

SOLUTION BRIEF

CodeLift: Accelerating Migration with AI-Powered SQL Conversion

Reduce migration cycles by 80% with GenAI-powered SQL translation.

```

while($day = mysql::fetch($result)) {

    $day_studio_list = array();
    $shots_result = mysql::query("SELECT DISTINCT(studio) as studio, COUNT(*) as count FROM image WHERE day_id = '$day->id' AND enabled='y' GROUP BY studio");
    while($studio_list = mysql::fetch($shots_result)) {
        $day_info = metadata::day_info($day->shot_date, $studio_list->studio, "quick");
        $tmp_studio_list[] = array("studio" => $studio_list->studio, "count" => $studio_list->count, "title" => $day_info->title);
    }
    $day->studio_list = $tmp_studio_list;
    $return[$day->shot_date] = $day;
}

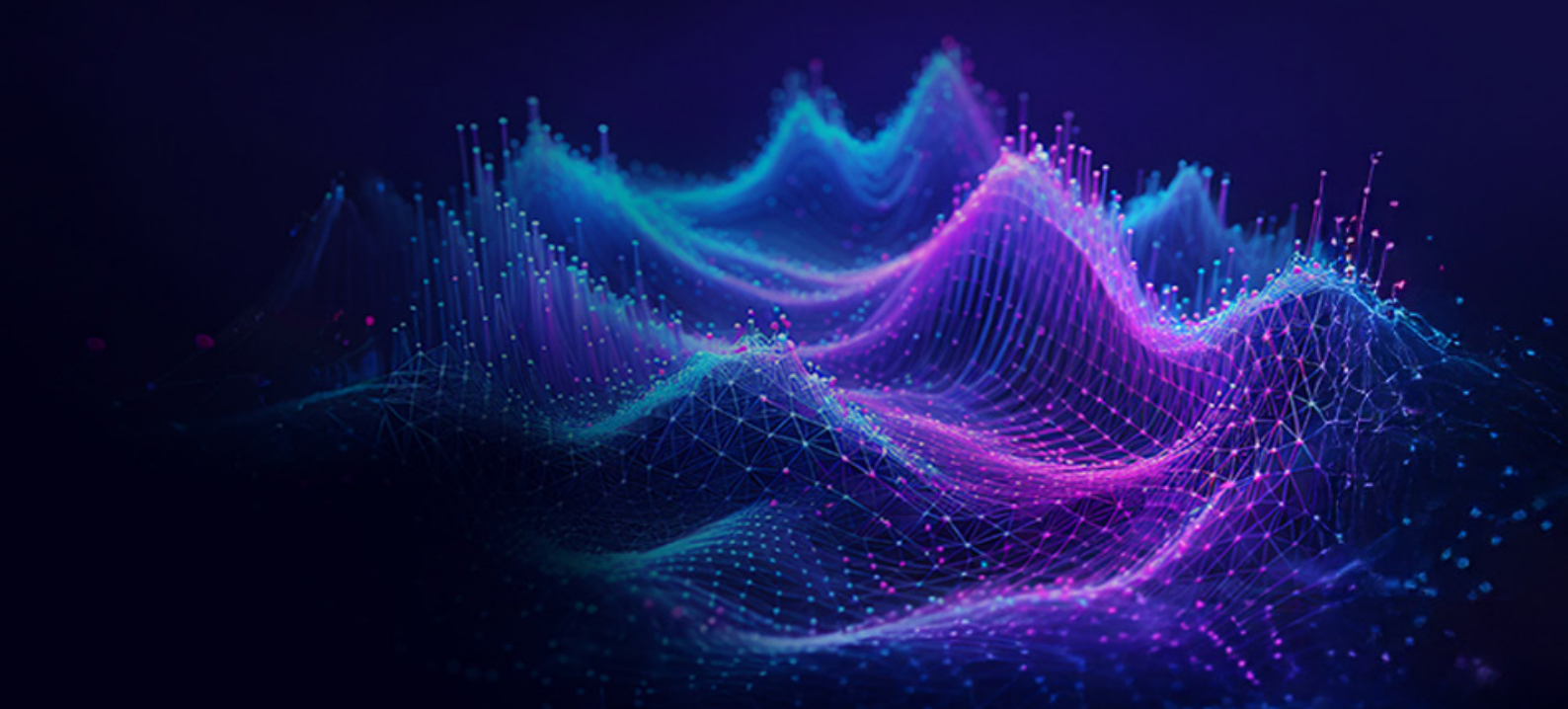
return $return;
}

static function day_images_list($date, $studio) {
    global $global_studio_list;
    if(!in_array($studio, $global_studio_list)) die("error studio");
    $date = mysql::escape($date);
    if(mysql::count("image_date", "shot_date = '$date'" ) != 1) die('date not found');
    $studio = intval($studio);

    $return = array();

    $result = mysql::query("SELECT image.id as image_id FROM image, image_date WHERE image_date.id=image.day_id AND image_date.shot_date='$date' AND image.studio=$studio");
    while($image = mysql::fetch($result)) {
        $image->copyright = metadata::get_copyright($image->image_id);
        $image->models = metadata::get_models($image->image_id);
        $return[$image->image_id] = $image;
    }
}

```



Modernizing data platforms is a top priority for many organizations. However, one challenge continues to slow things down: SQL migration. Manually converting SQL scripts is time-consuming, resource-intensive, and often results in errors. Teams can spend weeks, or even months, fixing syntax and ironing out differences between database dialects.

CodeLift was created to ease this problem. Combining AI-driven SQL translation with a lightweight, enterprise-ready interface, CodeLift enables teams to streamline migration efforts more easily without relying heavily on manual rework.

The Migration Challenge



Every database platform has its own SQL flavor. Shifting from databases such as MSSQL, Oracle, or PostgreSQL into modern environments like Snowflake, Redshift, or Databricks means dealing with:

- Syntax and function incompatibility between SQL dialects.
- Manual conversion effort is time-consuming, costly, and error-prone.
- Scalability limitations with difficult-to-handle large volumes of scripts.
- Risk of inconsistency when handled by multiple migration engineers.
- Complex stored procedures and metadata mismatches further slow progress.

These hurdles often delay cloud adoption and increase project costs, leaving organizations searching for an automated, intelligent solution.

Introducing CodeLift

CodeLift automates a large part of the SQL migration workload. By using Snowflake Cortex AI behind a simple Streamlit interface, it converts scripts across platforms quickly and with built-in checks for consistency.

Key features include:



AI-Powered Translation

Built on Snowflake Cortex for accurate SQL conversions.



Multi-Platform Support

Converts MSSQL, Oracle, PostgreSQL into Snowflake, Redshift, and Databricks dialects.



Enterprise-Ready Capabilities

Batch file processing, side-by-side previews, bulk ZIP exports, and detailed logging.



Serverless Architecture

Lightweight deployment with no infrastructure overhead.



Business Benefits



80% faster migration cycles.



70% reduction in manual effort.



Lower error rates thanks to AI-driven consistency.



Scalable batch processing across hundreds of queries/files.



Cost savings by reducing reliance on large manual migration teams.



Future-ready platform with faster time-to-market for data-driven initiatives.



Why NuSummit?

NuSummit brings the right balance of technical expertise and practical experience to ensure CodeLift delivers value in enterprise environments. Our approach goes beyond tool deployment, drawing on years of work in data modernization and AI-powered automation:

1

AI and Cloud Expertise

Deep knowledge of Snowflake Cortex, data migration methods, and AI automation.

2

Proven Approach

Migration frameworks that are consistent, auditable, and scalable.

3

Enterprise-First Design

Emphasis on security, governance, and scalability at every stage.

CodeLift aims to resolve one of the most difficult parts of database modernization: SQL conversion. Translation automation, reduction of manual rewrites, and implementing tools built for enterprise-scale projects enable a smoother and quicker migration to modern cloud platforms. With NuSummit's expertise, organizations gain the insights, technology, and strategy needed to modernize confidently.



About NuSummit

NuSummit is a global technology leader in AI-led digital transformation, specializing in applications, data, analytics, cloud, and cybersecurity. With over 300 clients worldwide, including 22 Fortune 500 companies, NuSummit supports organizations across industries. Our core expertise lies in banking, insurance, and capital markets, where we offer specialized solutions for these sectors.

With over two decades of experience and 3,000+ professionals, we deliver AI-driven, end-to-end solutions that integrate advanced cloud infrastructure and cybersecurity. Certified to top industry standards and backed by a robust partner ecosystem of hyperscalers and niche innovators, NuSummit is a trusted partner for secure, impactful digital innovation.

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