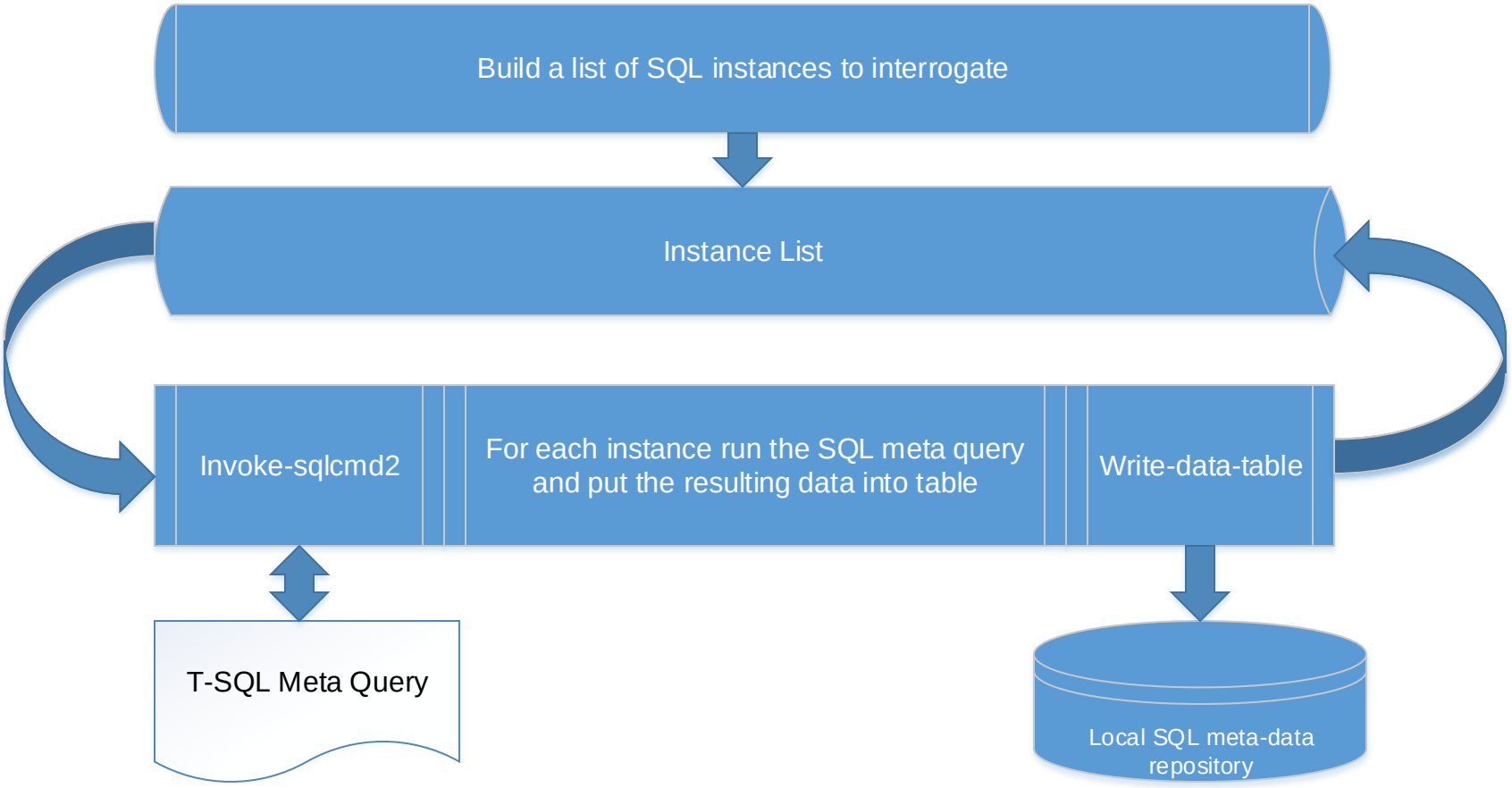
-SQL Meta-Data Collection Powershell Script-

- Write a reusable Powershell script that allows me to run SQL queries against multiple instances in a given environment (with low to no impact) from a centralized instance and collect the data returned into a set of tables.



-SQL Meta-Data Collection Local Environment-

- Create an automated process using a collector SQL instance to run the Powershell Meta-Data collection scripts using SQL Server Agent jobs in each environment to gather the SQL Meta-Data into a local repository.

SQL Server Agent

Job: 'DBA Monitor Cleanup'
SQL Query purges last 24 hours of performance data collected
(Once a day)

Job: 'DBA CollectSQLMetaPS'
Runs PS collector scripts, except the performance related ones
(Once a day)

Job: 'DBA InstPerfStats'
Runs PS scripts to collect server and instance performance data
(Hourly)

MSSQL Instance Level Information

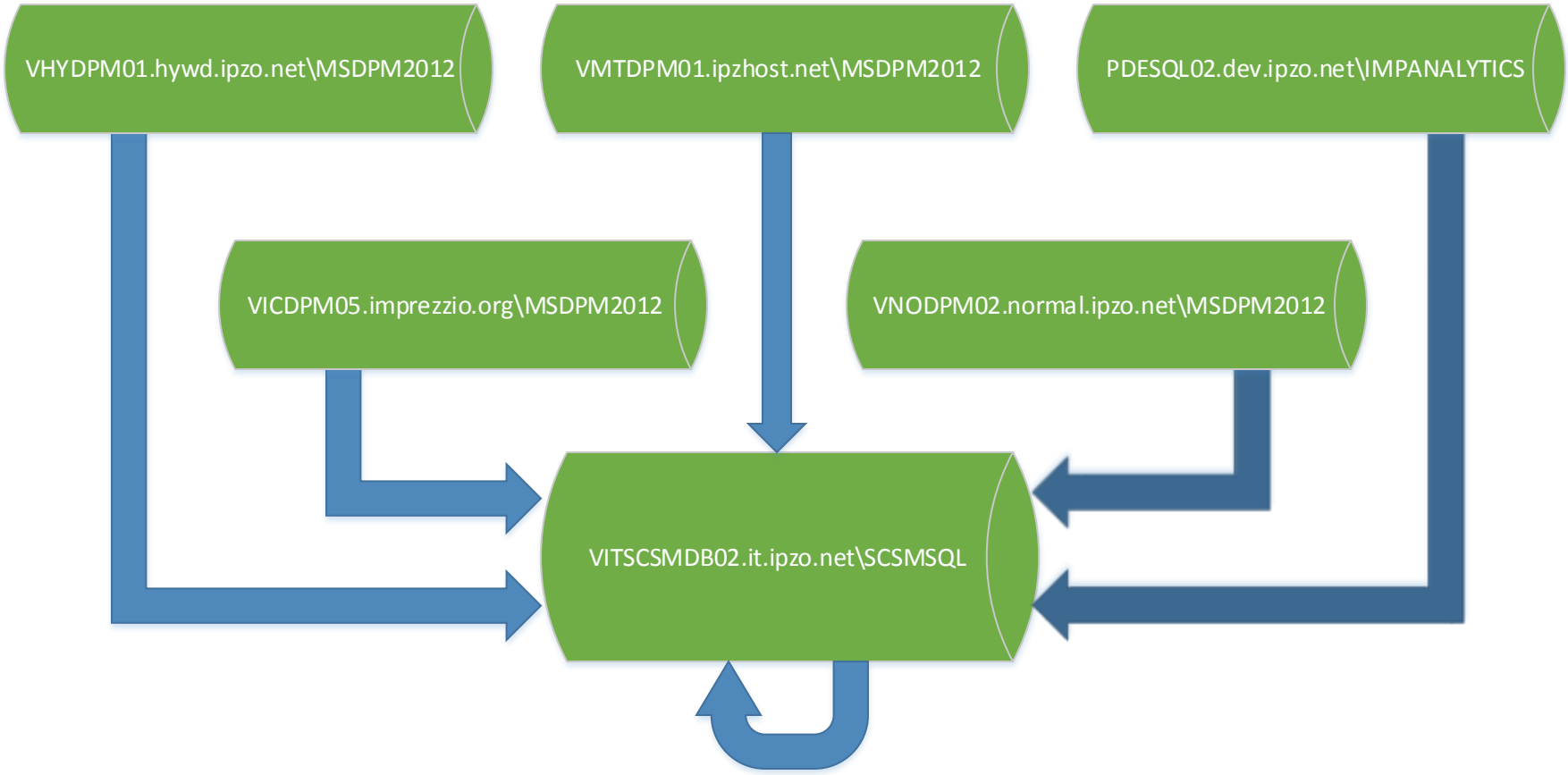
- Version & Edition
- Configuration settings
- Performance stats (hourly)
- Server Performance stats (hourly)
- SQL Agent Job Information

MSSQL Database Level Information

- Configuration settings
- Backup Information
- Table List
- Column List (Coming Soon!)
- Index List
- Data and Log file sizes (WIP)

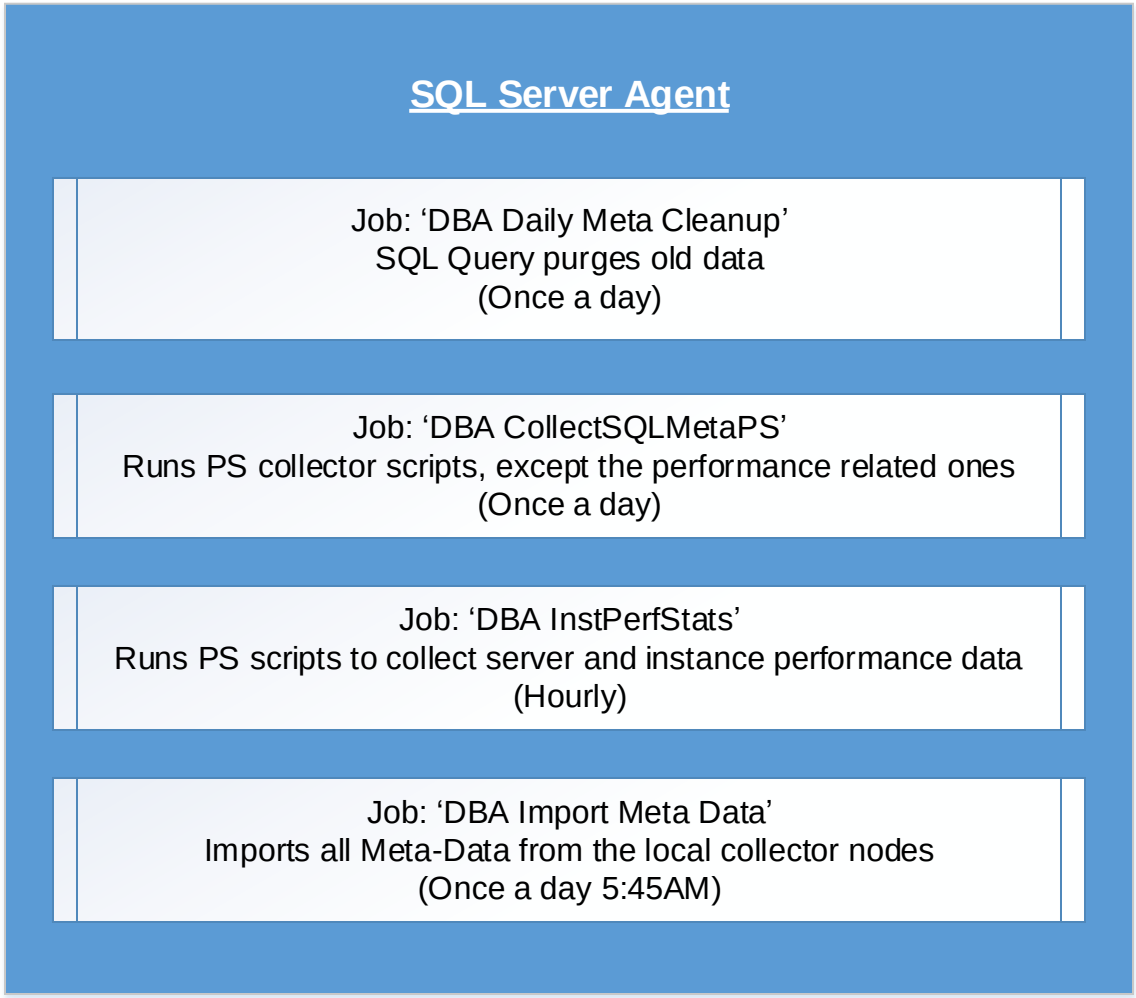
SQL Server Meta-Data Collection Process

- Create an automated process to collect all of the meta-data from the different environments/instances into a central repository database.



- For the majority of the environments I was able to use a DPM server in the environment as my local collector, since it already had access to the SQL Server instances it required little additional configuration.
- For the central repository I am using a System Center SQL instance which has access to each of the local collectors.

-SQL Meta-Data Collection Central Repository-

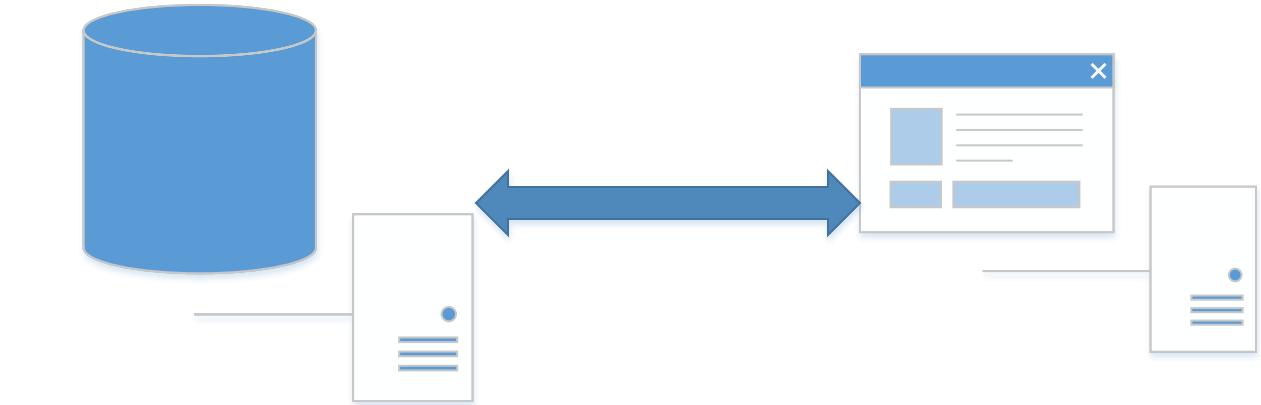


-SQL Meta Data Reporting Environment-

Utilize the collected meta-data to:

- Establish performance baselines
- Analyze growth trends
- Automate documentation
- Audit for best practices
- Troubleshoot issues

Across all environments...



VITSCSMDB02.it.ipzo.net\SCSMSQL
SQL Meta-Data Central Repository

VITSCOMDB01.IT.IPZO.NET
Power BI Desktop/SSRS Server

Reports/Dashboards

- Server Performance metrics
- SQL Instance Performance metrics
- SQL Instance Build Sheets

KPI's

- # of instances, DB's, Tables, Indexes

-SQL Meta Data Environment To-Do List-

- **Hardening against job failure**
- **Error checking/traps**
- **Email Alerts**
- **More/better reports**
- **Collect more data**
- **Cleanup/verify/fine tune data collected**
- **Better SSRS and Power BI desktop integration (Waiting on Microsoft)**