

CLAIMS

1. A computerized system for API migration, the system comprising:
 - at least one memory storing instructions; and
 - at least one processor configured to execute the instructions to perform operations comprising:
 - segregating client accounts into a first group, a second group, and a third group, each group having distinct members;
 - assigning a first API for communications with the first group and a second API for communications with the second group;
 - assigning the first API for communications with a first portion of the third group and the second API for communications with a second portion of the third group;
 - collecting, during a time interval, communications from the first group, the second group, and the third group, and generating metrics associated with each group;
 - generating a comparative report comparing the metrics associated with the first group and the metrics associated with the second group;
 - generating a compatibility report based on the metrics associated with the third group; and
 - transmitting at least one of an alert or a recommendation based on the comparative report and the compatibility report, wherein the recommendation comprises at least one of an updated API map table and a migration API plugin.
2. The system of claim 1, wherein:
 - the first API is a legacy API and the second API is an updated API; and
 - the operations further comprise automatically migrating the client accounts to the updated API based on the recommendation.
3. The system of claim 2, wherein the operations further comprise:
 - determining a comparative score based on the comparative report and a compatibility score based on the compatibility report; and

assigning the second API to the first group and the third group in response to determining the comparative score and the compatibility score are above a threshold.

4. The system of claim 1, wherein the first group and the second group comprise a larger number of client accounts than the third group.

5. The system of claim 1, wherein:

the comparative report specifies mismatches between API calls from the first group and a difference between the metrics associated with the first and the second groups;

the compatibility report specifies source, binary, and semantic compatibility errors between the first API and the second API;

the alert or recommendation comprises the mismatches; and

generating the alert or recommendation comprises automatically broadcasting a message in an administrator network.

6. The system of claim 1, wherein collecting the communications comprises configuring a network analyzer to:

capture packets incoming from client devices associated with the client accounts in the first group, the second, and the third group; and

store the captured packets from each group in independent memory spaces.

7. The system of claim 6, wherein generating the metrics comprises:

for each one of the first group, second group, and third group, generating:

infrastructure API metrics comprising uptime, CPU usage, and memory usage;

application API metrics comprising requests per minute, average maximum latency, and errors per minute; and

product API metrics comprising number of unique API consumers and calls per business transaction.

8. The system of claim 7, wherein the alert comprises the metrics associated with the third group below compatibility thresholds.

9. The system of claim 1, wherein the first group, the second group, and the third group comprise an equal number of the client accounts.
10. The system of claim 1, wherein:
the first API and the second API comprise integration extensions connecting online shops with an e-commerce data center; and
collecting the communications comprises logging attributes of communications retrieved from a log pipeline while excluding client-side communications.
11. A computer-implemented method for API migration, the method comprising:
segregating client accounts in a first group, a second group, and a third group, each group having distinct members;
assigning a first API for communications with the first group and a second API for communications with the second group;
assigning the first API for communications with a first portion of the third group and the second API for communications with a second portion of the third group;
collecting, during a time interval, communications from the first group, the second group, and the third group, and determining metrics associated with each group;
generating a comparative report comparing the metrics associated with the first group and the metrics associated with the second group;
generating a compatibility report based on the metrics associated with the third group;
and
transmitting at least one of an alert or a recommendation based on the comparative report and the compatibility report, wherein the recommendation comprises at least one of an updated API map table and a migration API plugin.
12. The method of claim 11, wherein the first API is a legacy API and the second API is an updated API.
13. The method of claim 12, further comprising:

determining a comparative score based on the comparative report and a compatibility score based on the compatibility report; and

assigning the second API to the first group and the third group in response to determining the comparative score and the compatibility score are above a threshold.

14. The method of claim 11, wherein the first group and the second group comprise a larger number of client accounts than the third group.

15. The method of claim 11, wherein:

the comparative report specifies mismatches between API calls from the first group and the second group;

the compatibility report specifies source, binary, and semantic compatibility errors between the first API and the second API;

the alert or recommendation comprises the mismatches; and

generating the alert or recommendation comprises automatically broadcasting a message in an administrator network.

16. The method of claim 11, wherein collecting the communications comprises configuring a network analyzer to:

capture packets incoming from client devices associated with the client accounts in the first group, the second, and the third group; and

store the captured packets from each group in independent memory spaces.

17. The method of claim 16, wherein:

generating the metrics comprises, for each one of the first group, second group, and third group, generating:

infrastructure API metrics comprising uptime, CPU usage, and memory usage;

application API metrics comprising requests per minute, average max latency, and errors per minute; and

product API metrics comprising number of unique API consumers and calls per business transaction; and

the alert comprises the metrics associated with the third group below viability thresholds.

18. The method of claim 11, wherein the first group, the second group, and the third group comprise an equal number of the client accounts.

19. The method of claim 11, wherein:

the first API and the second API comprise integration extensions connecting online shops with an e-commerce data center; and

collecting the communications comprises logging attributes of communications retrieved from a log pipeline while excluding client-side communications.

20. A system comprising:

one or more processors; and

one or more memory devices storing instructions that, when executed by the one or more processors, configure the one or more processors to:

segregate client accounts in a first group, a second group, and a third group, each group having distinct members;

assign a first API for communications with the first group and a second API for communications with the second group, the first API being a legacy API and the second API being an updated API, the first API and the second API comprising integration extensions connecting online shops with an e-commerce data center;

assign the first API for communications with a first portion of the third group and the second API for communications with a second portion of the third group;

collect, during a time interval, communications from the first group, the second group, and the third group, and generating API metrics associated with each group;

generate a comparative report comparing the API metrics associated with the first group and the API metrics associated with the second group, the comparative report comprising a difference between the API metrics associated with the first group and the API metrics associated with the second group;

generate a compatibility report based on the API metrics associated with the third group;

determine whether the difference is below a viability threshold;

determine whether the API metrics associated with the third group are below a compatibility threshold; and

in response to determining the difference is below the viability threshold and the API metrics associated with the third group are above the compatibility threshold, transmit a recommendation comprising an updated API map table and a migration API plugin.