tenant environments create difficulties in processing data streams in systems with sidecar components. Lack of filter optimization can lead to delays in request processing, overload of key system components, and potential errors in inter-tenant interaction.

An approach to effective management of HTTP request filters in sidecar components is proposed based on the following developments: mathematical models of filter operation, which allow estimating the time required to process requests and the interrelationships between filters; dynamic data caching mechanisms to optimize the performance of filters, which reduce the number of calls to external systems (authorization servers); data isolation strategies between tenants, integrated into the filter process, which minimize the risk of accidental access to other clients' data.

IMPROVED METHODOLOGY FOR EVALUATING THE SURVIVAL OF ANTI-AIRCRAFT WEAPONS

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The survivability of air defense systems is characterized by the system's ability to maintain (quickly restore) its combat capability when the enemy uses various means of destruction. The survivability coefficient can be used as an indicator of the degree of combat capability preservation of an anti-aircraft unit.

However, in order to effectively counter small enemy unmanned aerial vehicles (UAVs), it is necessary to create a targeted countermeasure system that includes both an "active" component (engaging UAVs with fire on the ground and in the air) and a "passive" (non-fire) component.

Thus, improving the methodology for assessing the survivability of anti-aircraft weapons is a pressing scientific task.

The report analyzes known methods for ensuring the survivability of anti-aircraft weapons, as well as their advantages and disadvantages.

It has been determined that such methods focus primarily on determining the enemy's capabilities to detect weapon systems using reconnaissance and direct fire strikes. However, these methods do not sufficiently take into account

factors that affect survivability and the time factor.

There are also methods that assess the survivability of air defense systems, taking into account the duration of combat operations, using Markov random processes.

However, in order to obtain an accurate assessment of survivability, this method requires a significant amount of time for calculations by the relevant military command officials.

The methodology for assessing the survivability of anti-aircraft weapons has been improved, taking into account various models of enemy strikes and the maneuverability characteristics of the means of mobility (anti-aircraft missile system combat vehicle or mobile weapon system).

The methodology allows determining the necessary values required for calculating the accepted survivability indicator for anti-aircraft weapons.

METHOD OF INTELLECTUAL FORMATION OF TEST SCENARIOS FOR C++ LIBRARIES BASED ON Q-LEARNING AGENT

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The development of modern software involves the use of high-quality C++ libraries, which relies on effective testing. This approach is relevant for libraries that are rapidly evolving and used in various fields (high-performance computing systems, etc.).

Thus, the development of a method for the intelligent formation of test scenarios for C++ libraries based on a Q-learning agent is a relevant scientific task.

The report analyzes known methods for optimizing test sets that operate at the level of indivisible test scenarios, prioritizing their execution according to a given criterion and excluding redundant test scenarios from test sets. It also analyzes methods that involve building new test scenarios at the level of forming sequences of application programming interface (API) elements, but these require access to specifications for the valid use of such APIs.

A method for intelligent generation of test scenarios for C++ libraries based on a Q-learning agent is proposed. The method works in the absence of