content of the provided material:

| (too little and/or of bad quality) | | (satisfactory) | | (ample and/or of good quality) |
|:---:|:---:|:---:|:---:|:---:|
| 1 | 2 | 3 | 4 | 5 |
| ☐ | ☐ | ☐ | ☐ | ☐ |

**Too little and/or of bad quality:** the material that was provided was inadequate to facilitate the learning process or it was not very well explained.
**Satisfactory:** the provided material was of decent quantity and quality.
**Ample and/or of good quality:** the provided material was well-prepared and of good quality and helped me learn about the tool considerably.

Would you like to see some improvements in the learning material that is provided? If yes, what improvements would you recommend?

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## 4. Support

This set of questions gives insights on whether the tool offered support material (e.g. live help, a forum, guidance etc.) during its operation or not.

Was support (e.g. in the form of online direct help, support sessions, a wiki etc.) provided to you along with the tool as part of the demonstration phase?

| Yes | No |
|-----|-----|
| ☐ | ☐ |

**In case you answered yes** to the previous question, how would you rate the support with regards to:

a.) The overall provided support service

| (not helpful) | | (satisfactory) | | (very satisfactory) |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| ☐ | ☐ | ☐ | ☐ | ☐ |

**Not helpful:** the material did not make it easier to understand the functionality of the tool and I am still confused on many aspects of the tool.
**Satisfactory:** the provided material was helpful when I ran into specific problems with the tool, but did not explain other problems I had.
**Very satisfactory:** the provided material was helpful when I ran into any types of problems with the tool and helped me find solutions.

b.) The provided support time (e.g. applicable in live support sessions):

| (not enough) | | | | (ample) |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| ☐ | ☐ | ☐ | ☐ | ☐ |

**Not enough:** there wasn't enough time available to solve the questions I had during the support session.
**Ample:** the support staff was available when I needed them, there was ample time to answer all my questions and ample guidance was provided during my demonstration.

Would you like to see some improvements in the support that is provided? If yes, what improvements would you recommend?

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## 5. Data requirements

This set of questions gives insights on aspects of the data input the tool requires and works with.

During the tool demonstration and before the tool execution, the tool probably required an amount of **input** (e.g. data or commands) from you and generated an amount of **output** (e.g. data) to you. How would you rate these data requirements in terms of:

a.) The amount of data <u>required by</u> the tool

| (excessive requirements) | | (reasonable) | | (minimal requirements) |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| ☐ | ☐ | ☐ | ☐ | ☐ |

**Excessive requirements:** The tool required data in great detail, not readily available in my line of service, that required a significant amount of time to collect.
**Reasonable requirements:** The tool required data that were on par with the tool goals and functionality. This data could be provided by the water service within a reasonable amount of time.
**Minimal requirements:** The tool required a minimal amount of easily accessible data, readily available in my working environment.

b.) The form/formatting of data <u>required by </u>the tool

| (custom formats) | | | | (common formats) |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| ☐ | ☐ | ☐ | ☐ | ☐ |

**Custom formats:** The tool required data in a specific form and I had to prepare/manually convert the data to that specific format.
**Common formats:** The tool required standard, common data formats, widely available in my working environment. Examples include: photos in .JPEG format, GIS data in .shp files, text data in plain .csv files.

c.) The form/formatting of data <u>produced by </u>the tool

| (custom formats) | | | | (common formats) |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| ☐ | ☐ | ☐ | ☐ | ☐ |

**Custom formats:** The tool produced data in a specific form and I had to prepare/manually convert the data to another format in order to use it further (e.g. for another function or tool).
**Common formats:** The tool produced standard, common data formats, widely available in my working environment that I could easily work further with. Examples include: photos in .JPEG format, GIS data in .shp files, text data in plain .csv files.

d.) The amount of preparation needed to load the data

(very large)                                                    (very little)
    1            2            3            4            5
   ☐           ☐           ☐           ☐           ☐

**Very large:** The tool accepts data only in specific formats and these have to be manually/externally converted by me. Substantial effort was needed to prepare the data. No automatic conversion process exists in the tool and I had to use a third-party converter to prepare the data.

**Very little:** The tool accepts data in multiple formats and/or features 'smart' converters internally, so that I didn't need to spend a long time preparing my input data.

e.) The availability/accessibility of data requested by the tool

(very low)                                                    (very high)
    1             2             3            4            5
   ☐           ☐           ☐           ☐           ☐

**Very low:** The data requested from the model could not be found easily or were not openly accessible and required substantial effort to gather.

**Very high:** The data requested could be found easily in my working environment or were openly accessible.

Do you have any remarks/suggestions concerning the data support of the demonstrated tools?

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Did you face any problems upon loading/extracting data? Please leave your feedback here.

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# 6. Integrity

This set of questions gives insight on the integrity of the tool, i.e. the speed, stability and reliability of its structural functions.

### 1.1.1 Tool stability, reliability and security

Following the tool installation and preparation of its input data, you had a phase during the demonstration where the tool was executed (i.e. the model or internal tool processes were run and an analysis was made). In case your tool is a database, this runtime refers to the internal processing, e.g. changing data sheets or processing the data before they were being displayed. How would you rate this tool execution phase in terms of:

a.) The speed of tool execution

| (very slow) | | | | (very fast) |
|:---:|:---:|:---:|:---:|:---:|
| 1 | 2 | 3 | 4 | 5 |
| ☐ | ☐ | ☐ | ☐ | ☐ |

**Very slow:** The runtime/operational time of the tool was significant and the user had to wait a considerable amount of time before the results could be presented (e.g. the user had to wait a number of minutes).
**Very fast:** The runtime/operational time of the tool was very small and the model performed the calculations very fast (e.g. in a few seconds).

b.) The stability of tool execution

| (very buggy) | | (reliable) | | (very reliable) |
|:---:|:---:|:---:|:---:|:---:|
| 1 | 2 | 3 | 4 | 5 |
| ☐ | ☐ | ☐ | ☐ | ☐ |

**Very buggy:** During the tool analysis, there were frequent problems and the results couldn't be displayed. These problems were structural, e.g. due to the tool crashing or freezing.
**Reliable:** Most of the analyses were run without errors. Some issues occurred at some more complex cases or when I did something that the tool did not expect.
**Very reliable:** The analysis of the tool was always able to run and the results were displayed with no problems. The tool performance was consistent, without any bugs or crashes.

c.) The security of tool execution

During the tool execution, the tool likely used a number of security protocols to ensure that the handled, processed and generated data cannot be seen by third users. Were you informed of or did you have any knowledge on the security protocols used for that particular tool?

| Yes | No |
|:---:|:---:|
| ☐ | ☐ |

**In case you answered yes** to the previous question, please rate your experience in the tool use in terms of how secure it was:

|     | (not secure) |     | (secure) |     | (very secure) |
| --- | --- | --- | --- | --- | --- |
|     | 1 | 2 | 3 | 4 | 5 |
|     | ☐ | ☐ | ☐ | ☐ | ☐ |

**Very secure:** The latest security protocols for that particular technology were used (e.g. encryption, user-restricted access etc.) and I was well informed of them, as part of the demonstration process.

**Secure:** A reasonable level of security was used and I had basic knowledge about it during the demonstration process.

**Not secure:** The tool, based on my experience, did not employ security protocols such as encryptions and I am concerned about its use as part of my regular water service.

d.) The stability of the Virtual Machine environment where the tool was executed?

| (unstable) |     | (reliable) |     | (very stable) |
| --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 |
| ☐ | ☐ | ☐ | ☐ | ☐ |

**Unstable:** During the tool analysis, many times the Virtual Environment itself would freeze or disconnect and I was not able to access the tool itself.

**Very stable:** The Virtual Environment itself ran smoothly and I was able to access the tool, as well as the tools connecting to it, on every occasion.

## 1.1.2 Open Questions

Did you encounter any problems during the **operation** of the demonstrated to your system (or your online access to it)?

| Yes (major issues, instabilities etc.) | Yes (minor issues, e.g. some bugs) | No |
| --- | --- | --- |
| ☐ | ☐ | ☐ |

**In case you answered yes** to the previous question, please explain the issues encountered:

……………………………………………………………………………………………………

……………………………………………………………………………………………………

……………………………………………………………………………………………………

# 7. Usability

This set of questions gives insight on how easy and pleasurable it is to use the tool, thus exploring its structural simplicity, aesthetic and functional aspects of its interface and intuitiveness.

Throughout the tool demonstration, you probably interacted with the tool or technology through a command line or user interface (UI) that included all buttons, commands, graphics etc. that enabled interaction with the tool. There could be also the case that this tool is only a protocol or (hardware) technology, so it was installed in your system and does not have a specific interface you can interact with.

Did the tool have an interface or was it just a protocol/technology?

| The tool featured a user interface (e.g. graphics or command line) □ (proceed to Section 7.1) | This tool was a protocol or technology so there is no interface I can interact with. □ (proceed to Section 7.2) |
|---|---|

## 7.1 Tool with a user interface

How would you rate this user interface in terms of:

a.) the time it took you to get acquainted with the interface:

| (excessive) | | (reasonable) | | (minimal) |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| □ | □ | □ | □ | □ |

**excessive:** It took me a long time to get used to the graphics and functions of the tool interface and I am still unsure about what many of the options do.
**reasonable:** The amount of time needed to get acquainted with the buttons and graphics was reasonable and in par with the tool goals. I now know what most options do.
**minimal:** I learned how to interact with the tool very quickly and got used to it very quickly as well.

b.) user interface functionality:

| (cumbersome) | | (functional) | | (very functional) |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| □ | □ | □ | □ | □ |

**cumbersome:** The user interface is complicated and a considerable amount of time is required to explore the options and functions of the tool.
**functional:** The user interface offers a decent level of functionality, even though some aspects could be improved (e.g. some options could be simplified).
**very functional:** The user interface is simple and functional, on par with the tool goals.

c.) the design of the user interface:

| (basic) | | (good) | | (beautiful) |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| ☐ | ☐ | ☐ | ☐ | ☐ |

**basic:** The user interface works with a very crude design, i.e. is a simple command-line, or is a primitive graphical user interface.

**functional:** The user interface is designed to serve the basic functions of the tool and facilitate the user experience.

**very functional:** The user interface is beautifully designed and offers a pleasurable user experience.

d.) the overall intuitiveness of the user-tool interaction:

| (not intuitive) | | (reasonable) | | (very intuitive) |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| ☐ | ☐ | ☐ | ☐ | ☐ |

**not intuitive:** During the user-tool interaction, actions from my side frequently do not make sense or are not easy to deduce and I must spend a considerable amount of time to learn them. The sequence of actions needed from me is confusing.

**reasonable:** During the user-tool interaction, I occasionally have to look out where to find specific options and/or actions. However, the general experience is not cumbersome and I can interact with the tool without overall confusion.

**very intuitive:** The user-tool interaction works in a very intuitive way. I know or can easily guess where I can find the tool options without a lot of learning.

e.) the functionality of the tool in general:

| (unnecessarily complex) | | (functional) | | (very functional) |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| ☐ | ☐ | ☐ | ☐ | ☐ |

**unnecessarily complex:** The tool in general looks very complex and offers a lot of options that I'm not going to or wouldn't like to use.

**functional:** The tool offers interesting options, even though some aspects could be improved.

**very functional:** The tool feels 'just right' and it has complexity and functionality in par with the tool goals. I find it very functional and would like to use it further.

### 7.2 Protocol or Technology

How would you rate your experience with the tool in terms of:

a.) the general way the tool runs in your systems so far:

| (problematic) | | (functional) | | (very functional) |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| ☐ | ☐ | ☐ | ☐ | ☐ |

**problematic:** The protocol or technology is not able to run multiple times and I had to uninstall it/operate the system without it.

**functional:** The protocol or technology is operational during most times, with slight issues that do not bother me or cause downtime to other services.

**very functional:** The protocol or technology has a seamless operation to my working environment and is always working well.

## 8. Usefulness

This set of questions gives insight on how useful the demonstrated tools are the context of the FL service, both as stand-alone products but also as part of the STOP-IT platform.

The end product of STOP-IT is to provide a framework for the identification, detection, assessment and mitigation of cyber-physical risks in your water system. Based on your experience, what is the role of **the demonstrated tools** towards the afore-mentioned general goal?

(Note: multiple answers are accepted)

| Risk identification (e.g. RIDB) | Risk detection (e.g. NTSA) | Risk assessment and analysis (e.g. AVAT) | Risk mitigation (e.g. RRMD) |
|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ |

a.) Based on your experience from the demonstration, how well do you think **the demonstrated tools** perform the <u>specific function</u> that they were designed/supposed to do?

| (very limited success) | | (partial success) | | (success) |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| ☐ | ☐ | ☐ | ☐ | ☐ |

**Very limited success:** The tool's function deviates from what was promised and only a small part of the tools' objectives are currently fulfilled.
**Partial success:** The tool's function is exactly what was promised, albeit with a number of limited mishaps during the tool operation. Core functionalities are as promised, even though the tool could be improved to serve its functional requirements.
**Success:** The tool works exactly as it was envisioned and all of its requirements are covered.

b.) How do you view **the demonstrated tools** as <u>part of the whole STOP-IT platform and its goals</u> (i.e. the provision of cyber, physical and cyber-physical risk assessment and treatment services at strategic, tactical and operational levels)?
Consider also the role of the tool in the identification-detection-analysis-mitigation chain that was analysed at the beginning of this section.

| (a niche/optional part) | | (a useful part) | | (an integral part) |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| ☐ | ☐ | ☐ | ☐ | ☐ |

**A niche/optional part:** The tool's function has a niche part in the STOP-IT platform and/or does not directly aid/actively contribute to the goals of the platform as a whole.
**A useful part:** The tool's function offers useful functionality that helps/contributes to the general goals of the STOP-IT platform.
**An integral part:** The tool's function is important and can be considered an integral part of the STOP-IT platform services.

c.) Would you consider **the demonstrated tools** as a useful addition to the needs and challenges of your water service?

| (not that useful) | | (useful) | | (very useful) |
|:---:|:---:|:---:|:---:|:---:|
| 1 | 2 | 3 | 4 | 5 |
| ☐ | ☐ | ☐ | ☐ | ☐ |

**Not that useful:** The tool is not useful, in its present form, to the needs and challenges of the water services my company provides.
**Useful:** The tool is a useful addition to the needs and challenges of the water services my company provides.
**Very useful:** The tool is a highly desirable addition to the needs and challenges of the water services my company provides.

d.) Are **the demonstrated tools** efficient at raising your awareness on cyber-physical risks on your system?

| (inefficient) | | (moderately efficient) | | (very efficient) |
|:---:|:---:|:---:|:---:|:---:|
| 1 | 2 | 3 | 4 | 5 |
| ☐ | ☐ | ☐ | ☐ | ☐ |

**Inefficient:** The tool did not give any insights on the cyber-physical risk my company faces while operating their drinking water system.
**Moderately efficient:** The tool provided insights and made me aware of the cyber-physical risks involved in my line of business.
**Very efficient:** The tool provided me with good insight and made me well aware of the cyber-physical risks that are involved in my line of business.
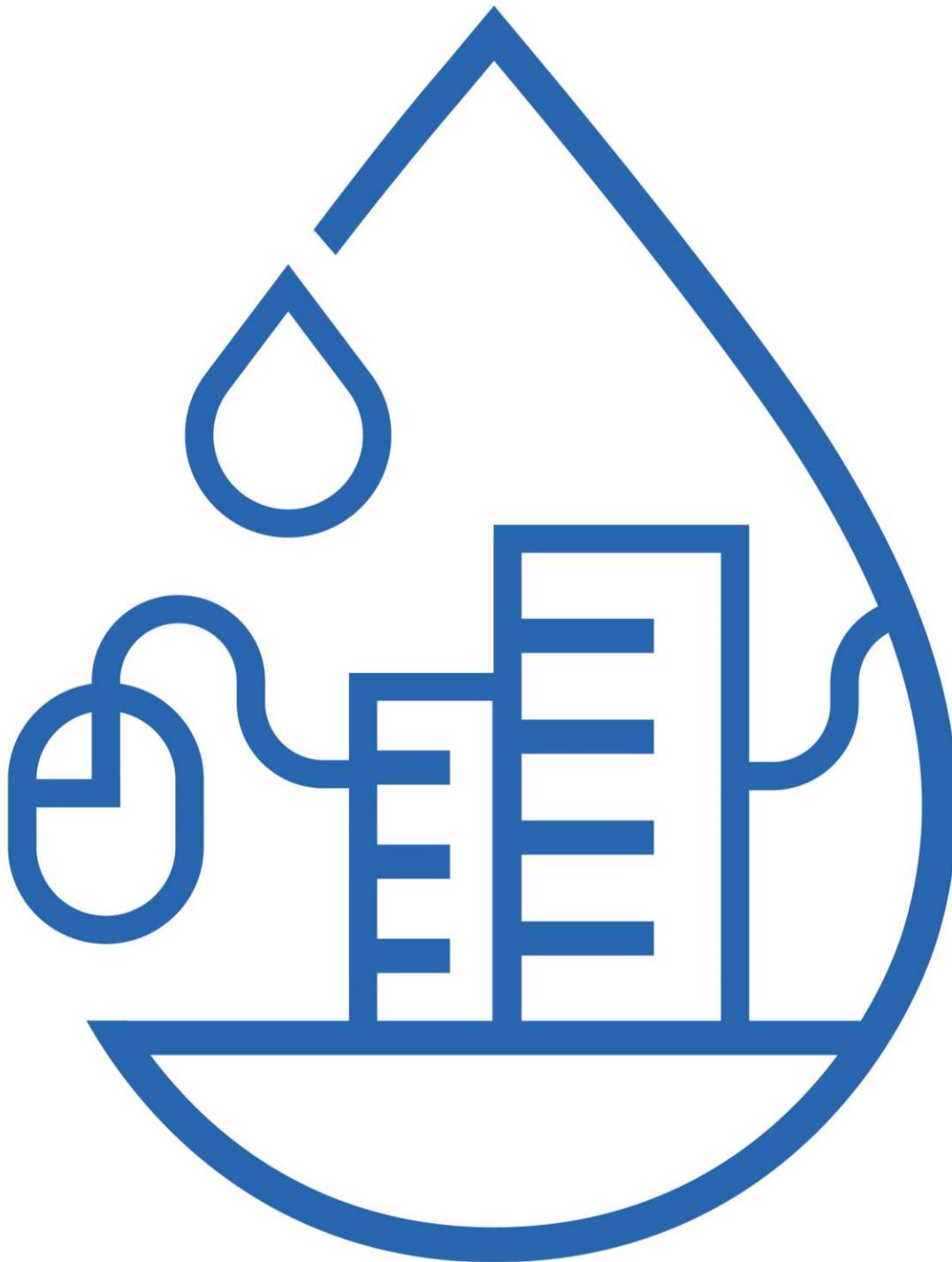
## 8.1 Open Questions

Do you have any general remarks/suggestions concerning the demonstrated tools and the Virtual Machine as a whole?

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