



# vFunction



## vFunction 3.7.0 Release Notes

### Key Additions

#### Architecture Governance through Organization of Services and Domains

- New ability to tag services (in distributed apps) and domains (in monolithic apps) based on layer or function for easier management and tracking of architecture.
- The layout of domains and services is now kept on the measurement and inherited to scheduled measurements.
- New ability to multi select services to tag them and move them on the analysis tab.
- Automatic layering of domains and services to improve readability of the analysis tab.
- New TODO (“Refactoring needed”) when a dependency is interfering with a clear layered structure of services or affecting scalability.
- **Architecture Rules** to alert on dependencies not complying with the standards and policies of the organization. These rules can be applied to both domains and services either by name or with their tag.

#### Distributed Flows and Sequence Diagrams

- Automatically create **sequence diagrams** of individual flows in distributed applications.
- Improved DETAILS view for resource usage in distributed applications, allowing to see exact flows from where resources are used.
- Flows can be sorted based on the API endpoint or the number of occurrences in the measurement.



## Improvements in Learning

- Added the ability to start learning on a Distributed application based on a specific service tag, to learn from different environments separately.
- Added the time in learning for distributed measurements.

## Improvements in Analysis of Distributed Apps

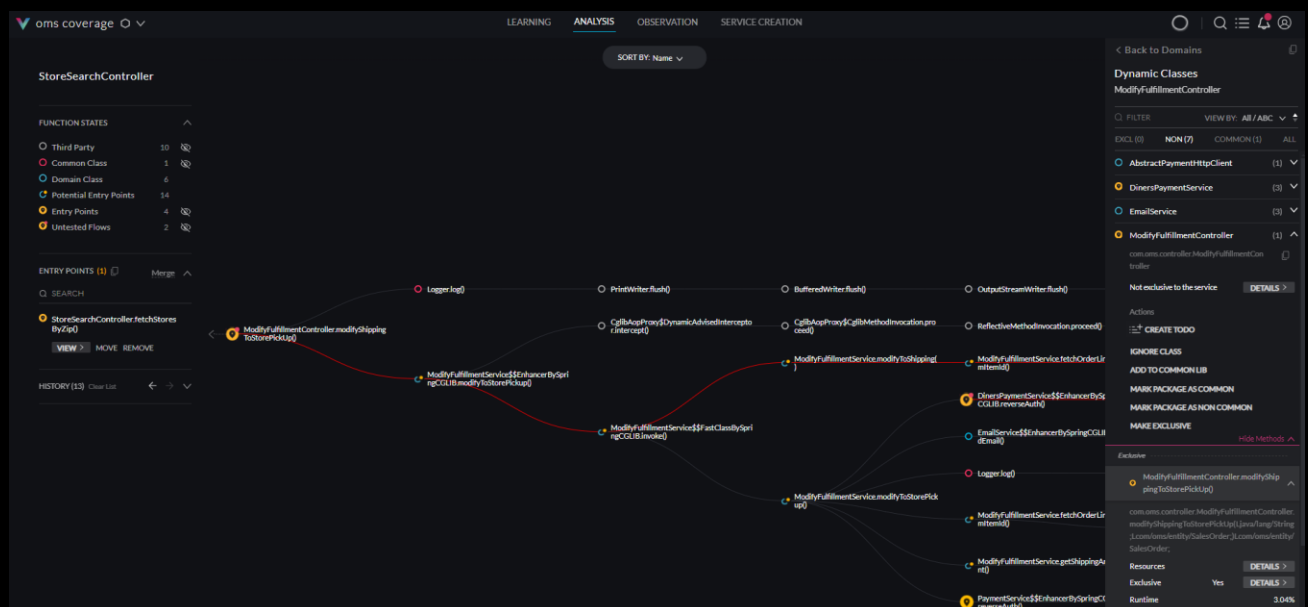
- Improved handling of stored procedures called from distributed applications.
- Showing HTTP and HTTPS calls separately in distributed measurements

## Architecture Observability Improvements

- New TODO to alert when a new resource is used in a distributed flow.
- Added the option to send a TODO to alert when non-encrypted HTTP calls are seen between services.
- Added goals and prioritization of TODOs in distributed applications.
- Improved the usability of selecting the baseline and latest measurement of each app.

## Live Flow Coverage Analysis for Monolithic Apps

- Understand gaps in your test flow coverage by comparing test measurements and production measurements. This can be done by selecting two measurements, or automatically through the observation schedule.





## Improvements in Analysis of Monolithic Apps

- Improved the displayed details for bidirectional jar dependencies.
- Improved the DETAILS screen of classes – showing instances and the entry-points they were called from.
- Allow sorting the call tree by name, type, or runtime percentage
- Added the ability to sort domains by their runtime.
- Added the ability to merge multiple domains at a single time.
- Improved the organization of the left pane of the analysis screen.
- Better retention of domain structure between baseline and latest measurements.

## Installation and Operational improvements

- A new option to restore the DB from the latest available dump (of the same major version) during installation for an easier restore process.
- New logging improvements: New options to set the java and dotnet agent log level to log to the console for containerized environments.
- A new option to support configuring multiple dotnet agents from a single configuration file on machines where multiple processes need to be observed.
- Enhanced support to use environment variables to config options for controllers in containerized environments.
- A new option for the controller to use client certificates to authenticate with the vFunction server.
- Additions to the viper-run-ci.sh script to enhance error handling within CICD pipelines. The viper-run-ci, and the observation trigger scripts are now also available in powershell for windows based pipelines.
- For container environments with instance-id configured on the controllers, the create date in the controllers screen will show the latest update of the instance.
- More tools and examples for smoother adaptation of vFunction Controller in a sidecar in K8s and OpenShift environments

## Miscellaneous

- Measurements cannot be created with the same name for the same app.
- The portfolio view now shows the technology stack of the selected apps on the right pane.
- Improved URL handling, to allow sharing the URL to get to a specific screen.