



trivadis

From Technology Stack to Technology Radar

Technology Stack **Data Platforms**















Storage

Processing











kubernetes

Cloud Computing







aws









docker























Security

Container & (Development) Automation

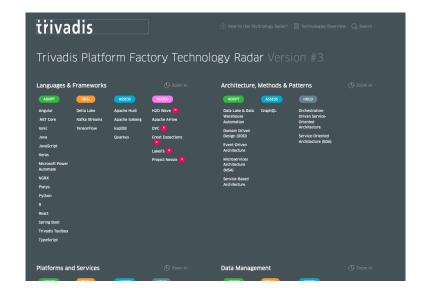
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Trivadis Technology Radar

Trivadis Technology Radar



- Source available in the following GitHub private repository: https://github.com/TrivadisPF/trivadis-technology-radar
- Can be installed locally using docker-compose: <u>https://github.com/TrivadisPF/trivadis-technology-radar/blob/master/deployment/README.md</u>
- Deployed on AWS Lightsail
 - Stable: http://3.122.200.138:28540/techradar/
 - Preview: http://3.122.200.138:28541/techradar/



 To work on the Technology Radar, clone the develop branch of the Git project:

git clone --branch develop TrivadisPF/trivadis-technology-radar

Maintaining the Technology Radar



- A technology is specified as a <u>Markdown</u> file, placed into one of the subfolders inside folder radar
- Subfolders determine the date when the technology has been added
- Each file has a <u>front-matter</u> header where the attributes of the item are listed
 - Attributes ring, quadrant and status have to be one of the values shown on the next page
- For each technology the icon will be stored in the icon folder with the same name as the technology

```
id:
                     react
title:
                     "React"
info:
                     "a modern web framework"
quadrant:
                     languages-and-frameworks
ring:
                     adopt
skillsNeeded:
relatedTo:
alternativeTo:
supportsTvdBB:
owners:
knowHowPageURI:
status:
                     draft.
featured:
                     true
Text goes here. You can use **markdown** here.
```

Maintaining the Technology Radar (II)



Following front-matter attributes are possible:

- id: id of the technology
- title: Name of the Item
- info: (optional) A short textual description of the item (visible in overview pages)
- quadrant: Quadrant. One of languages-and-frameworks, data-management, platforms-and-services, architecture-methods-and-patterns
- ring: Ring section in radar. One of trial, assess, adopt, hold, watch
- **featured**: (optional, default "true") If you set this to false, the item will not be visible in the radar quadrants but still be available in the overview.
- relatedTo: relates to another technology (use the id of the other technology)
- alternativeTo: alternative to another technology (use the id of the other technology)
- **skillsNeeded:** the skills needed for this technology (use the id of the skill system to refer to the skill)
- supportsTvdBB: used to implement/deliver the Trivadis Building Blocks
- status: status of the technology item. One of draft, proposed, rejected, accepted, deprecated
- owners: the owner(s) of the technology, use the Trivadis employee abbreviations

Maintaining the Technology Radar (III)



There are many good editors for maintaining markdown files, such as

- https://typora.io/ (win,mac,linux)
- https://macdown.uranusjr.com/ (mac)
- https://wereturtle.github.io/ghostwriter/ (win, mac, linux)

```
• • •
                                            ■ spark.md — Edited
     id:
                      spark
     title:
                      "Apache Spark"
                      adopt
     ring:
     quadrant:
                      platforms-and-services
     relatedTo:
                      [delta-lake]
     alternativeTo:
                     [hadoop-mapreduce]
     skillsNeeded:
                      [spark]
     supportsTvdBB:
     owners:
     status:
                      accepted
     featured:
                      true
```

Apache Spark is a unified analytics engine for large-scale data processing.

Apache Spark achieves high performance for both batch and streaming data, using a state-of-the-art DAG scheduler, a query optimizer, and a physical execution engine.

Spark offers over 80 high-level operators that make it easy to build parallel apps. And you can use it interactively from the Scala, Python, R, and SQL shells.

Maintaining the Technology Radar (IV)



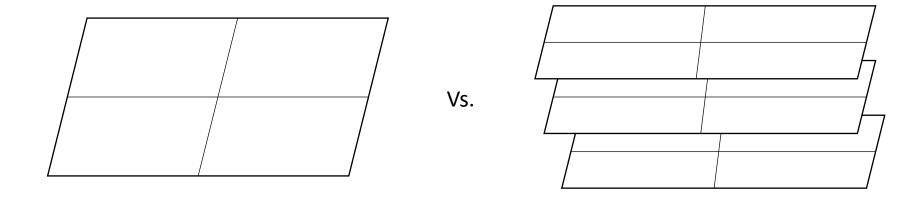
- Anyone can suggest a new technology by submitting a pull-request to the folder of the next iteration
- When finished, check-in the new file into GitHub and after a few minutes, it should be updated

Do we have one global radar or many subject **trivadis** based?



One base of Technology Radar

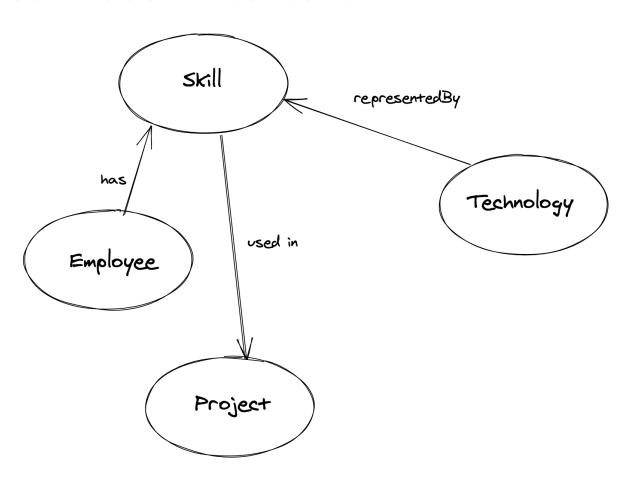
Many Technology Radars



- Currently we are only working on one global Trivadis wide radar
- By using additional metadata we can later add different views onto the radar

Tech Radar in context





Validation



- https://www.npmjs.com/package/mwks-jsonlint
- https://www.npmjs.com/package/yaml-front-matter
- https://www.npmjs.com/package/frontmatter-validator

SQL Access on TechRadar



```
id:
                   react
title:
                   "React"
                   "a modern web framework"
info:
quadrant:
                   languages-and-frameworks
ring:
                   adopt
skillsNeeded:
relatedTo:
alternativeTo:
supportsTvdBB:
owners:
                    11 11
knowHowPageURI:
status:
                   draft
featured:
                   true
Text goes here. You can use **markdown** here.
```



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