What is Computational Law?

Expressing Law and Legal Processes as Standard Data Through Interoperable Service Interfaces

December 15, 2018

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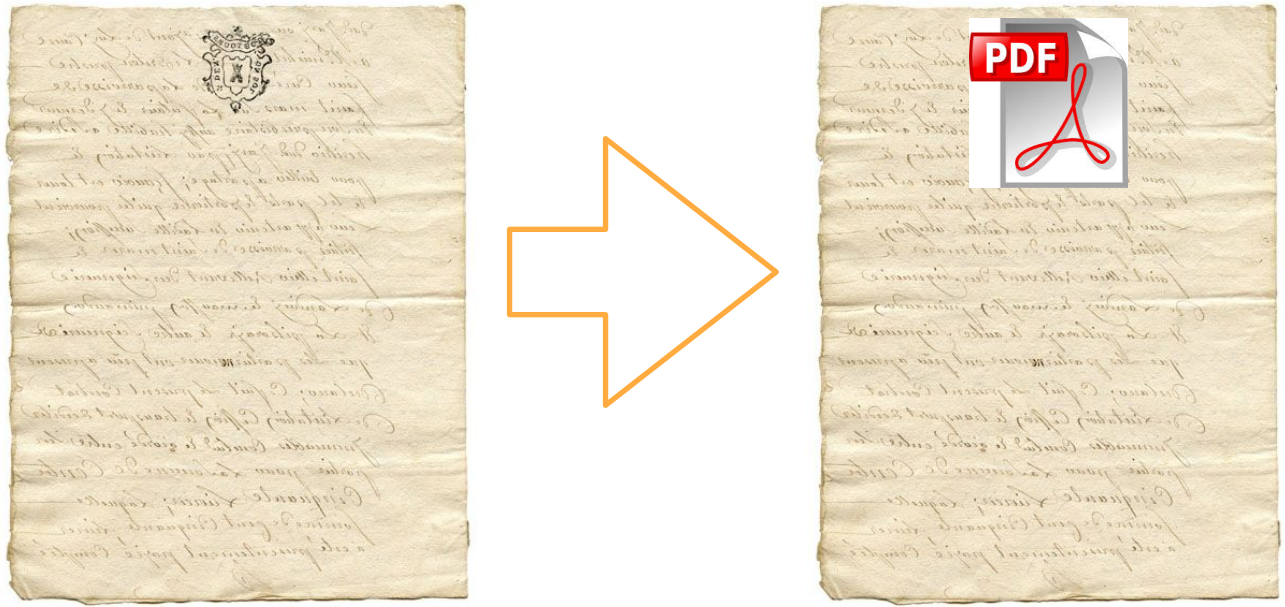
Global Context

Increasingly, the data-driven, model-based algorithmic service types that have transformed other professions and industries are pulling the law, lawyers and legal processes toward revolutionary transformation.

Initial Digital Adoption in the Legal Field

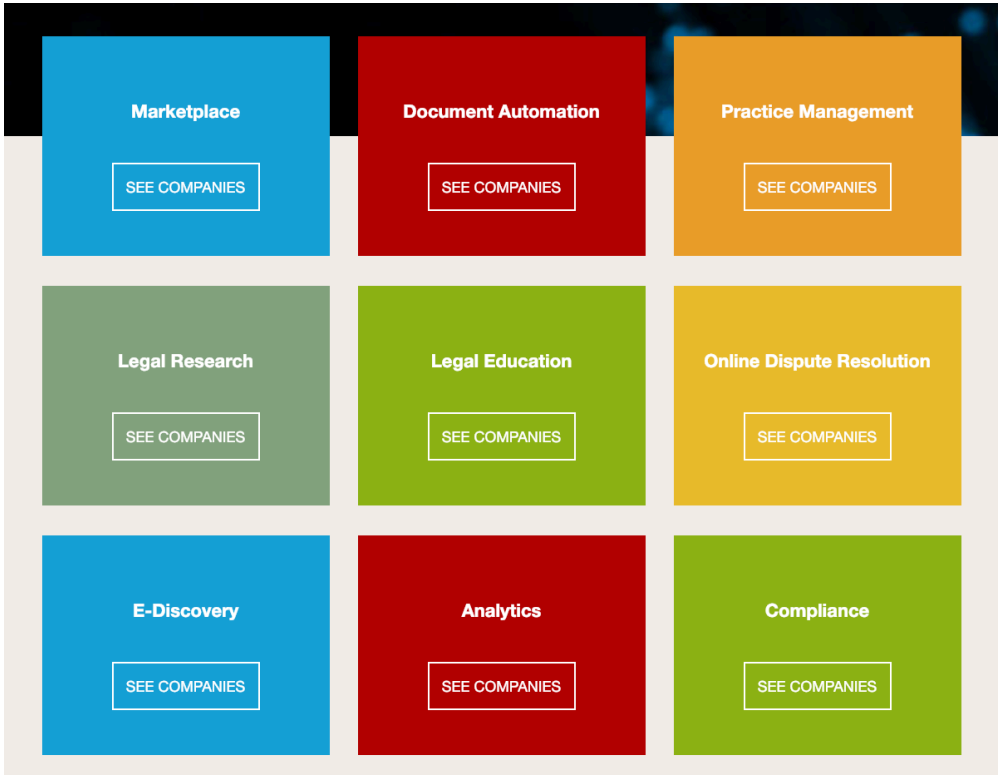
The first phase was duplicating manual processes locked in paper-document paradigms but expressed through digital formats such as word processing files and e-mail messages.

Initial Digital Adoption in the Legal Field



Current Phase of Adoption

In the current stage of change, apps and platforms provide faster, cheaper and more efficient methods for using, connecting and extending documents and messages.



Emerging Direction

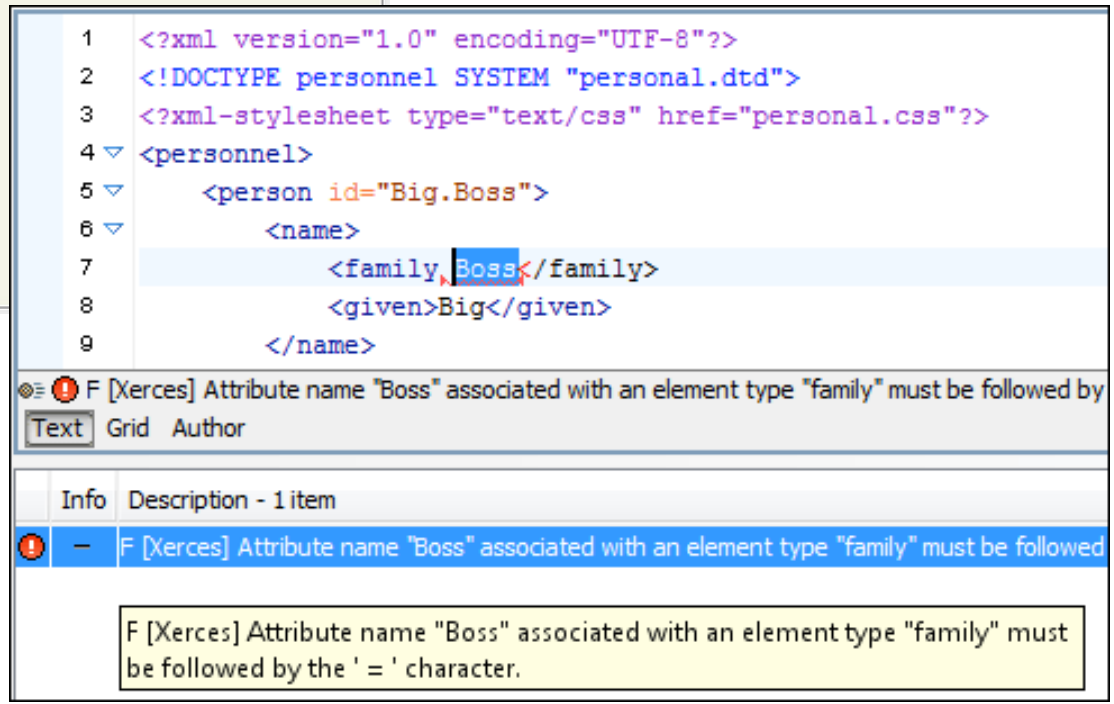
The next era, which has already started to emerge is atomizing events and content into data that can

- *exist as standard data expressed through interoperable service interfaces;*
- *provide updates, alerts and other events in external, linked or integrated applications; and*
- *trigger chains of automated or computational systems.*

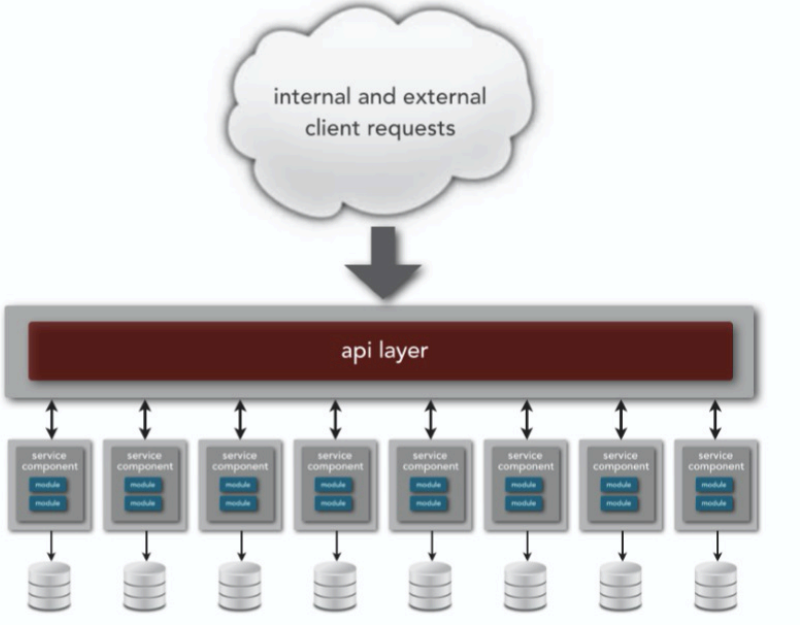
Emerging Direction: Data (Not Just Digital Documents)

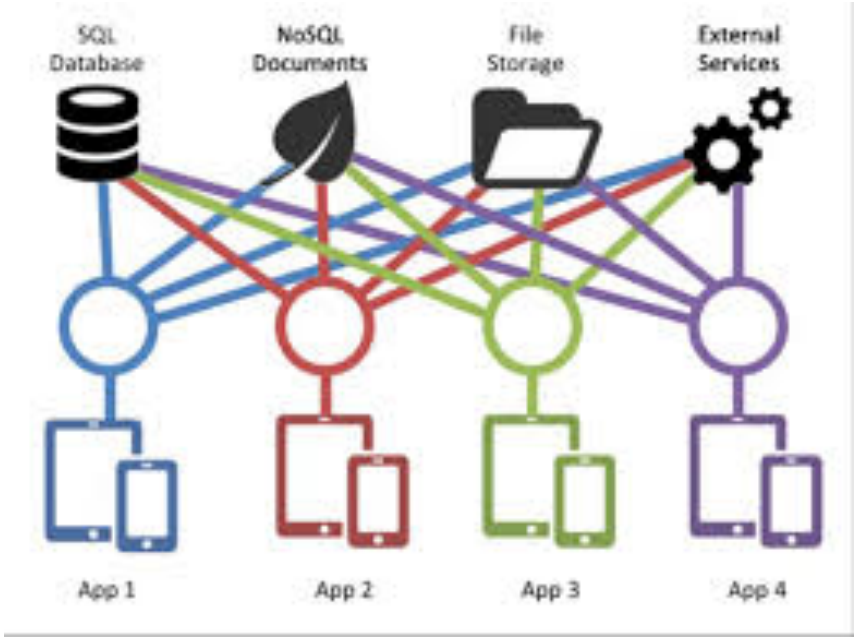
Sample JSON Schema

```
{
        "title": "Example Schema",
        "type": "object",
        "properties": {
                "firstName": {
                        "type": "string"
                },
                "lastName": {
                        "type": "string"
                },
                "age": {
                        "description": "Age in years",
                        "type": "integer",
                        "minimum": 0
                }
        },
        "required": ["firstName", "lastName"]
}
```



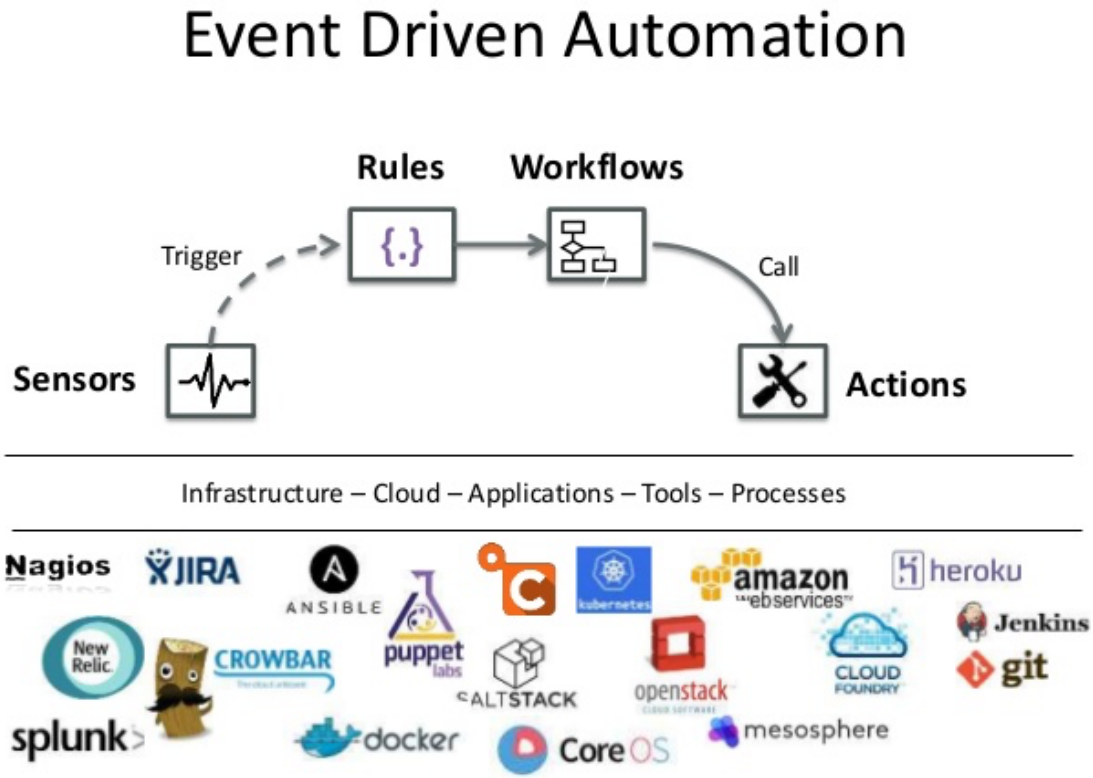
Emerging Direction: Interoperable Service Interfaces





Well Documented REST (HTTP) API Services

Emerging Direction: Interoperable Service Automation

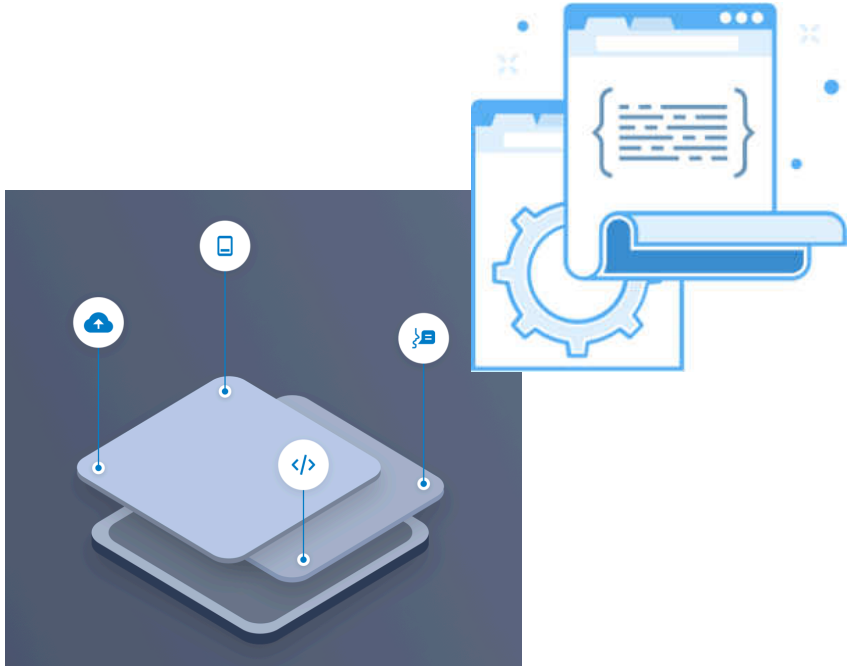


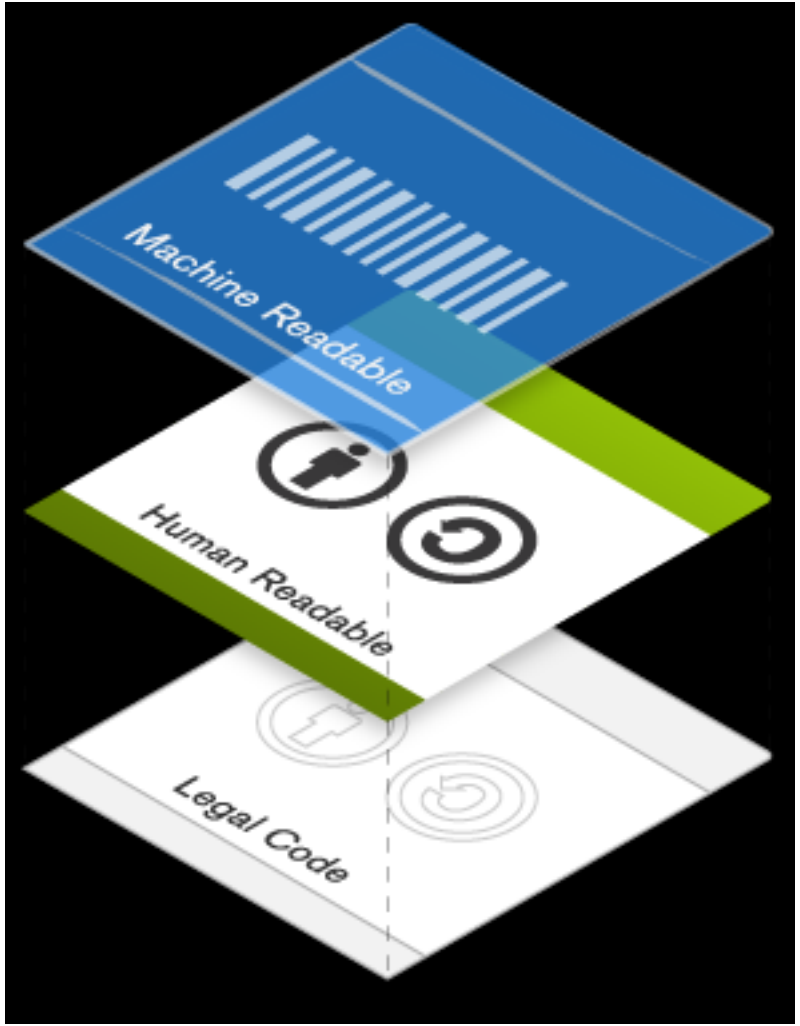
Optimal Destination

In the next era of computational law, legal content is

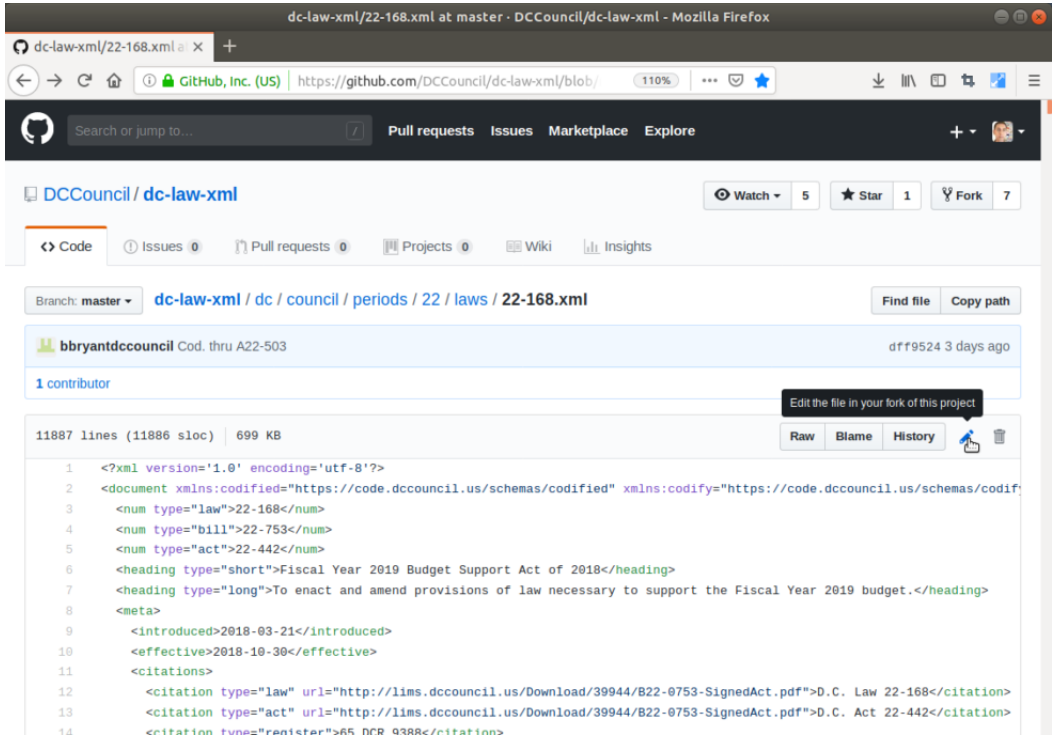
- *created and collected in **standard formats and data structures**; and can be*
- *displayed as legal instruments or rules and that can be understood in **plain language**, parsed by **lawyers** and processed by **machines**.*

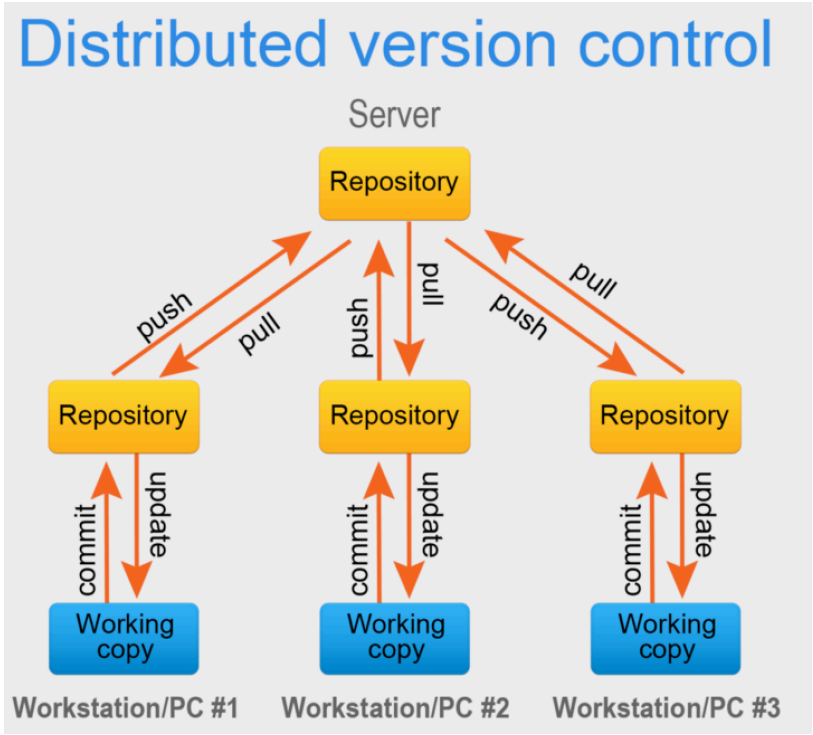
Optimal Destination: BLT



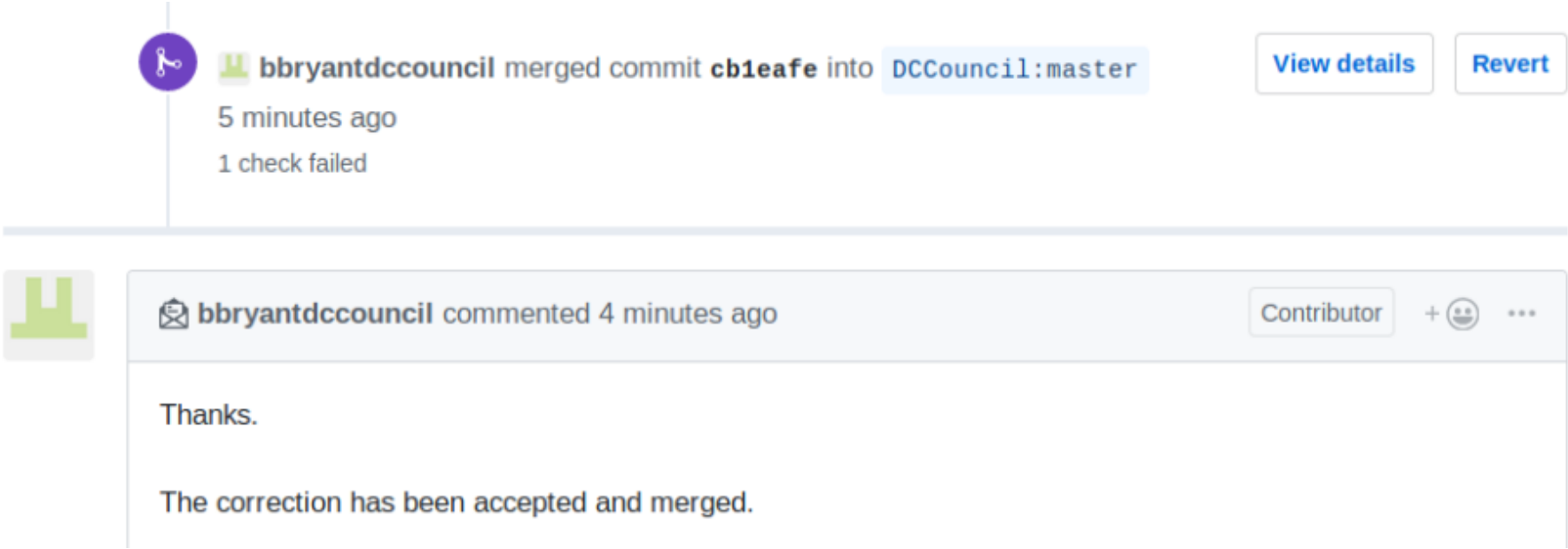


Optimal Destination: Git/VCS





Optimal Destination: Git/VCS



Optimal Destination

Computational law is quintessentially

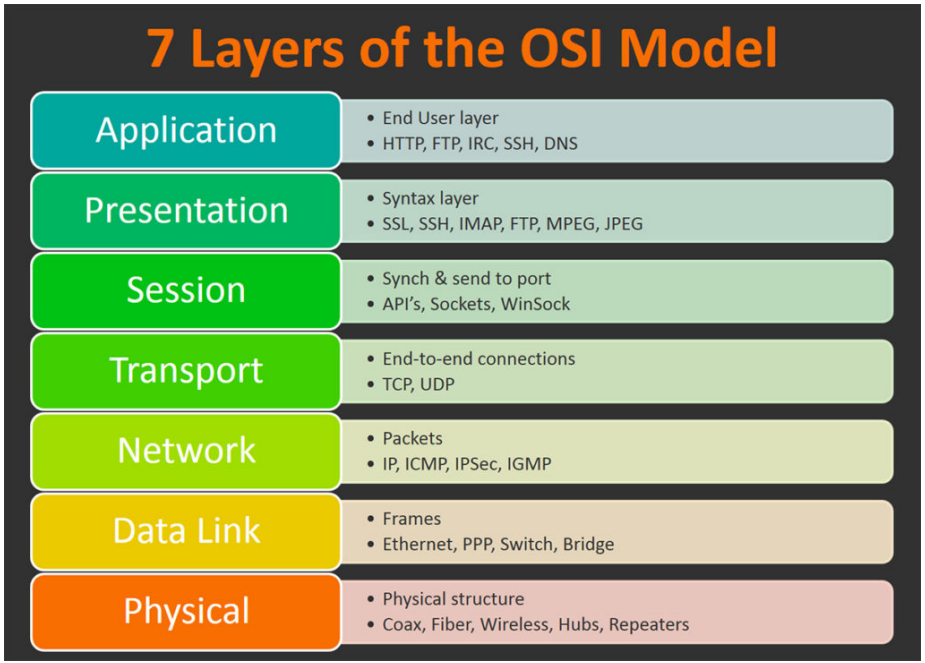
- ***standard and verifiable data*** *flowing through*
- ***integrated applications*** *linked through* ***interoperable services*** *in*
- ***connected global system*** *of legal content, instruments, events, and activities.*

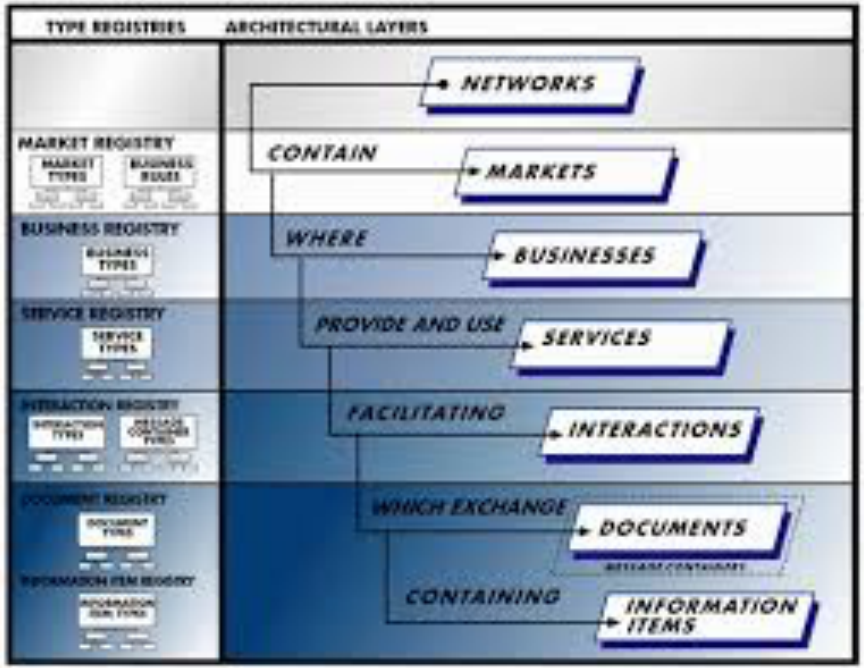
Success measures of computational law include…

Important computational law capabilities include the ability to

- *identify, summarize and visualize rules over time;*
- *pose questions about what the rules would apply to situations,*
- *achieve predictable legal outcomes;*
- *trace/verify algorithmic processes impacting legal results*
- *law makers to measure the effectiveness and performance of law over time.*

What Architectural Stack Will Enable Computational Law?





Thank You

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