

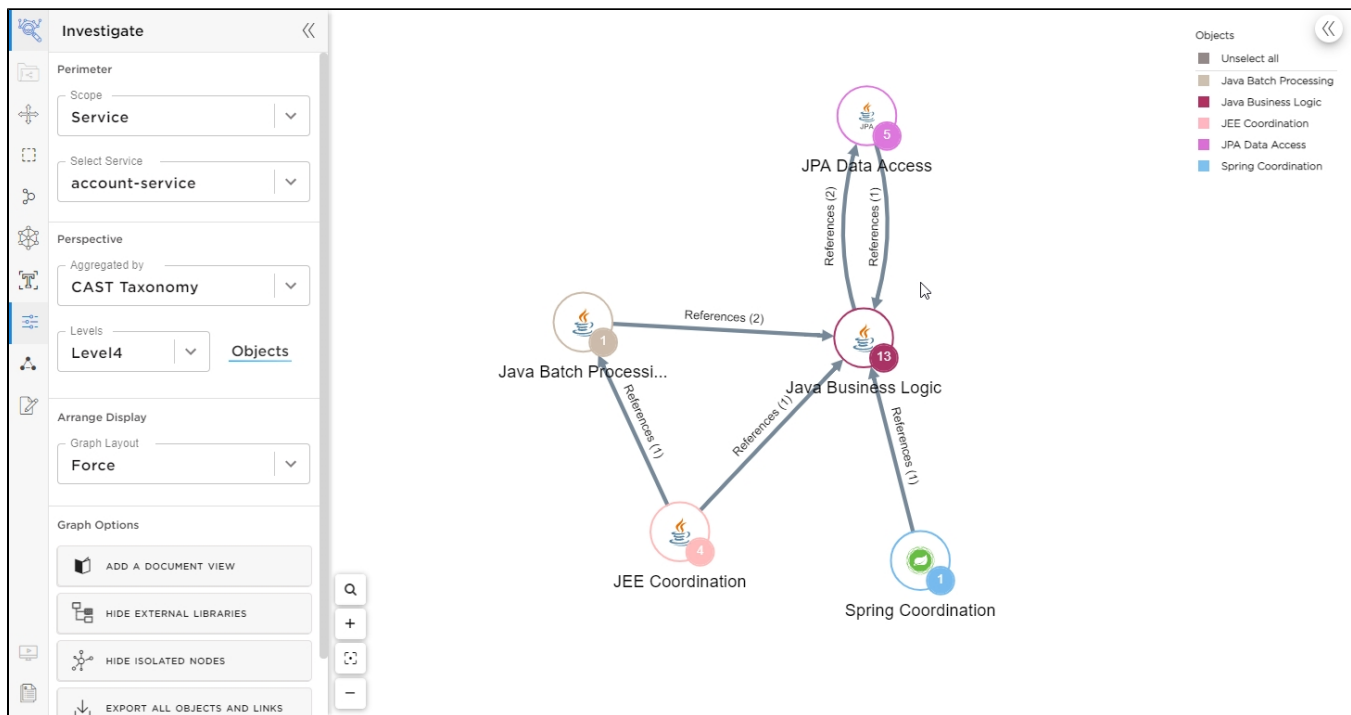
User Guide - Service scope

- [Introduction](#)
- [Enabling the Service scope](#)
- [Accessing the Service scope](#)
- [Navigating the view](#)
 - [Aggregated by](#)
 - [Levels](#)
 - [Actions](#)

Introduction

Microservices - also known as "microservice architecture" - is an approach to developing a single application as a suite of small services, each running in its own process and communicating with lightweight mechanisms, often an HTTP resource API. These services are built around business capabilities and independently deployable by fully automated deployment machinery (see <https://martinfowler.com/tags/microservices.html>). CAST AIP is able to detect these microservices during an analysis (with the assistance of a dedicated extension) and the subsequent results are made available in the CAST Imaging **Service scope**:

Click to enlarge



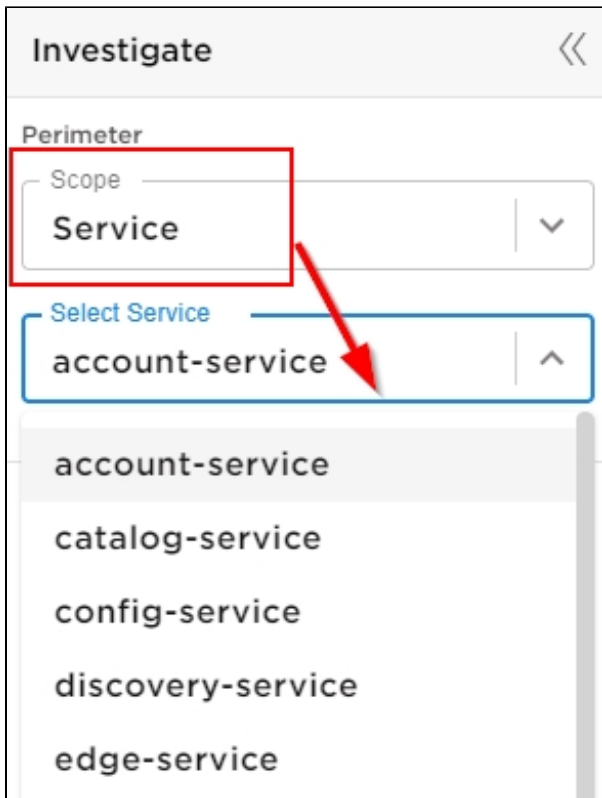
Enabling the Service scope

The **Service scope** requires that the Application in question has been analyzed with a specific extension installed, **before** it is exported/imported into CAST Imaging. Therefore the process is as follows:

- Download, install and enable the following extension: <https://extend.castsoftware.com/#/extension?id=com.castsoftware.architecture&version=latest> for your Application
- Run a new analysis of your Application
- **Export/import** the Application into your CAST Imaging instance
- Ensure you grant the appropriate **permissions** to access the application (if necessary)

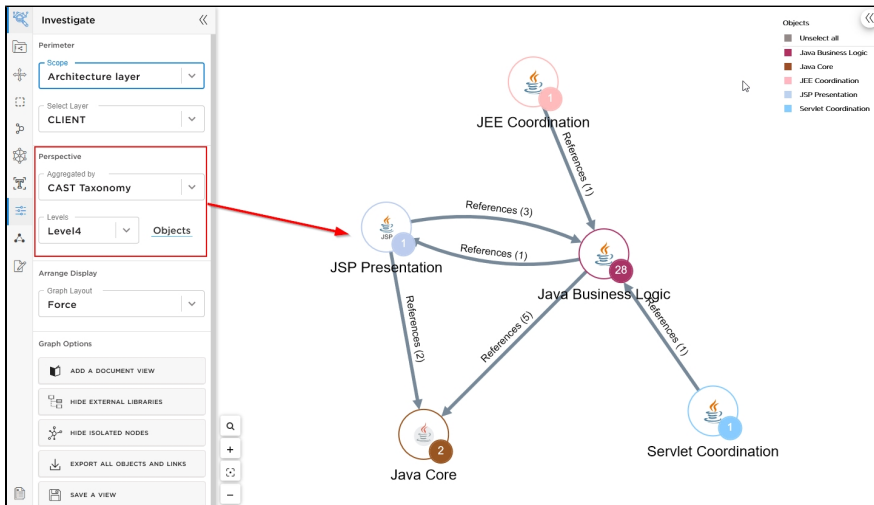
Accessing the Service scope

To access the Service scope, click the **Services scope** entry in the **Investigation panel** (if there are no microservices available in the selected application, the entry will be greyed out), then choose a specific microservice from the list of those available in the **Select Service** dropdown:



Which will drill down to **Level 4** of the selected microservice using the **CAST Taxonomy** aggregation (standard grouping of items):

Click to enlarge



Navigating the view

Aggregated by

In **Service mode**, only the standard CAST Taxonomy layout is available. See [User Guide - GUI - Investigate panel](#) for more information about this.

Levels

Levels 4 and **5** are available for selection when a specific microservice is selected in the **Investigate panel** - these levels provide ever greater details about the items within the selected microservice:

Perspective

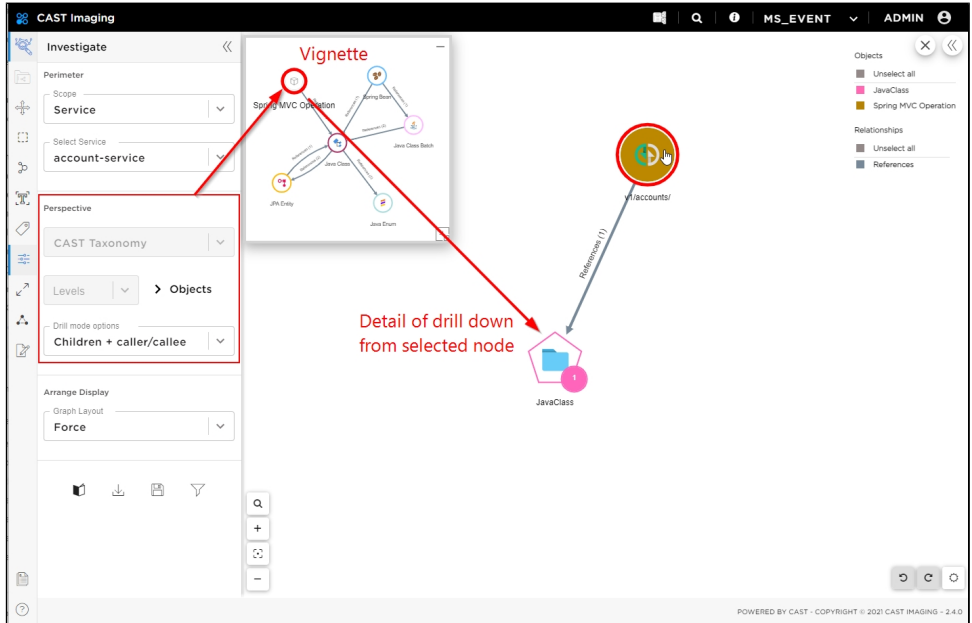
Aggregated by
CAST Taxonomy | ▾

Levels
Level4 | ▲

Level4

Level5

Actions

Action	Location	Result/Behavior
Double click on node	Level 4	N/A
	Level 5	<p>Drill down to Vignette mode i.e.: Objects level + drill mode Children + Caller/Callee + Group by communities (depending on selected). See also User Guide - GUI for more information on Drill and Communities modes.</p> <p><i>Click to expand</i></p>  <p>The screenshot shows the CAST Imaging interface. On the left, the 'Perspective' panel is open, showing 'CAST Taxonomy' and 'Levels' set to 'Level 4'. Below this, 'Drill mode options' are set to 'Children + caller/callee'. The main area displays a 'Vignette' graph with various nodes. A red circle highlights a node in the graph, and a red arrow points from it to a detailed view of a 'JavaClass' object. Another red circle highlights a 'References (1)' link in the detailed view, with a red arrow pointing to a 'JavaClass' node in the 'Objects' panel on the right. The 'Objects' panel shows a list of objects with checkboxes for 'Unselect all', 'JavaClass', and 'Spring MVC Operation'. The 'Relationships' panel shows checkboxes for 'Unselect all' and 'References'. The bottom right corner of the interface says 'POWERED BY CAST - COPYRIGHT © 2021 CAST IMAGING - 2.4.0'.</p>
Vignette mode		Expand and investigate the selected object.
Objects		View source code of the object. See User Guide - Viewing source code .

Right click on node

Level 4

Properties

- **Properties** > Displays information about the node in the right hand slide in panel (see [User Guide - Properties panel](#)):

Properties >>

Name	User Interaction
Count	686

1 User Interaction

- Web Interaction
- Screen Interaction

If the object properties cannot be retrieved in a timely manner, a **retry** button will be displayed:

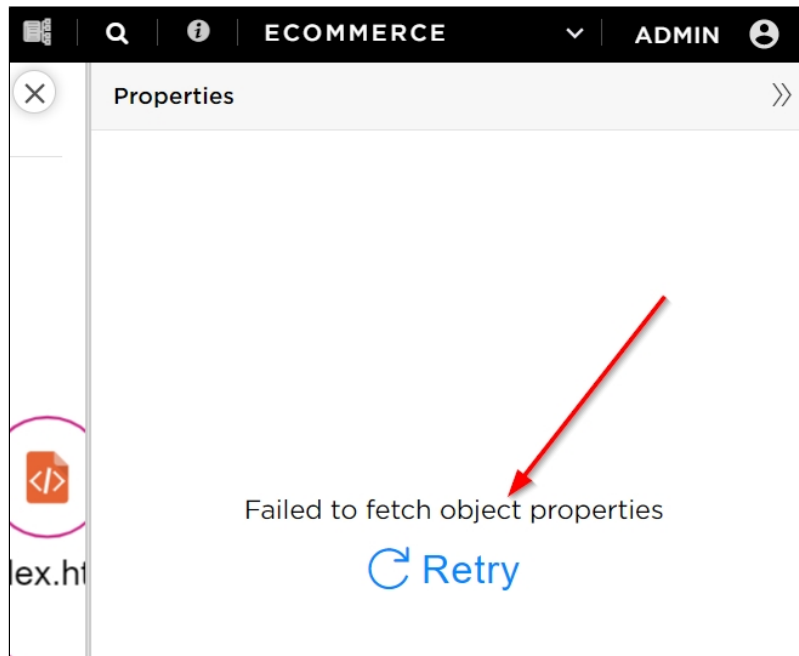
The screenshot shows the 'Properties' panel in a dark-themed application. The header includes 'ECOMMERCE' and 'ADMIN'. The panel title is 'Properties'. The main content area is empty, with an error message 'Failed to fetch object properties' and a blue 'Retry' button below it. A red arrow points to the error message. On the left side, there is a sidebar with a file icon and the text 'lex.ht'.

Children + caller/callee
Children only
Add edge
Search
Properties

- **Children + X** > Drill down into **Vignette mode** for further investigation. See also [User Guide - GUI](#) for more information or **mmunities** modes.
- **Add edge** > See [User Guide - Working with custom links](#).
- **Search** > Invokes the standard search options for the selected object. See [User Guide - Search for items](#).
- **Properties** > Displays information about the node in the right hand slide in panel (see [User Guide - Properties panel](#)):

Properties		>>
Name	Hibernate Entity	
Type	Hibernate Entity	
Count	235	

If the object properties cannot be retrieved in a timely manner, a **retry** button will be displayed:



Vignette mode

Expand All

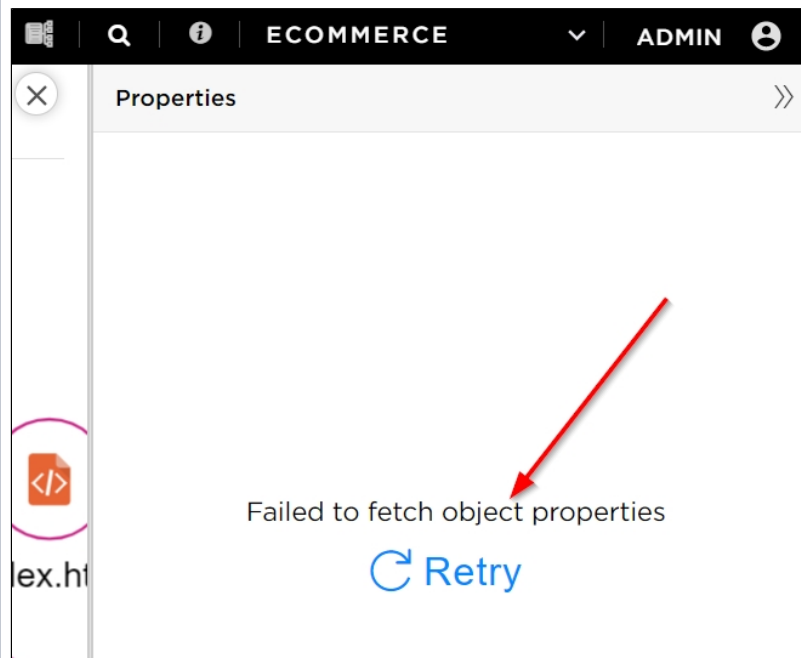
Hide node

- **Expand All** > Expand and investigate the selected object (same as double click)
- **Hide node** > Use this to hide selected nodes. To unhide, either use the "Undo" option or refresh the page. It is not possible to hide a concept node or a group node, in which case the option will not be available.
- **Properties** > Displays information about the node in the right hand slide in panel (see [User Guide - Properties panel](#)):

Properties

Name	Hibernate Entity
Type	Hibernate Entity
Count	235

If the object properties cannot be retrieved in a timely manner, a **retry** button will be displayed:



Objects

Add callers [2]
Add callees [23]
Add linked objects [25]
Add 2 levels of callers
Add 2 levels of callees
Associate to custom aggregation
Show source code
Hide object
Remove object
Properties

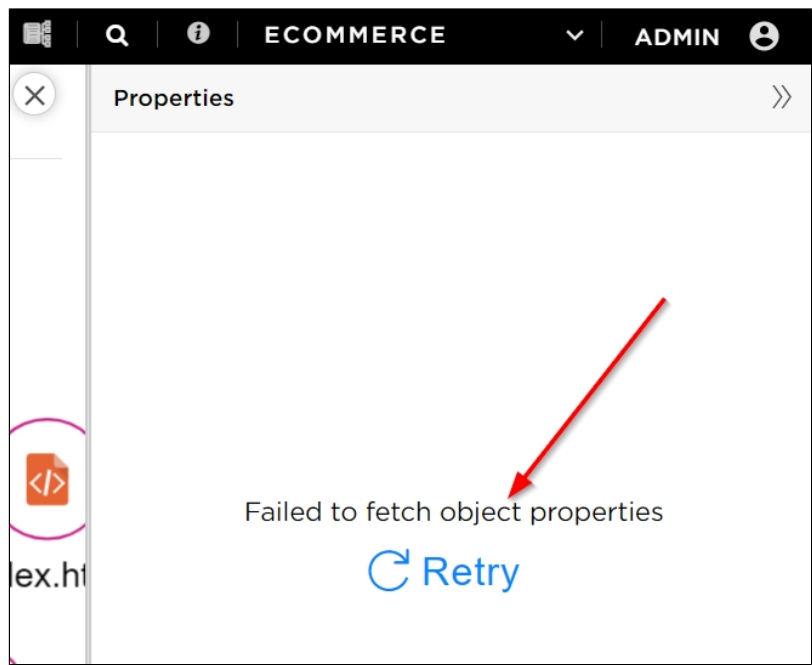
- **Add callers/callees** > Retrieves all caller/called objects. Links are added to the selected object and to any other objects provided a link exists. The number in square brackets in the contextual menu indicates the number of items available.
- **Add linked objects** > See [User Guide - Using the Add Linked Objects feature](#) for more information.
- **Add 2 levels of Callers/Callees** > Same principal as the Add Callers/Callees options, but instead displays two levels of objects.
- **Associate to custom aggregation** > See [User Guide - Creating a custom aggregation mode](#).
- **Show source code** > See [User Guide - Viewing source code](#).
- **Hide node/object** > Use this to hide selected nodes. To unhide, either use the "Undo" option or refresh the page. It is not available to hide a concept node or a group node, in which case the option will not be available.
- **Remove object** > Use this option to remove the object from the current view. When you reload the view the object will be removed.
- **Properties** > Displays information about the object in the right hand slide in panel (see [User Guide - Properties panel](#)):

Properties



AipId	253484
Name	PAGE
File	C:\webi\AipNode\data\deploy8322\eCommerce\main_sources\sche ma\sql\shopizer_schema_mysql.sql
FullName	DEFAULT.PAGE
Type	MySQL Table
External	false
Status	Unchanged
Application	eCommerce
Comment	----- -- before object -- PAGE --
Number of Transaction	9
Number of code lines	24
Number of heading comment lines	4
Number of inner comment lines	0
Primary Key	1

If the object properties cannot be retrieved in a timely manner, a **retry** button will be displayed:



Single click on edge

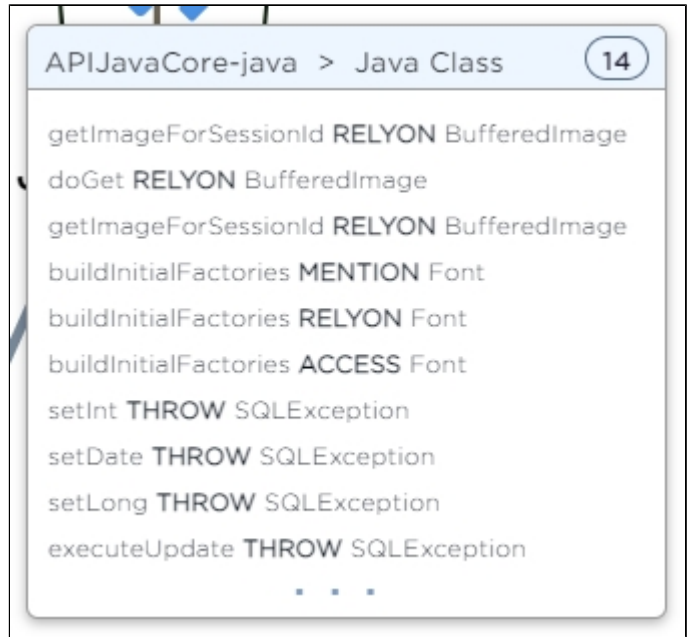
Levels 4 and 5

N/A

Objects and Vignette mode

Displays all the methods that are linked between classes and provides additional actions such as:

- view source code
- method information
- add caller/callees



See [User Guide - Using the Method view](#) for more information.

Double click on edge

Levels 4 and 5, Objects and Vignette

N/A