

# SNOWMIRROR A SMART DATA REPLICATION TOOL FOR SERVICENOW



YOUR ENVIRONMENT

# **MAIN BENEFITS**

# **Off-Load Reporting and Business Intelligence**

Create custom reports on all sorts of existing reporting platforms and BI tools by connecting to a traditional, local database (e.g. Oracle or MySQL) containing replicated data from a ServiceNow instance. Select tables, columns and schedule regular data replication to have fresh data as needed.

# **Improve Performance**

Reduce ServiceNow instance load by introducing SnowMirror. Only a few reports or integrated applications need live data. By reading the data from a mirror database instead of performing resource-intensive real-time queries, the load of the cloud instance becomes much lower.

### **Simplify Integrations**

Leverage the mirror database to connect readonly integrations. No more point-to-point real-time interfaces relying on the Internet connection. Integrate applications with a database in a local network and improve the integration architecture.

# **OUR CLIENTS**









#### THE IT CHALLENGE

Many organizations have successfully made use of ServiceNow to automate their IT operations. Often times they rely on this cloud-based platform to deliver a variety of other integrated enterprise-wide solutions. The outstanding single system of record contains valuable, important or critical data. How to access the data if it is stored too far away, somewhere in the cloud? The standard ServiceNow ODBC driver has its natural, well-documented limitations and it does not always fit the reporting requirements. On top of that sending complicated aggregated queries into a production ServiceNow instance every time the report is being generated is posing unnecessary load on the instance.

Without a reliable and repeatable method to extract and maintain the ServiceNow data in a more traditional, relational database, it is impossible to leverage proven reporting solutions, analyze the data effectively by the business intelligence tools, or load the data into a data warehouse. Using the data exports or homegrown solutions leads to high development and maintenance costs and a risk of impacting end users.

# THE SOLUTION

SnowMirror is a smart data replication tool for ServiceNow. The data is loaded from a ServiceNow instance and stored into a relational database such as Oracle or Microsoft SQL Server, installed in a local environment. This mirror database can be used for custom reporting, data warehouse loads, system integration, data backup and more. All applications that need the ServiceNow data for any purpose can access them in standard database ways (e.g. ODBC driver, JDBC, ETLs or plain SQL). The access to a local database is fast and the ServiceNow instance is no longer impacted.

By defining tables, selecting columns and even specifying a detailed filter query SnowMirror allows to synchronize only the data really needed. The data synchronization between ServiceNow and the mirror database is easy to schedule with a wide range of scheduling options. SnowMirror performs only incremental data downloads so the replication runs are fast and reliable. SnowMirror was designed and implemented as an agent deployed in the customer's environment (i.e. customer's network) accessing ServiceNow instance on one side and a database of choice on the other side. It is a similar agent as a MID server. Simple and user-friendly interface enables seamless configuration and operation.







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### **Multiple Database Support**

SnowMirror supports your database! There's no need to adapt an existing database environment to a new solution. Enterprise edition of SnowMirror has a multi-database support. Currently Oracle, Microsoft SQL Server, IBM DB2, MySQL, MariaDB and PostgreSQL are supported out of the box. Other database vendor support can be easily added upon request. SnowMirror has been designed to be extendable with new database dialects. Existing JDBC driver makes it even simpler.

#### **How SnowMirror Works?**

The SnowMirror server is running as a Java agent service in a customer's local environment (Windows and Linux operating systems supported). According to the configured replication jobs it downloads data changes from a ServiceNow instance and updates the mirror database. No ServiceNow changes are needed; the mirror uses out-of-the-box API available in every instance. The SnowMirror team guarantees to keep up with every new ServiceNow release. The only SnowMirror installation requirements are: a machine to install the agent, an existing database instance, and a ServiceNow user account with sufficient permissions.

# **Synchronize Only Data Needed**

Simply define which ServiceNow tables should be synchronized, select the table columns and optionally specify a detailed

Cushbased

Simple user interface enables seamless configuration

filter query to restrict the amount of data (e.g. synchronize incidents only from the current year). SnowMirror supports the ServiceNow encoded query notation so it is easy to copy-paste filter settings from ServiceNow into the synchronization setup. SnowMirror supports both ServiceNow tables and database views so more complicated requirements can be easily solved by preparing a view on the ServiceNow side and replicating it into the mirror database.

# **Replication Scheduling**

Every synchronization run can be triggered manually anytime. However, the more common option is a scheduled replication. The configurable scheduler allows you to define individual execution plans for every synchronized table so the more active table can be synchronized more often. It is possible to specify an interval between executions (e.g. every 15 minutes), schedule a daily replication, or use a CRON expression. The first time a synchronization runs, it downloads all the configured data. However, every subsequent run is an incremental update adding only new records, updating changes and removing deleted items. These increments are usually small even for large ServiceNow instances so SnowMirror proceeds fast.

# High Performance, Low ServiceNow Load

Speed is important. ServiceNow customers process millions of records every day.

Synchronization Settings: incident

Synchronization Name \* incident

Table name of the Table in ServiceNow incident

Table Name in Mirror DB \* incident

ServiceNow Encoded Guery • caller\_idSNOTEMPTY

Delete Strategy • Available Columns

Callendar\_stc
Callendar\_stc
Callendar\_stc
Category
Callendar\_stc
Callendar

Choose tables and columns to synchronize

SnowMirror takes this fact into account and was designed with focus on performance. The replication algorithms were finetuned by skilled integration engineers and seasoned ServiceNow consultants. The performance has been tested on huge ServiceNow instances and it is able to synchronize millions of records in less than one hour. SnowMirror has no or very low impact on the ServiceNow instance performance. The impact is much smaller than live reporting or any live integration directly to ServiceNow.

### **Customer Experience**

SnowMirror might look like a marginal product but it turns out that 7 out of 10 ServiceNow customers actually need to work with the ServiceNow data outside of the cloud. About 80% of SnowMirror customers use the mirror database for reporting and analysis purposes. The most popular tools include Tableau, Microsoft Reporting Services and SAP Business Intelligence. For example Coca-Cola was struggling to connect their SAP BusinessObjects to the ServiceNow data. By introducing SnowMirror, regularly replicating data into their Oracle database, the SAP BO was able to connect seamlessly to the data. There are similar stories for Tableau or QlikView users. The remaining 20% of SnowMirror customers simplify their integration architecture or they use the mirror database as a staging DB for other data transformations.



Define individual plan for every synchronization

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