
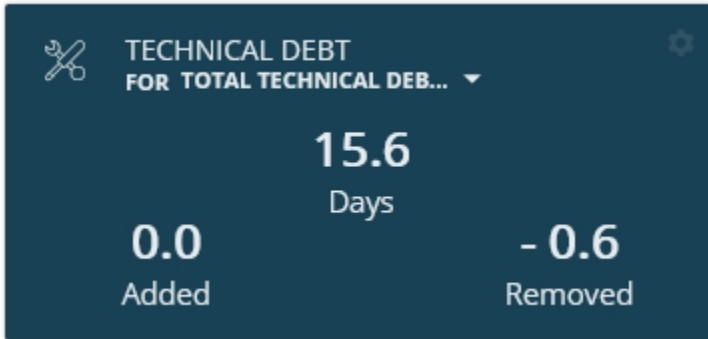


OMG Technical Debt tile

 This tile:

- needs to be configured manually in **CAST Engineering Dashboard 2.3.1** (in later releases it is available out of the box)
- requires the [OMG Technical Debt](#) extension to be installed - if the extension is not installed, the tile will display N/A for values

OMG Technical Debt tile is available out of the box (in **2.3.1**) displaying the **Total Technical Debt (OMG) in days** for the current Application, as well as **Added** and **Removed OMG Technical Debt in days** for the current snapshot:



Configuration

- **type:** tile type has to be *OMGTechnicalDebt*
- **parameters:**
 - **business:** can be set to:
 - **1061000 (based on ISO-5055 index, installed by default in AIP Console)** only for **version 2.x** of the extension
 - **60017 (based on TQI from AIP Core)** only for **version 2.x** of the extension
 - **1062100 (based on CISQ Index)** for any release of the extension (requires that the [CISQ Index](#) is installed)
- **color:** tile color
- other parameters for sizing and positioning of the tile - see [Tile Sizing and Positioning](#).

Example



For v. 2.x based on ISO-5055 Index (default configuration):

```
{
  "type": "OMGTechnicalDebt",
  "parameters": {
    "business": "1061000" },
  "color": "blue-dark",
  "col": 1,
  "row": 4,
  "size": 2,
  "sizey": 1,
  "min-size": 1,
  "min-sizey": 1,
  "max-size": 1,
  "max-sizey": 2
},
```

For v. 2.x based on AIP Core TQI:

```
{
  "type": "OMGTechnicalDebt",
  "parameters": {
    "business": "60017" },
  "color": "blue-dark",
  "col": 1,
  "row": 4,
  "size": 2,
  "sizey": 1,
  "min-size": 1,
  "min-sizey": 1,
  "max-size": 1,
  "max-sizey": 2
},
```

For v. 2.x based on CISQ Index data:

```
{
  "type": "OMGTechnicalDebt",
  "parameters": {
    "business": "1062100" },
  "color": "blue-dark",
  "col": 1,
  "row": 4,
  "size": 2,
  "sizey": 1,
  "min-size": 1,
  "min-sizey": 1,
  "max-size": 1,
  "max-sizey": 2
},
```

For v. 1.x:

```
{
  "type": "OMGTechnicalDebt",
  "parameters": {
    "business": "1062100"
  },
  "color": "orange",
  "col": 7,
  "row": 1,
  "size": 2,
  "sizey": 1,
  "min-size": 1,
  "min-sizey": 1,
  "max-size": 1,
  "max-sizey": 2,
},
```

Drill down behaviour

Clicking this tile will drill down to the [Risk investigation view](#) with **Technical Debt (OMG)** with the **ISO-5055 Assessment Model** selected. If the tile has been manually edited and re-configured to show either **TQI (AIP Core)** or **CISQ Index** data, the drill down will also change as shown below:

Click to enlarge

The image displays three screenshots of a dashboard interface, each showing a different data view and its corresponding dropdown menu. Red arrows indicate the interaction points.

- ISO-5055 data (default):** The dashboard shows 'ISO-5055 Characteristics' and 'Technical Criteria'. The dropdown menu is set to 'Technical Debt (OMG)' and 'ISO-5055 Assessment...'. The 'ISO-5055 Characteristics' table shows values like +16.1, +10.5, +6.7, +2.2, and +0.5. The 'Technical Criteria' table lists items like 'All Rules...', 'CWE-391 - Unchecked Error Condition', 'CWE-392 - Missing Report of Error Condition', 'CWE-1060 - Excessive Number of Inefficient Server-Side Data Accesses', and 'CWE-1067 - Excessive Execution of Sequential Searches of Data Resource'.
- TQI data (AIP Core):** The dashboard shows 'AIP Characteristics' and 'Technical Criteria'. The dropdown menu is set to 'Technical Debt (OMG)' and 'AIP Assessment Model'. The 'AIP Characteristics' table shows values like +32.5, +17.4, +16.8, and +14.1. The 'Technical Criteria' table lists items like 'All Rules...', 'Efficiency - SQL and Data Handling Performance', 'Architecture - Multi-Layers and Data Access', and 'Programming Practices - Error and Exception Handling'.
- CISQ Index data:** The dashboard shows 'CISQ Characteristics' and 'Technical Criteria'. The dropdown menu is set to 'Technical Debt (OMG)' and 'CISQ Assessment Mod...'. The 'CISQ Characteristics' table shows values like 0, -0.4, -0.5, -0.6, and 0. The 'Technical Criteria' table lists items like 'All Rules...', 'ASCPM-PRF-9 - Non-Stored SQL Callable Control Element with Excessive Number of Data Resource Access', 'ASCPM-PRF-5 - Data Resource Read Access Unsupported by Index Element', 'ASCPM-CWE-772 - Missing Release of Resource after Effective Lifetime', and 'ASCPM-PRF-6 - Large Data Resource ColumnSet Excessive Number of Index Elements'.

You can also switch to showing **Violations** instead of **Technical Debt (OMG)** values from the drop-down list:

The image shows a close-up of a dropdown menu. The menu is open, showing three options: 'Violations' (highlighted in orange), 'Technical Debt (OMG)', and another option partially visible below. The background is a blurred dashboard view.

In the rule details section, there is a dedicated section called "Technical Debt (OMG)", which will show the details (Total, Added, Removed, and No. of occurrences):

Click to enlarge

99+
Technical Debt(OMG) ×

TOTAL (IN DAYS)	ADDED	REMOVED	NO OF OCCURRENCES
511.1	0.0	0.0	326

Documentation

Technical Debt(OMG) is calculated as the amount of effort required to fix the structural quality problems in an application that, if left unfixed, put the business at serious risk. Like financial debt, Technical Debt incurs interest in the form of the extra effort it takes to maintain and enhance an application due to the structural quality flaws in the code.

Technical Debt(OMG) follows the OMG specification. For more information on the specification, please visit [link](#).

For documentation, please visit [link](#).

In the source code view, a Technical Debt (OMG) section is displayed, showing object level details on the Adjustment Factor, Unadjusted Effort (in mins) and Adjusted Efforts (in mins):

Click to enlarge

Technical Debt (OMG)
×

UNADJUSTED EFFORT (IN MINS)	ADJUSTMENT FACTOR	ADJUSTED EFFORT (IN MINS)
120	1.00	120

Adjustment Factor

NAME	VALUE
Occurrence technological diversity	1.00
Occurrence complexity overhead	1.67
Occurrence exposure overhead	2.15