
CAST HIGHLIGHT
Accelerate & Secure Your Digital Journey
Accelerating Cloud Migration

Accelerate Cloud Migration with CAST Highlight

- CAST Highlight is a Rapid Application Portfolio Analysis solution that provides factual visibility about software condition, relevant for Cloud Migration
- Everything starts with a Source Code automatic analysis and the completion of a set of Surveys with Context and Business information.
- The result of this analysis is a set of measures that are used in several portfolio and application-level dashboards, that provide visibility and support the decision-making process

Surveys (built-in and custom)
Criticallity, total end users, Age, Cloud, Infra, ...

Source Code analysis
Java, .Net, Javascript, Cobol, PHP, ...

- Application code never leaves the company
- CAST Highlight runs in SaaS mode
- CAST Highlight is ISO 27001 certified

Main CAST Highlight Measures used for Cloud Migration

CAST

CloudReady
45

Based on
CloudReady Survey

13

(weight of 50%)

+

Based on
CloudReady Scan

77

(weight of 50%)

Boosters
5.6

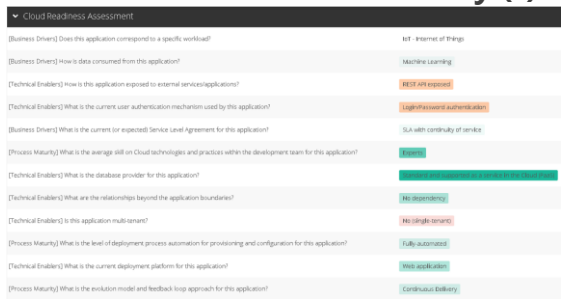
Based on Positive
Code Patterns
(weight of 20%)

Blockers
5.0

Based on Negative
Code Patterns
(weight of 80%)

[(100 - 5.0 Blockers)*0.80] + [5.6 Boosters *0.20]

Context information survey (*)



(*) it can be customized

200+ Code Patterns
(Java, C#, VB.Net, PHP, Python, Javascript, Typescript, Cobol)
Criticality level (critical, high, medium, low)
Impact area (code, framework, architecture)

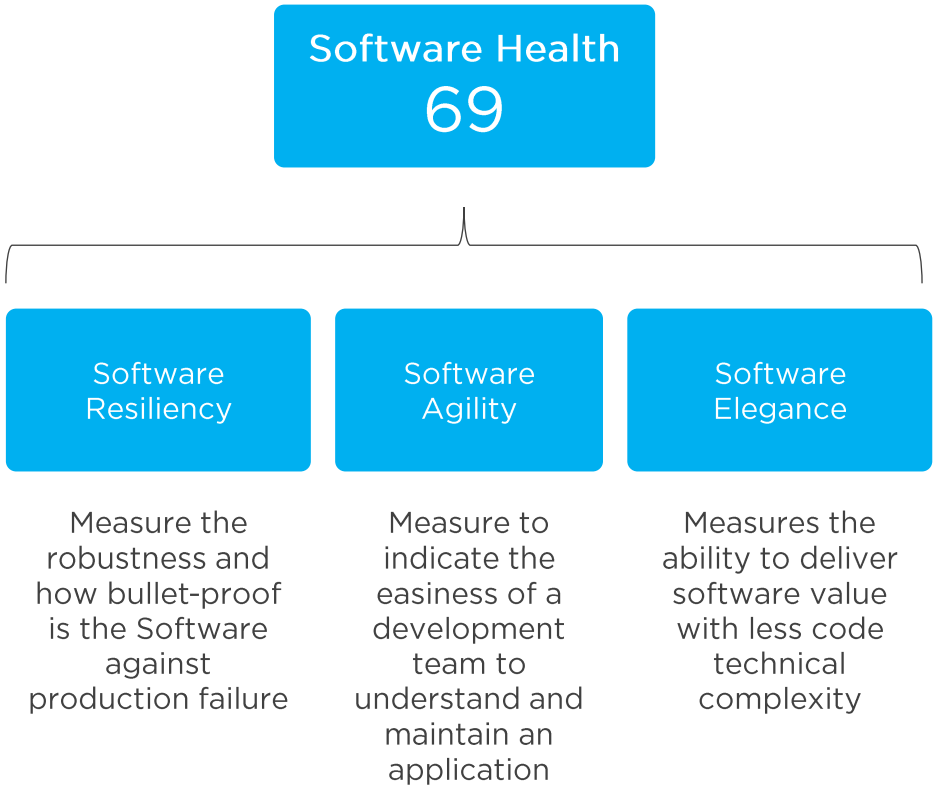
Business Impact
68

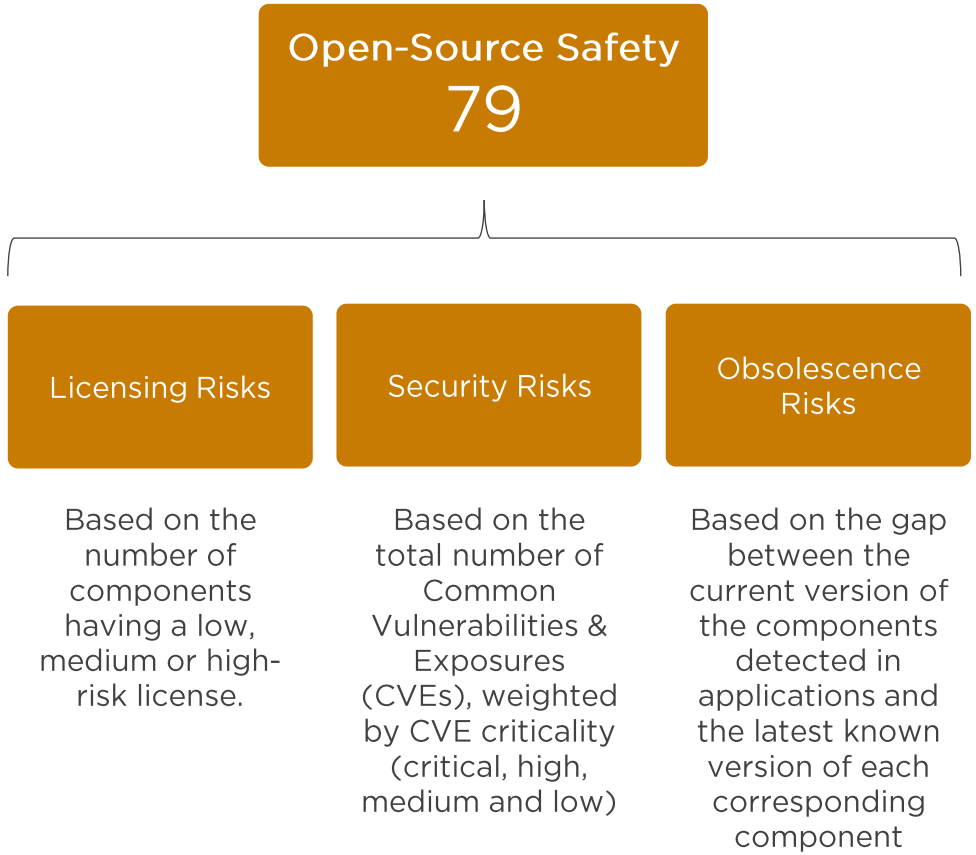
Based on
Business Value Survey (*)

The number of major releases delivered over the last 12 months for this application?	More than 12
Is this application aligned with the company's future technology direction?	Yes
What is the average number of FTE (Full Time Equivalent) resources that have worked on the source code for this application over the last 12 months?	35
Does the application serve internal or external users?	Both
What is the approximate number of end users for this application?	100 to 500
Could failure of this application lead to disruption? Please define the level of impact.	Very High
Could failure of this application lead to loss of revenue or business opportunity? Please define the level of impact.	Very High
Could failure of this application lead to harm of the company's public image? Please define the level of impact.	Very High
Could failure of this application lead to loss of customer confidence? Please define the level of impact.	Very High

(*) it can be customized

Complementary CAST Measures used for Cloud Migration





All these measures are obtained exclusively from source code analysis

Custom Surveys & Indicators

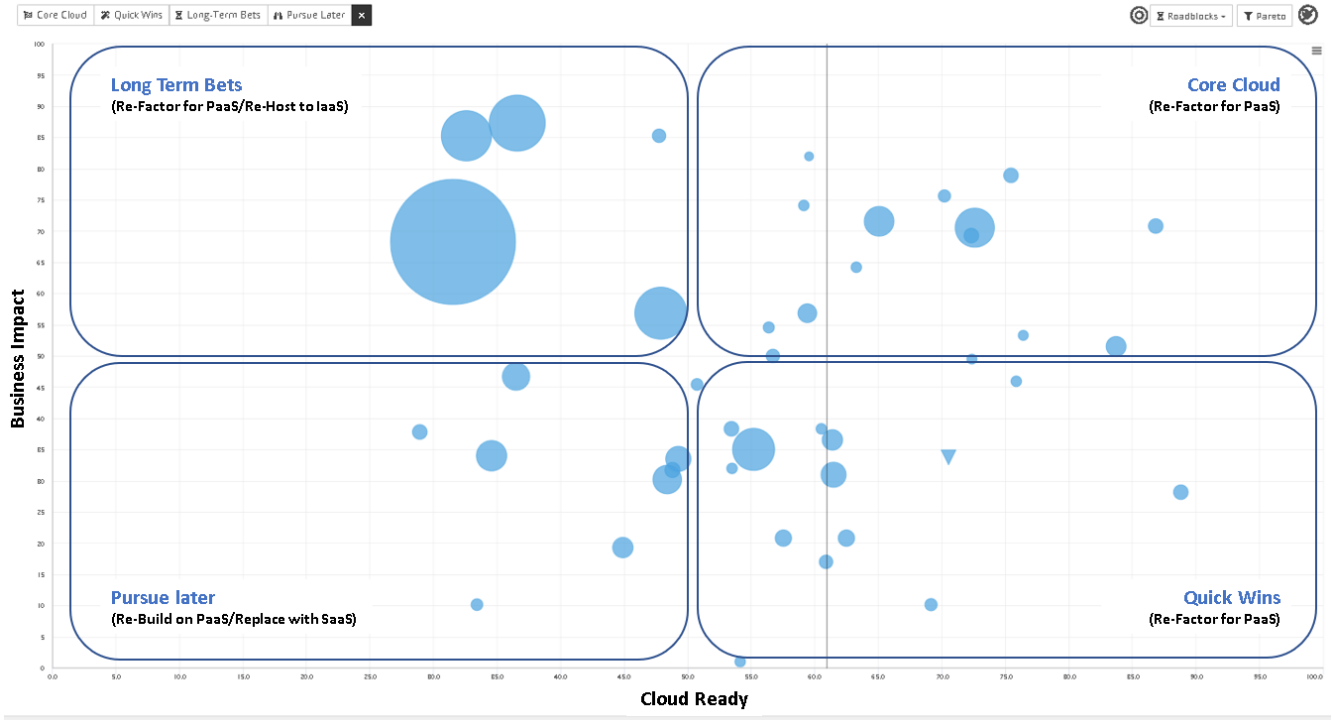
Based on Custom Surveys, new Custom Indicators can be defined (illustrative example below)

Contextual information adds a new layer of analysis on the top of the fact-based foundation. Thanks to precise questions involving closed/scoped answers, we can maximize objectivity and therefore enable a valuable cross analysis between CAST Highlight insights – regardless if they are captured from code analysis or surveys.
The values for these custom indicators **can be injected from other tools** using CAST Highlight Rest API, e.g., coming from **infrastructure analysis tools**.

Data Driven Decision Making with CAST Highlight

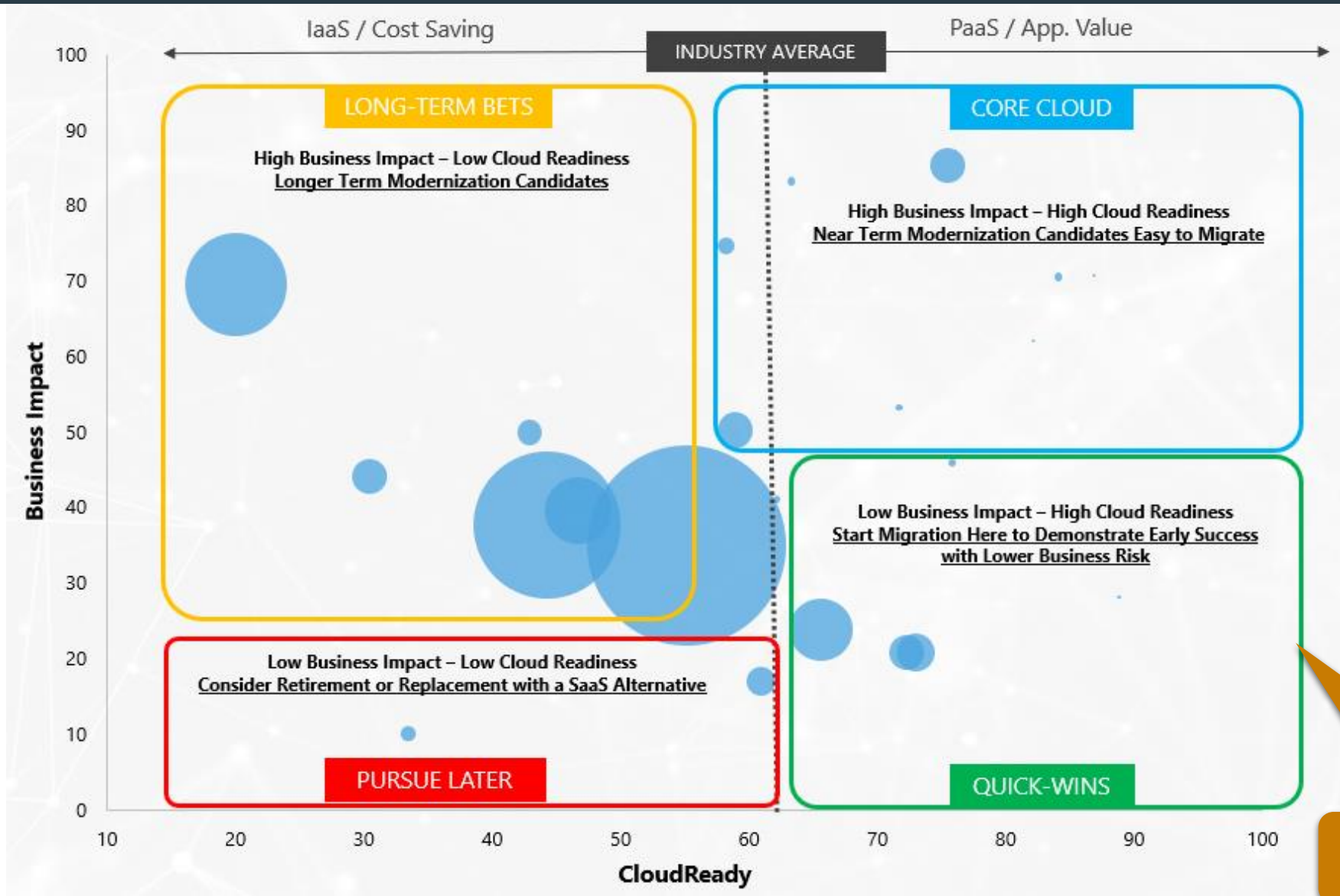
Build the smartest application cloud migration roadmap with unprecedented portfolio-level software intelligence

- Prioritize Cloud candidates based on technical and business impacts to ensure success in your cloud migration journey
- Enable your organization to spot and fix roadblocks early which tend to slow down your migration
- Track progress and monitor your PaaS Cloud journey over time to safeguard migration success
- Based on finding, view PaaS recommendation is both Azure and AWS



Place your Application Landscape at the Core of your Cloud Adoption Strategy

Portfolio Segmentation and Roadmap definition



START HERE

Hollow	Spectator
Tensorflow	Fenzo

REFACTOR TO PAAS

Karyon	Servo	Beachhead
Priam	Lucee	Lando
Genie	Lowlight	Wedge

REHOST TO IAAS

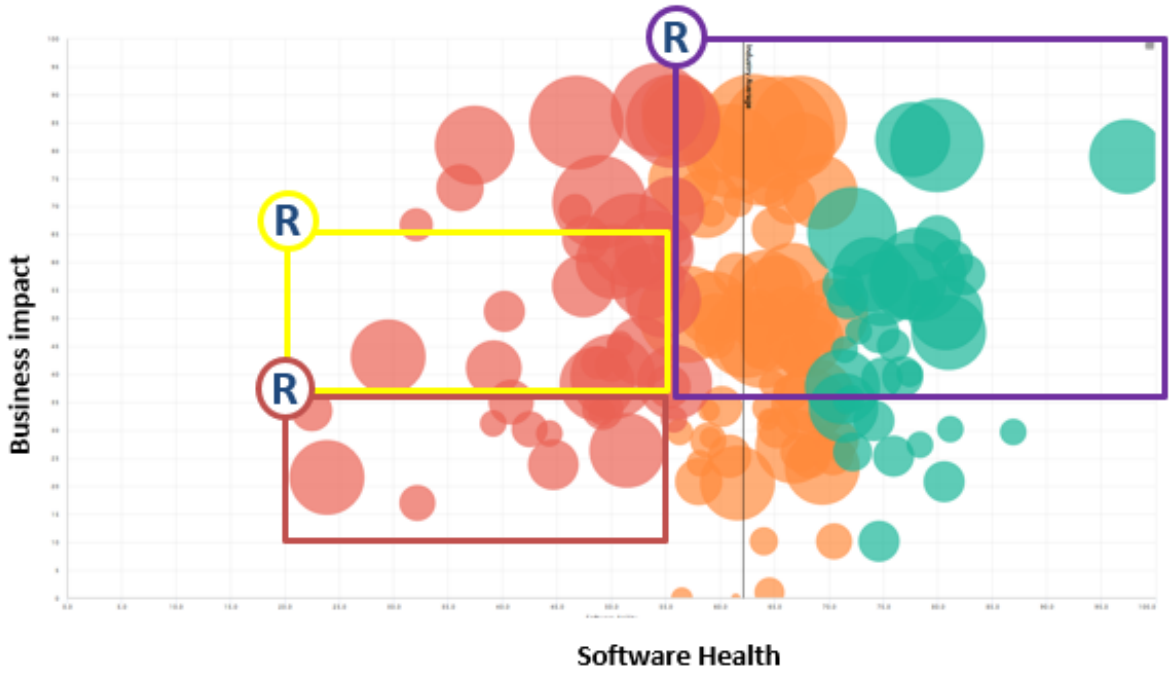
CRM	MMU
Analytics	AR
IEP	AP

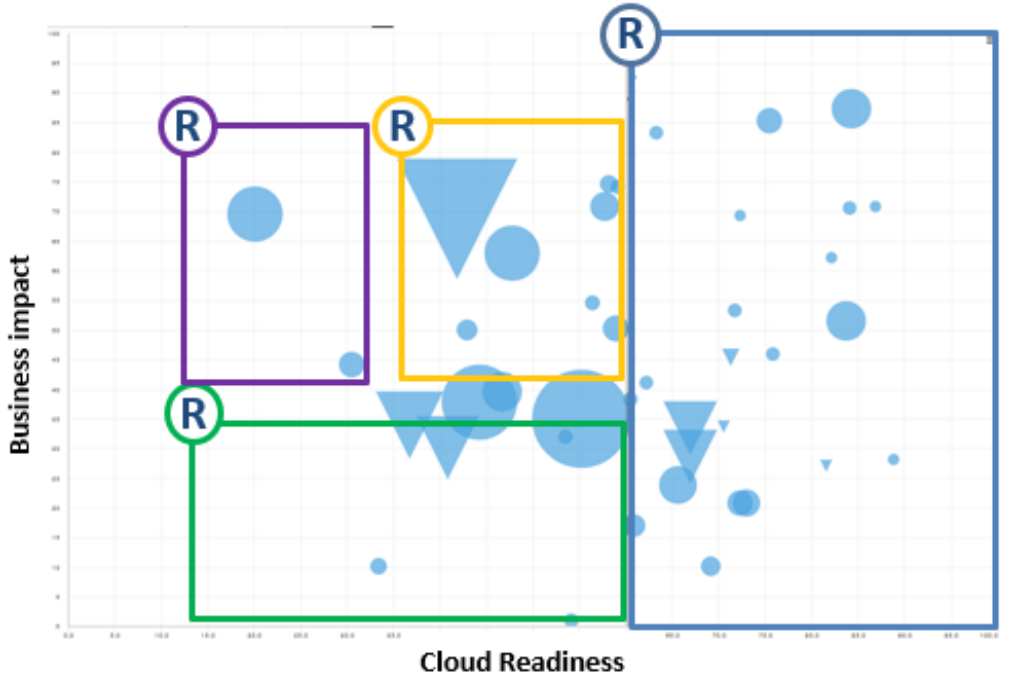
REPLACE, REBUILD OR RETIRE

BAT
Soundwave

Example of an initial portfolio segmentation and prioritization.

Using Health & Cloud Readiness For Migration Planning





R Retire

R Repurchasing

R Rehosting

R Retain

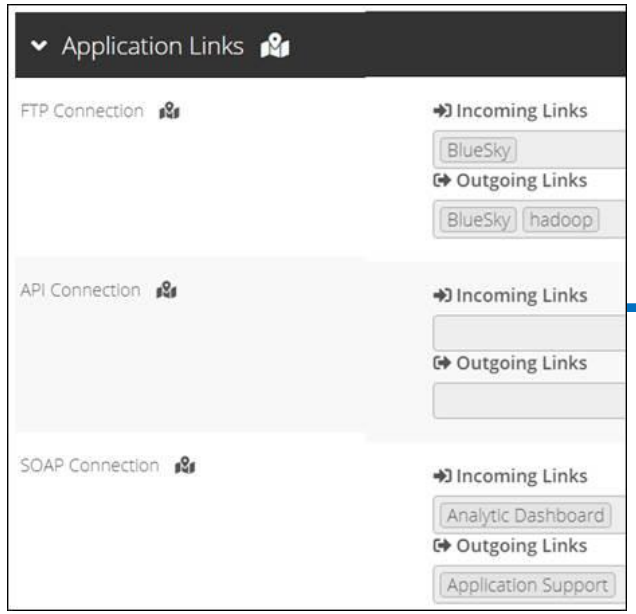
R Replatforming

R Refactoring

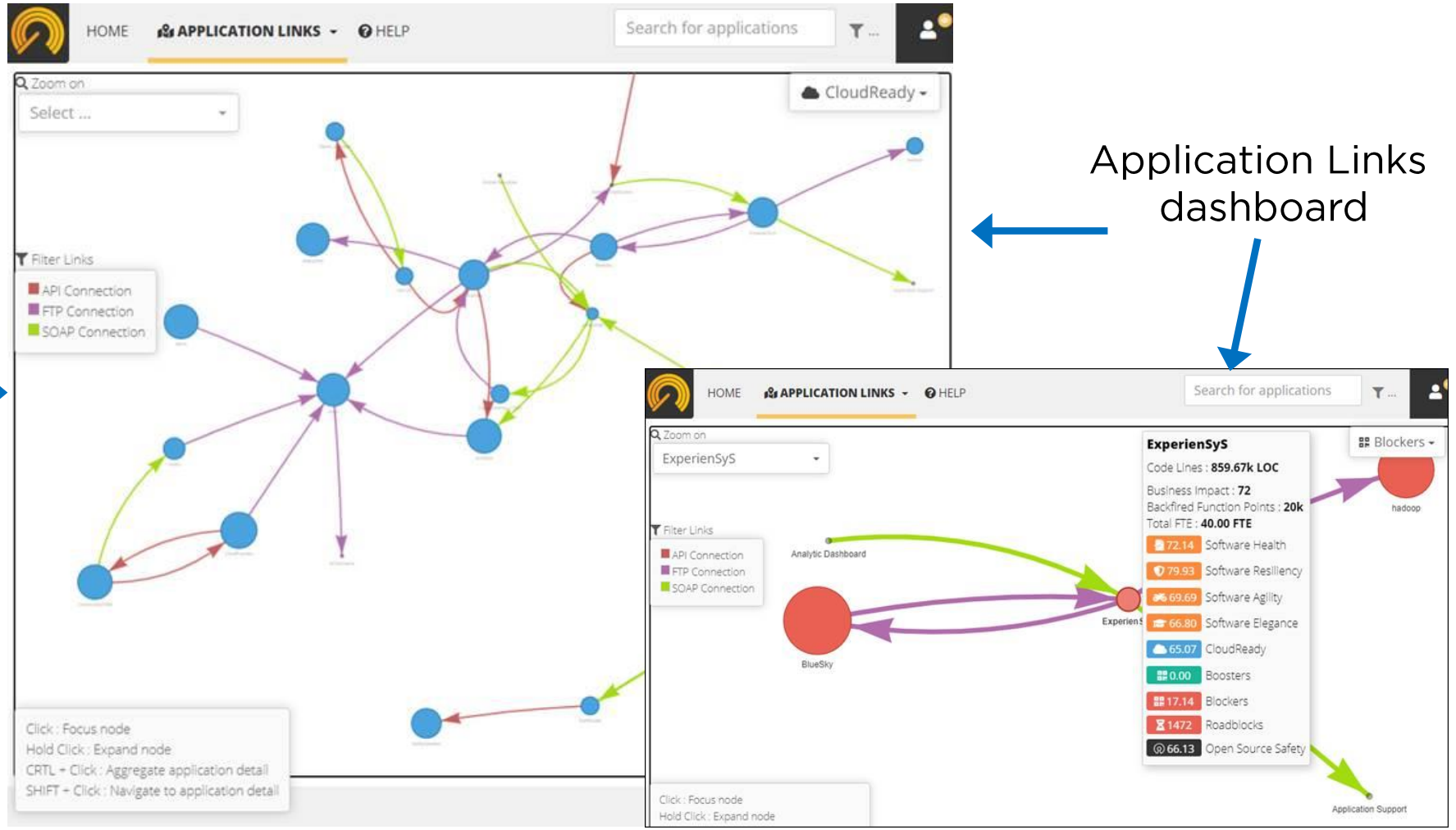
CAST Highlight dashboards will allow you the implementation of cloud migration strategies like Amazon 6R's or Gartner 5R's. The combination of technical and context information makes it easy to use this kind of strategies

Consider Application Dependencies for Roadmap definition

Survey



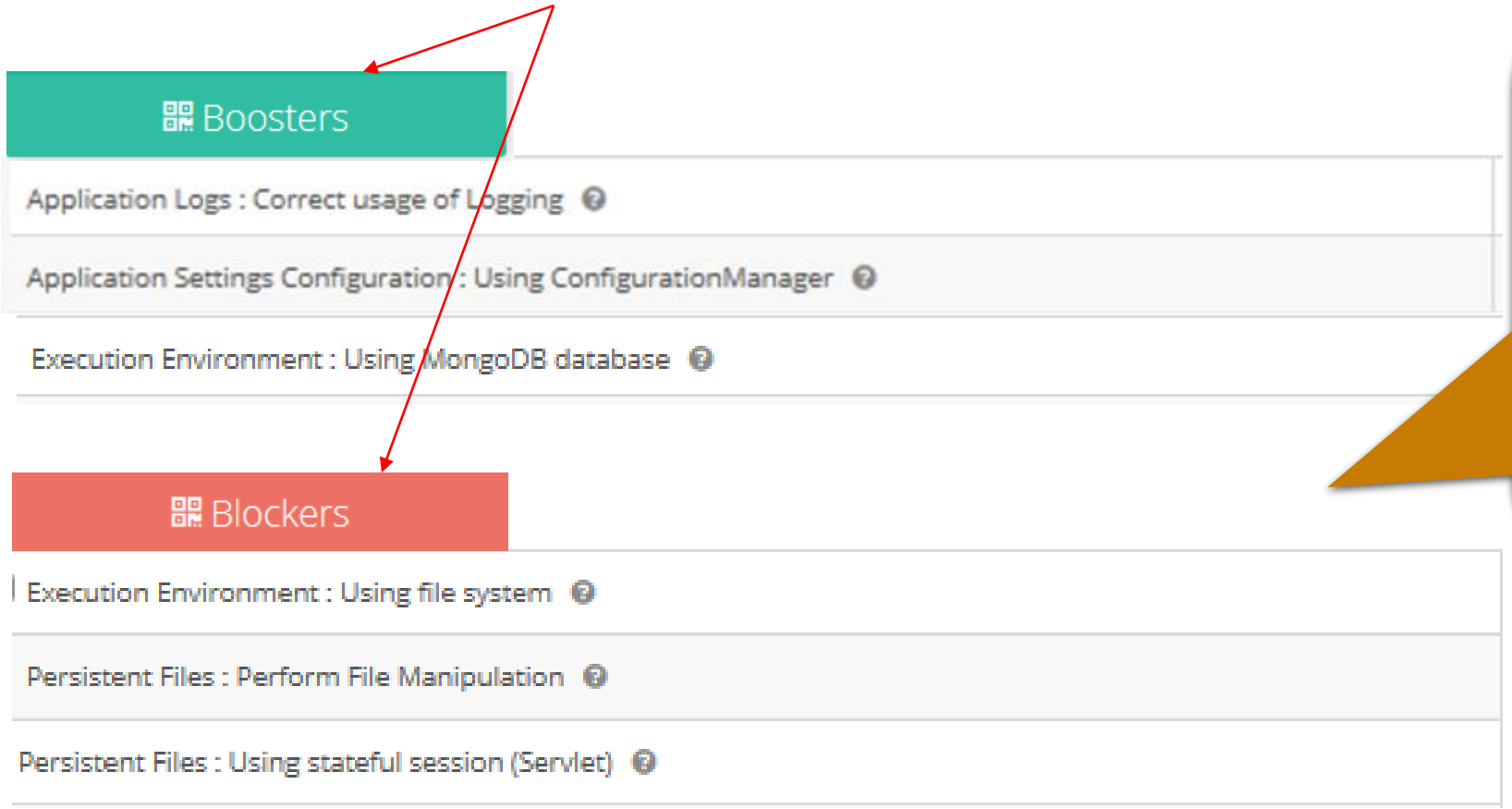
Application Links dashboard



The Application Links feature in CAST Highlight helps you crowdsource this knowledge from each application owner and consolidate this information in a visual and interactive way

Portfolio-level Cloud Blockers and Boosters

Below are the top three Boosters and Blockers to Cloud-Readiness found across the portfolio



Here are the top three Cloud Migration Blockers and Boosters observed across the entire portfolio.

Blockers will be the most common code level issues that need to be considered before migration. These are described in more detail on the following pages.

Cloud Blockers details

Blocker Detail: Use of File System

Rationale and Recommendation

Cloud applications should not assume the local file system is accessible, as the directory structure might be different from a traditional desktop or server machine and/or the Cloud application may not have sufficient rights to access the local file system. Instead, use relative paths to application resources (e.g. ../../reporting/reportBuilder.xml). Depending on your application context and the Cloud platform where it is deployed, you could also consider using functions or classes like LocalResources to dynamically resolve file paths.

Criticality

BLOCKER | MEDIUM

Migration Impacts

CODE | FRAMEWORK | ARCHITECTURE

Files list

```
\path\to\file1
\path\to\file2
\path\to\file3
```

Searched Code Patterns

Look in source code for strings tha

- C:\, D:\ … Z:\ for Windows pla
- /var, /user, /etc for Linux pla

Blocker Detail: Using Stateful Sessions

Rationale and Recommendation

For modern applications running in the Cloud, it is not recommended to be stateful, especially for sessions as they're not scalable, and are generally harder to replicate and fix bugs (server-side). Ideally, stateful sessions should be replaced by stateless and client-side mechanisms such as cookies, client cache (e.g. Redis, memcache…) or in an external cloud-based storage. This is an important architectural constraint of microservices-style applications, as it enables resiliency, elasticity, and allows any available service instance to execute any task.

Criticality

BLOCKER | HIGH

Migration Impacts

CODE | FRAMEWORK | ARCHITECTURE

Files list

```
\path\to\file1
\path\to\file2
\path\to\file3
```

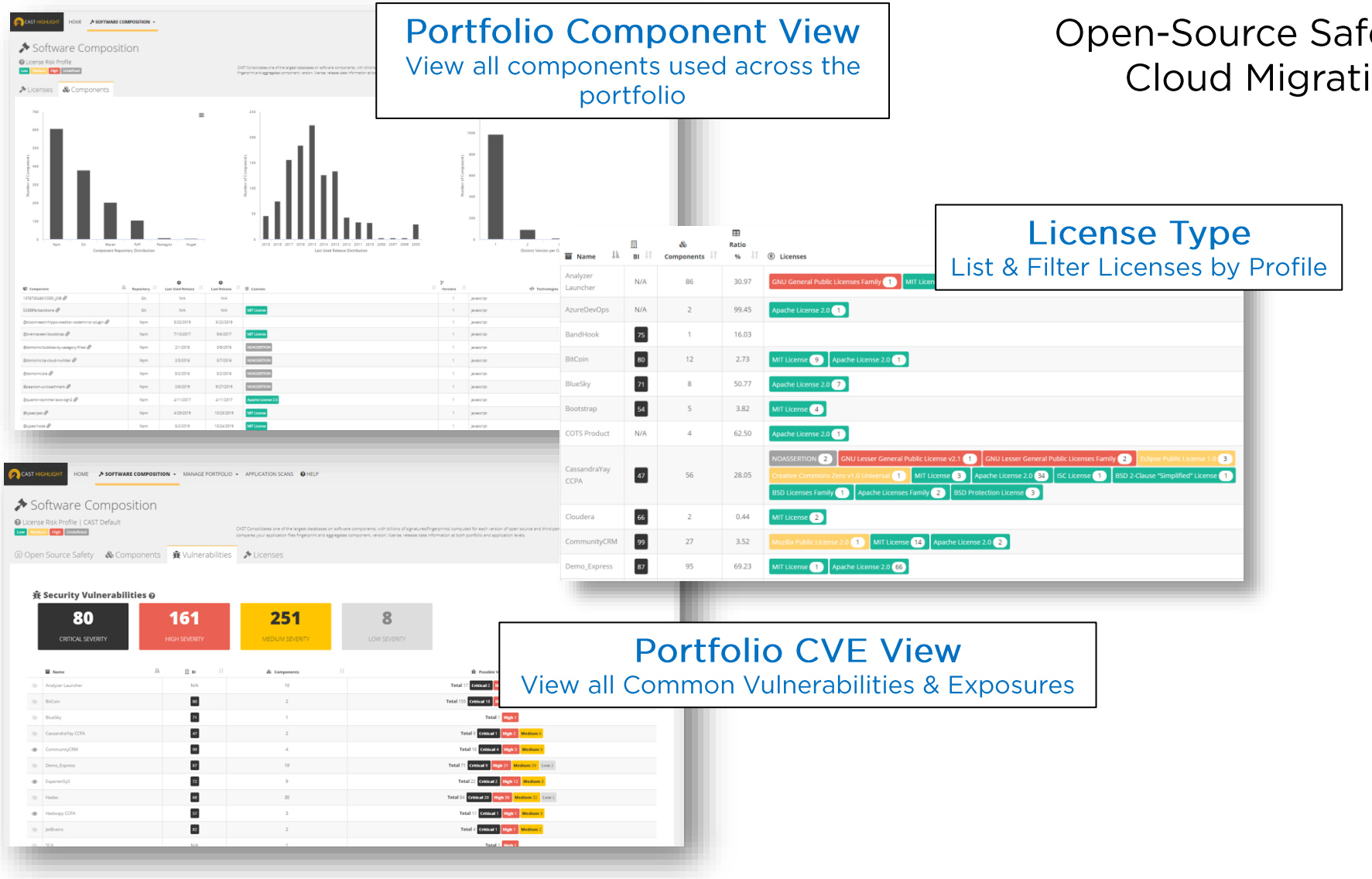
Searched Code Patterns

For Java applications:

```
import javax.servlet.http.HttpSession;
and getSession().setAttribute( or getSession().putValue(
```

Each Cloud Blocker is described in detail to begin estimating the impact and effort level to remediate

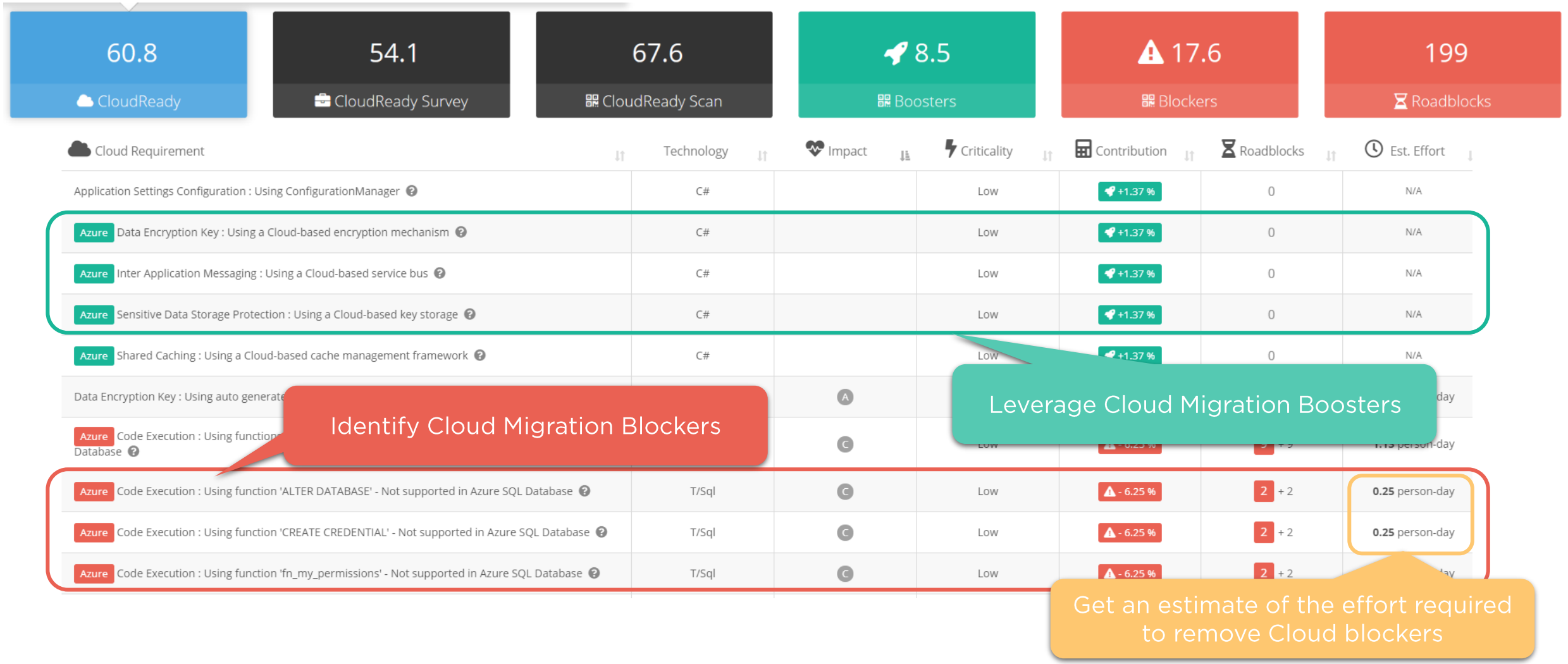
Software Composition at Portfolio Level



Open-Source Safety can assist in Cloud Migration planning

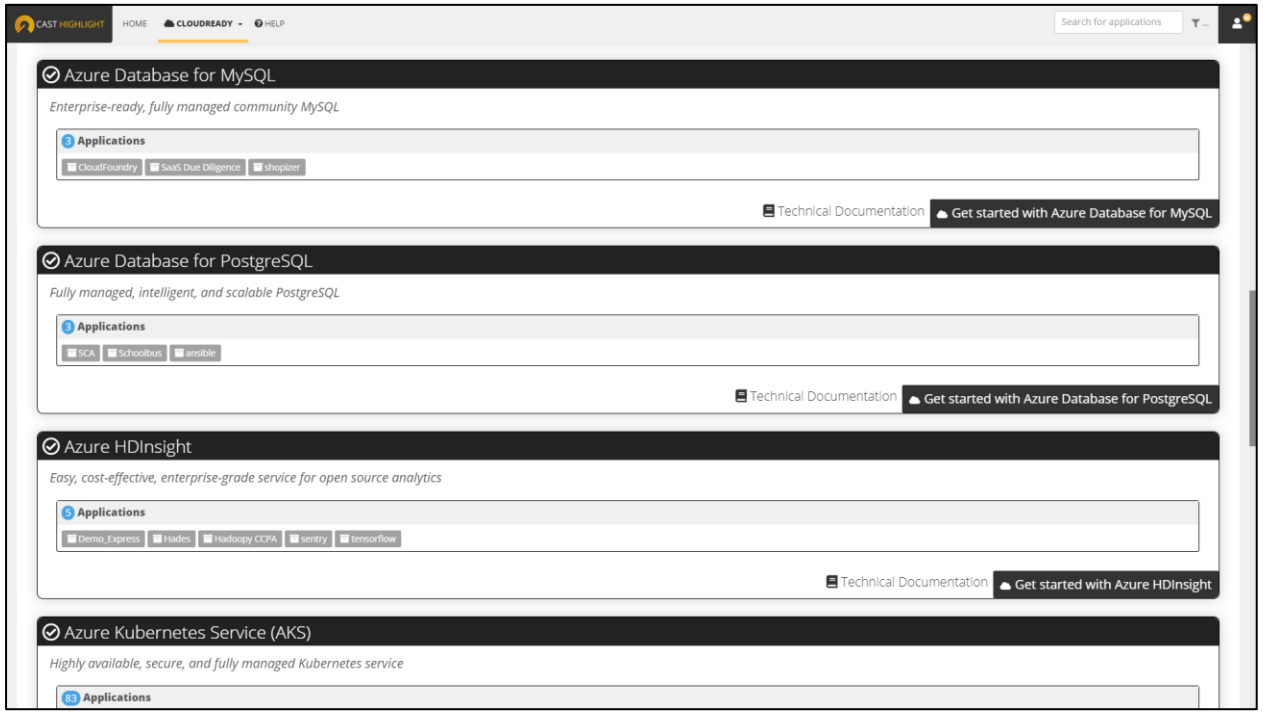
Automatically detect all Open-Source frameworks and 3rd party components from a proprietary knowledgebase of near 80 million components. Use the unique Open-Source Safety score to prioritize remediation efforts before cloud migration across your entire portfolio and focus on the most business critical applications first

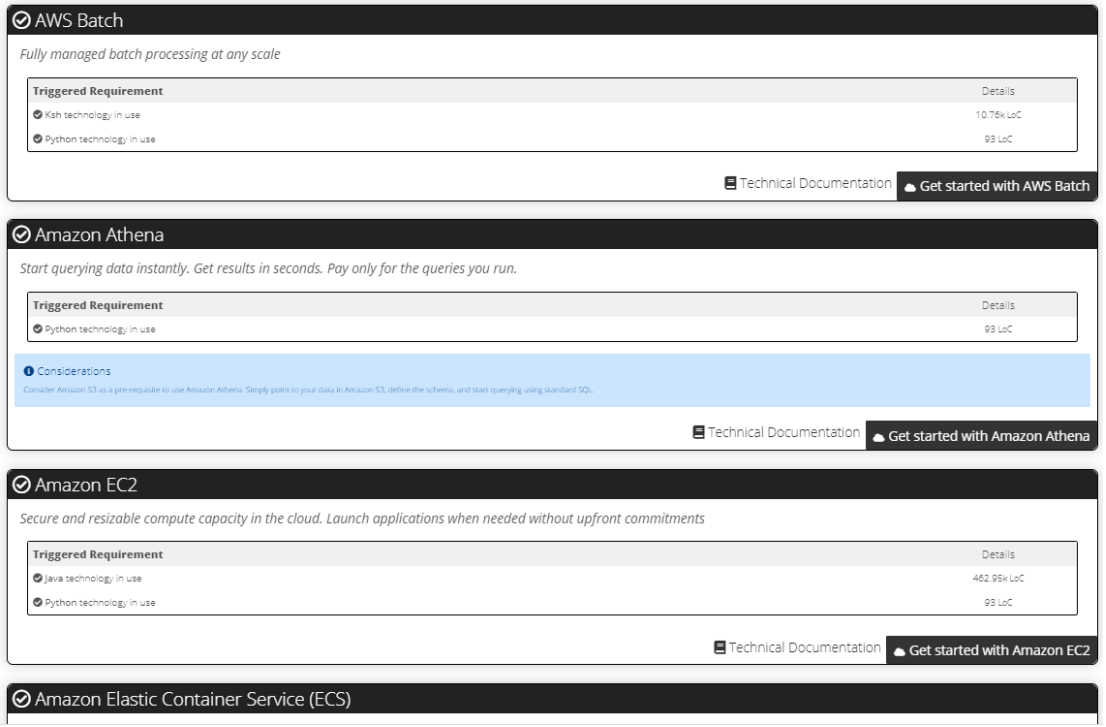
Application-level View: CloudReady scores, Blockers & Boosters



Each individual application is then assessed to **understand the specific Blockers and Boosters** that occur within each application so that the segmentation and prioritization can be further refined based on individual application characteristics.

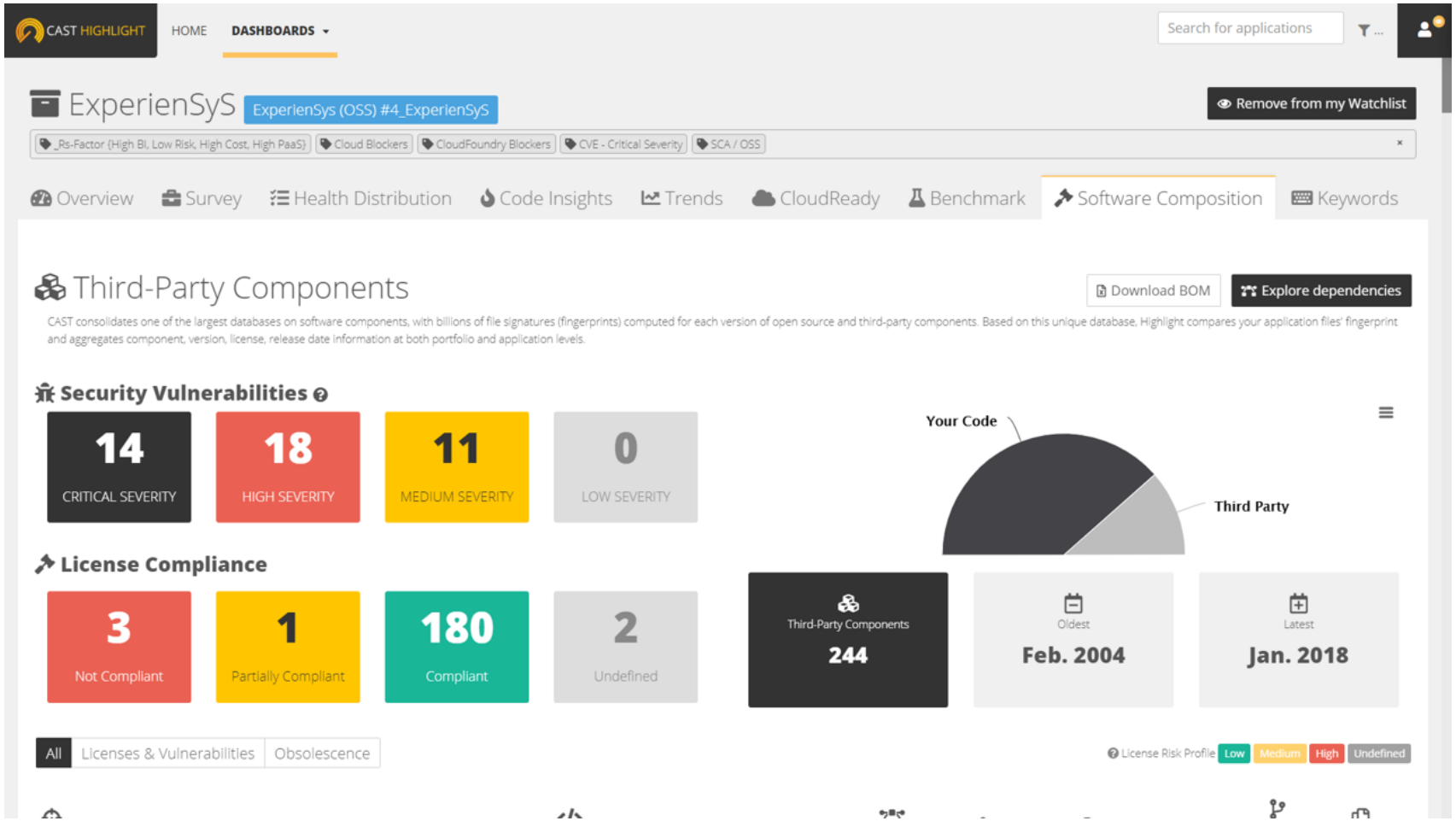
Application-level View: Cloud Service Recommendations





CAST Highlight combines detected code patterns, technologies and OSS components and contextual characteristics of an application to help cloud architects identify the **best cloud services to adopt** for their custom apps from Cloud vendors. These recommendations are provided for AWS and Azure

Application-level View: CVE and IP Risk Detection



Frameworks Detection

Identify used Frameworks & their type

License Type

List Framework Licensing Profile

Vulnerabilities

Detect & document Common Vulnerabilities & Exposures (CVEs)