AVX-Framework

Roadmap of user-facing Apps
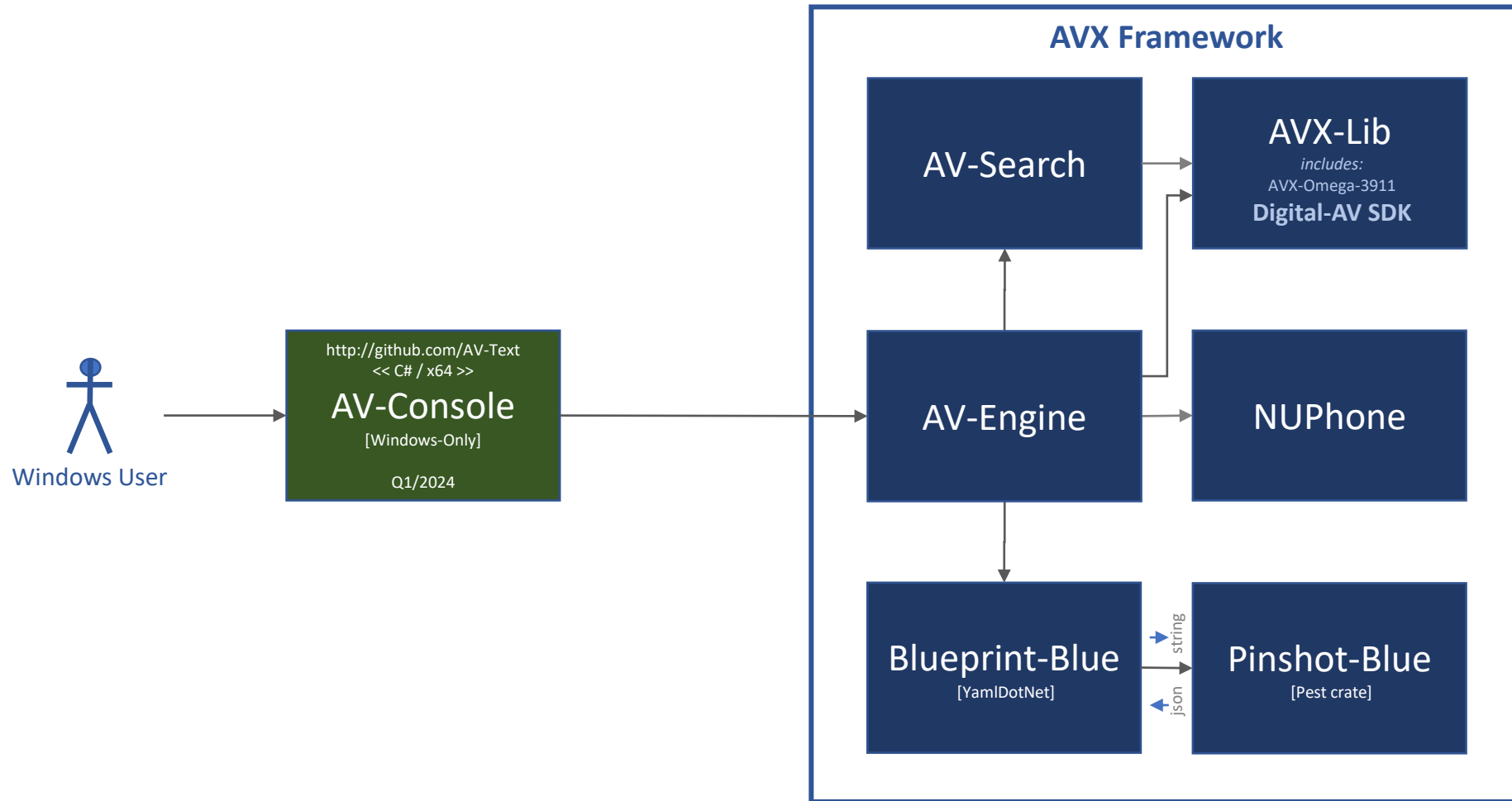
2-14-2024

AVX-Framework – Dotnet – CY2024
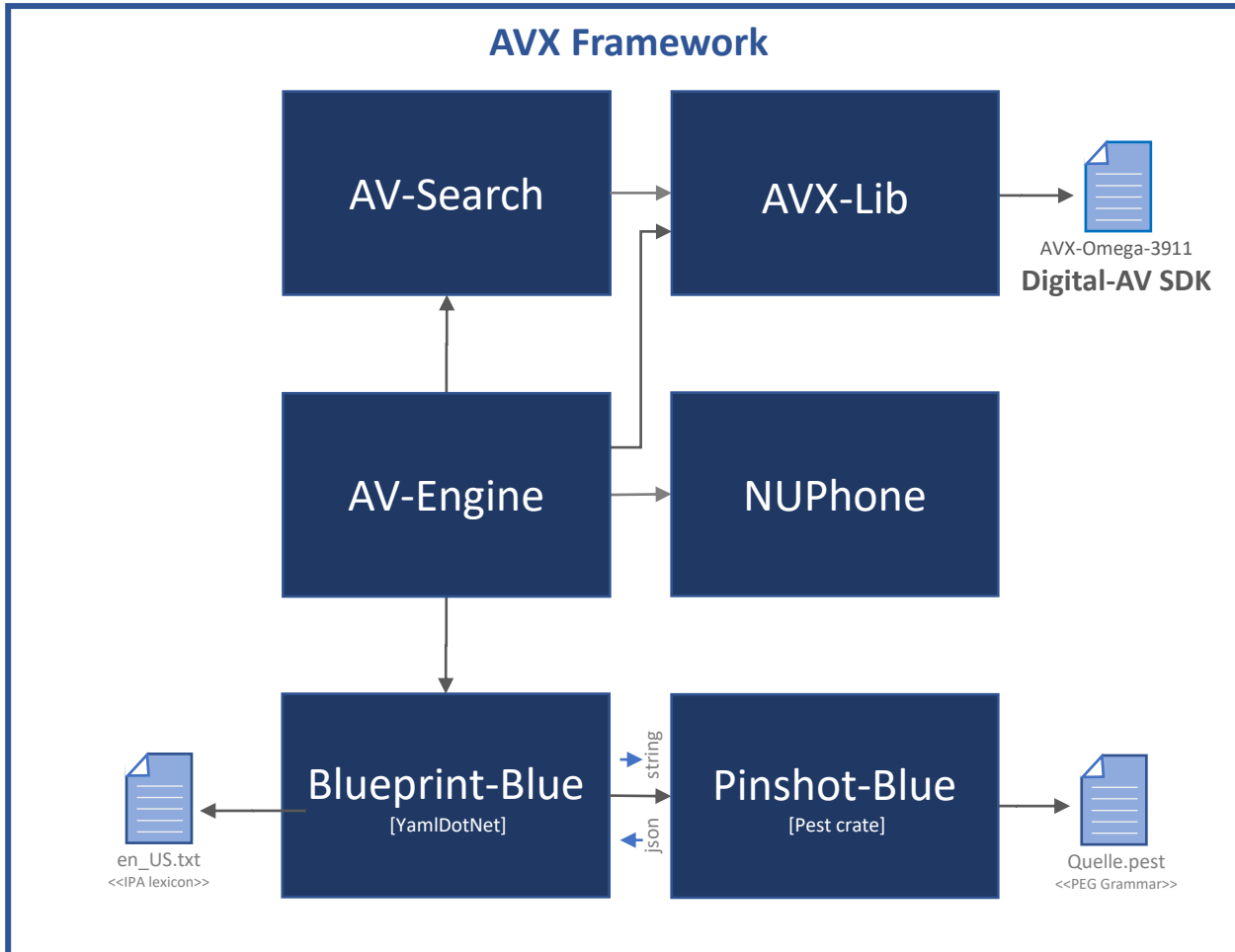
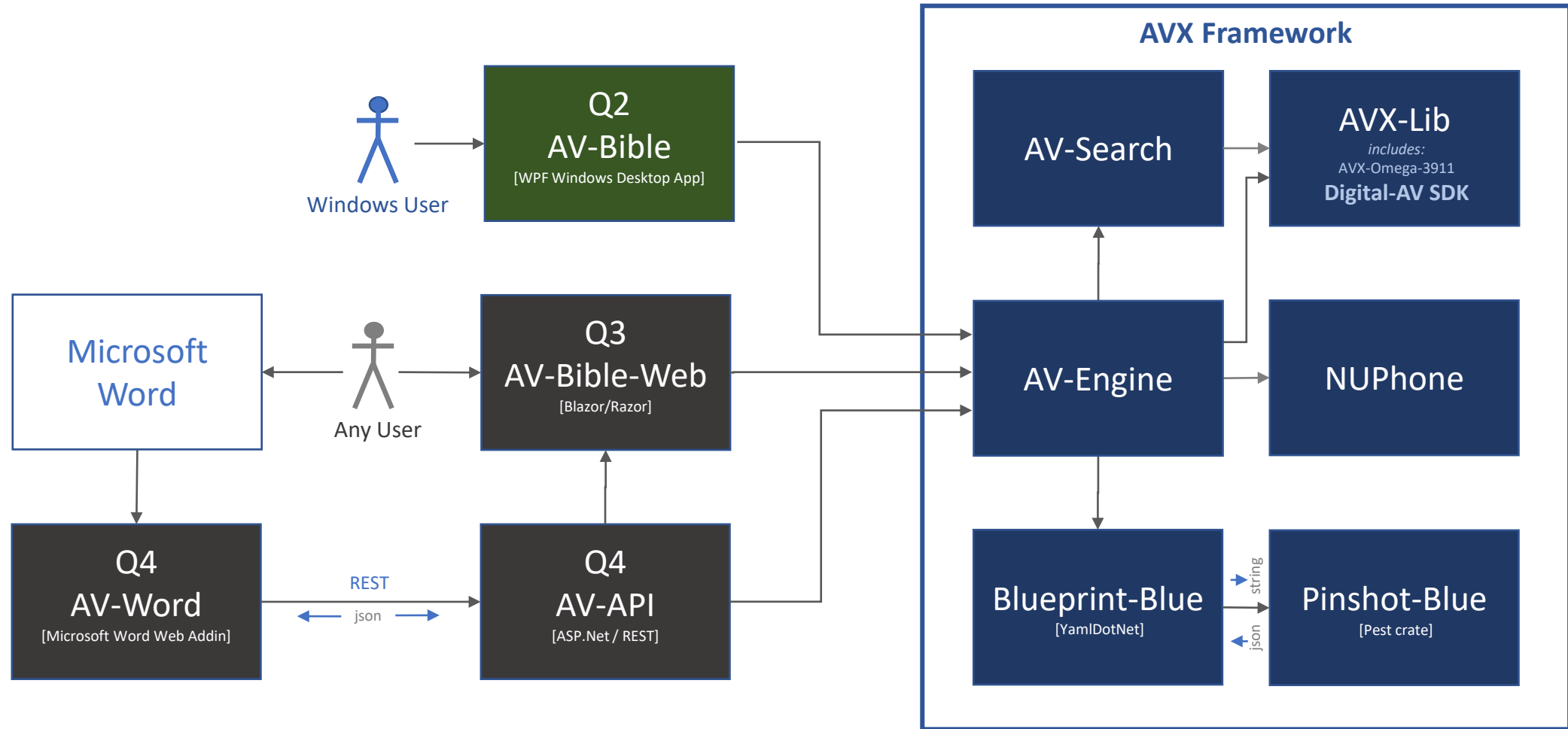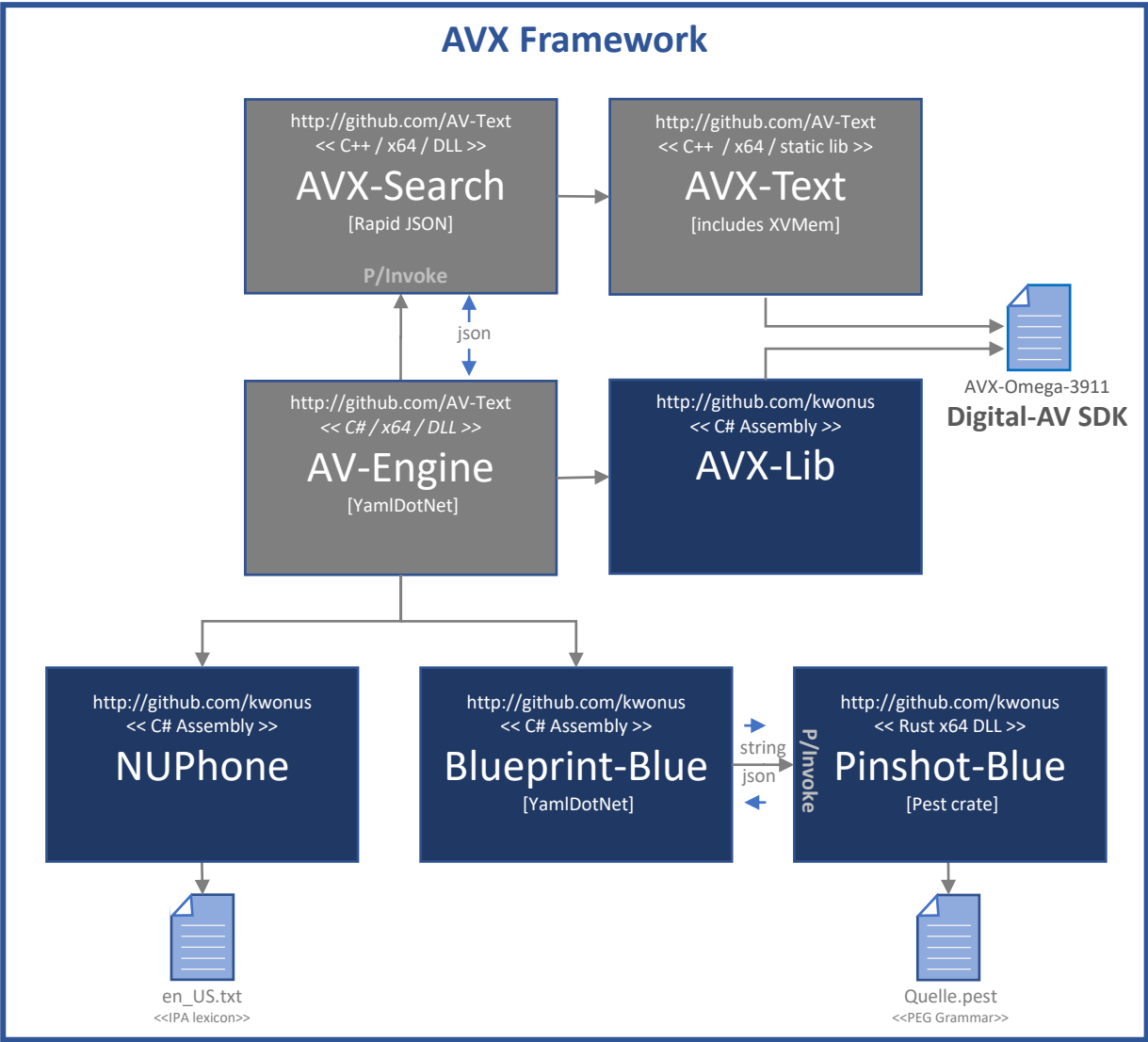| Module	Input	Output
AV-Engine	Quelle Command (text)	POCO, JSON, YAML
AVX-Lib	POCO	POCO
AV-Search	POCO	POCO
Pinshot-Blue	null-terminated text	null-terminated json
Blueprint-Blue	POCO	POCO
NUPhone	POCO	POCO

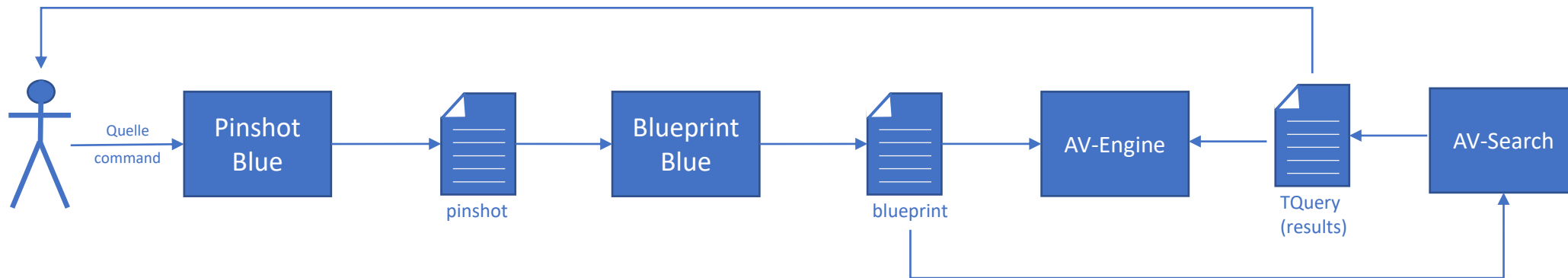# AVX Framework Roadmap – 4216 – Q1/2024

AVX Framework Roadmap – 4216 – CY2024

AVX-Framework – Native – CY2025 *(github.com/AV-Text/AVX)*

AVX Framework

```
http://github.com/AV-Text
<< C++ / x64 / DLL >>
AVX-Search
[Rapid JSON]
P/Invoke
```

```
http://github.com/AV-Text
<< C++ / x64 / static lib >>
AVX-Text
[includes XVMem]
```

```
http://github.com/AV-Text
<< C# / x64 / DLL >>
AV-Engine
[YamlDotNet]
```

```
http://github.com/kwonus
<< C# Assembly >>
AVX-Lib
```

AVX-Omega-3911
Digital-AV SDK

json

```
http://github.com/kwonus
<< C# Assembly >>
NUPhone
```

```
http://github.com/kwonus
<< C# Assembly >>
Blueprint-Blue
[YamlDotNet]
```

string
json
P/Invoke

```
http://github.com/kwonus
<< Rust x64 DLL >>
Pinshot-Blue
[Pest crate]
```

en_US.txt
<<IPA lexicon>>

Quelle.pest
<<PEG Grammar>>

Module	Input	Output
AV-Engine	Quelle Command (text)	IAVResult interface
AVX-Lib	C# Classes/Methods	C# Classes/Methods
AVX-Search	blueprint (yaml)	avx_search (yaml)
AVX-Text	C++ Classes/Methods	C++ Classes/Methods
Pinshot-Blue	null-terminated text	null-terminated json
Blueprint-Blue	null-terminated string	blueprint (yaml)
NUPhone	C# Classes/Methods	C# Classes/Methods

Functional view of the Quelle parsing sequence

Pinshot-Blue	Blueprint-Blue	AV-Engine	AV-Search
A specialized PEG grammar is used to parse the Quelle command	The pinshot is transformed into a runtime object model.	local processing (non-search) is executed in AV-Engine. This includes applying new labels to segments and capturing the command into history.yaml. AV-Engine also uses precendence rules [per segment] to create one QSettings object per segment.	The QImplicitCommands object is transformed into a barebones Tquery object. A search is executed that fully populates all the summary information for the search results.
Return JSON representation of the Quelle command	Any macro or history invocations are expanded into the appropriate object model properties.	After processing local components of the Quelle command, AV-Engine passes QImplicitCommands property of the blueprint to AV-Search, for complex search processing.	The TQuery object state is maintained for subsequent requests. AV-Engine will ask AV-Search for search results [one-by-one] by chapter.
The JSON return payload is called the "pinshot"	The runtime model is called the "blueprint"	AV-Engine returns results [search-summary & chapter-details] as requested by user-facing client app of AV-Engine.	