# IDERA Solutions for DBAs Managing Complex Database Environments

Every year, data becomes increasingly critical to business growth and even more complex to manage and keep secure. The growth in the diversity of database deployments (physical, virtual, private cloud, public cloud) along with the complexity of multiple versions and editions has introduced a lot of variables for today's DBA to manage effectively. The day-to-day maintenance activities, performance monitoring and security controls with an audit trail of server and user activities are still necessary. Add to that today's reality of continually evolving and new database technologies, means DBAs must not only learn them, but also manage data migrations as the organization's data demands grow and change to fit the business dynamics.

To help solve some of these challenges, IDERA provides a portfolio of products to ease the burden of managing complex environments and simplifying planned migrations to hybrid cloud environments. In particular, IDERA has five products which Database Professionals can use to address these environment challenges: SQL Diagnostic Manager, SQL Inventory Manager, SQL Compliance Manager, SQL Secure and SQL Comparison Toolset.

## **KEY USE CASES**

#### **INVENTORY MANAGEMENT**

- Discover and manage deployed databases, whether hosted on a physical or virtual server
- View a list of SQL Server builds, versions and editions to ensure Microsoft licensing compliance including core license calculations
- Upgrade and downgrade databases to different versions and editions of SQL Server or Oracle.
- Track server growth for future capacity needs, chargebacks and reallocation of server resources for different applications or user groups
- Manage monitored databases across the spectrum of editions (e.g. SQL Server 2000 to 2017) as well as cloud virtual machines (e.g. Microsoft Azure VM and Amazon Web Services EC2)

#### MIGRATION FOR HYBRID ENVIRONMENTS

- Move data to the cloud without impacting application performance
- Determine the best database-specific settings for cloud deployments
- Plan how many schemas and tables the databases have and how big the tables are to migrate
- Migrate and manage SQL Server instances across multiple cloud platforms with different SQL Server options (e.g. Amazon RDS for SQL Server and Microsoft Azure SQL Database)
- Verify successful database migration and replication
- Move database environments to/from the cloud (such as testing, development, and archive)

#### **PERFORMANCE**

- Monitor performance of SQL Server instances hosted on physical, virtual, cloud virtual machines, and databases running on Amazon RDS for SQL Server and Microsoft Azure SQL Database
- Review performance statistics pertinent to decision making
- Improve visibility into the overall health and availability of databases
- · Identify database-related application performance issues
- Tune parameters to fit database requirements and workloads
- Find and fix problem queries with tuning advice and automated response actions
- Generate performance reports to satisfy SLAs within the organization  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left($

#### **SECURITY**

- Monitor and alert on server user activities, data and schema changes
- Reduce unauthorized usage of service accounts by identifying users and logging
- Provide database audit reports to auditors and security staff quickly
- Get notified of suspicious activities and accesses/changes to sensitive data
- Understand who has access to what and identify each user's effective rights
- Identify top security vulnerabilities on databases and servers via
  a secretary





# **SQL Inventory Manager**

#### DISCOVER, TRACK AND MANAGE SERVER INVENTORY

- Dashboard view and drill down into SQL Server inventory by host: physical, virtual, cloud
- · Auto-discover any new servers installed to better manage server sprawl
- Create tags and custom fields to organize servers and databases across the enterprise
- Get real-time alerts of server availability and capacity shortages
- Track SQL Server licensing and version info for patches, upgrades and consolidation
- Run reports on SQL licensing and capacity levels for chargebacks or reallocations



# SQL Diagnostic Manager

### PERFORMANCE MONITORING, ALERTING AND DIAGNOSTICS

- Performance monitoring for physical, virtual and cloud environments
- Profile and optimize poor-performing SQL queries
- Monitor wait states and analyze application transaction workload
- Optimize performance with integrated expert tuning advice
- Use predictive alerting with settings to avoid false alerts
- Script management tasks with PowerShell



# SQL Compliance Manager

#### MONITOR, AUDIT AND ALERT ON SERVER ACTIVITY AND CHANGES

- · Audit sensitive data and see who did what, when, where, and how
- Monitor and alert on suspicious activity to detect problems
- Satisfy audits with templates for PCI, HIPAA, FERPA, SOX, CIS and more
- View data accesses, failed logins, schema changes, and more
- Audit individual columns or a sensitive data set that spans multiple tables
- Leverage pre-defined compliance reports and create custom views



## **SQL** Secure

## MANAGE SECURITY AND PERMISSIONS

- Identify existing vulnerabilities in SQL Server and Azure environments
- Harden security policies across SQL Server and Azure SQL databases
- Rank protection with 3 distinct security levels via a scorecard
- Scrutinize rights, files, directories, weak passwords, OS, and more
- Analyze and report user permissions and groups across databases
- Comply with audits via templates for CIS, DISA STIG, HIPAA, NERC, NIST, PCI, and SOX