Integrating Your Data with Prophix

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Agenda

- Introduction to Prophix integrations
- Goals & Objectives for Data Integration
- Data Connection Types
- Integration methods
- Staging data vs. direct connection
- Technology Needed
- Cube vs DPM Integration Considerations
- Performance and Best Practices
- Summary

Introduction to Prophix integrations

- Prophix is like the foundation of your house to which you can add pieces as needed
- Data can be integrated into Prophix based on your business processes and needs. Some common data types are Financial (GL), Sales/Revenue (CRM), Personnel (Payroll), Operational (GL), Project data (PM), etc.
- Both automated and manual integrations are supported through the application

Data Integration Goals & Objectives

- Use Prophix as a central repository of financial data for Reporting and Planning purposes (a system of record)
  - Report on financial results (GL information) using Prophix to produce reporting packages, dashboards, trend reports, etc.
  - Use Prophix to plan based on data entered or calculated
  - Use statistical data from other sources as drivers in Prophix
  - Perform allocations and/or intercompany eliminations in Prophix using data integrated from other source systems
- Minimize errors and risks associated with manually pulling and transforming data from multiple sources
- Save time/effort with automated updates of data in Prophix

Data/Connection types

- ODBC/Automated Integration
  - Connects directly to data source and establishes a real time connection
  - Can pull data on demand and generally requires minimal user involvement
  - Requires a Windows driver based connection to source
  - May sometimes require a 3rd party software for connectivity
  - Typically used for fast changing data (ex: GL account balances, Sales data)
- Flat file/Manual integration
  - Connects to files that have been prepared for import
  - Requires user involvement for preparation of the file
  - Can result in invalid connections if the file name or path changes
  - Not a real time connection resulting in older data
  - Typically used for slow changing data (ex: Employee salaries, Asset purchases)

Polling Question # 1

- Can you integrate transactional data into Prophix?

Data Integration Methods

- Push – data is pushed by the source to a staging area
  - Pros
    - Data and scheduling can be controlled by client IT
    - Integrations run successfully even if there is no connection between the 2 environments
    - Can be used for instances where Prophix resides outside of the client network (like Cloud or 3rd party hosting)
  - Cons
    - More reliance on client IT expertise for maintenance
    - Less control over process by Prophix users
- Pull – data is pulled directly into Prophix or into the Prophix staging area
  - Pros
    - Less reliance on client IT for initial set up and ongoing support
    - Controlled by Prophix users
  - Cons
    - Integrations fail if there is no source connection available

Polling Question # 2

- Can you access transaction detail information from Prophix and how?

Staging Data vs. Direct Connections

Staging – involves storing the data in a shared but secure location

- Pros
  - Allows pre-calculation of data like Balance Sheet balances required for Prophix
  - Can drill across to data even if the source is unavailable. Drill Across in sync with cube data
  - Staging tables can be indexed for performance rich Drill Across and integrations
- Cons
  - Need to wait for integration process to complete to get fresh Drill Across results
  - Additional database and code that needs to be maintained

Direct – involves connecting directly to the data source

- Pros
  - LIVE data connection means fresh data when drilling across to the source
- Cons
  - Could cause performance issues with the source being connected to, affecting business users
  - Drill Across results could be out of sync with cube data
  - Calculations need to be run during every integration
  - Needs to establish a fresh connection every time a Drill Across is run

Technology Needed

- There are a few different ways to connect to the variety of data sources and transform the data. Prophix will often use a combination of the below
  - SQL Server Integration Services
    - Pros include GUI interface, direct connection to a variety of sources
    - Cons include requiring MS Visual Studio, modifying and re-deploying the package every time a change is required, Prophix users have no control over source data, need SSIS programming skills
  - SQL stored procedures
    - Pros include easy connections over a linked server, easy deployment of changes
    - Cons include no GUI interface, Prophix users have no control over source data, need SQL programming skills
  - Queries embedded in Prophix processes
    - Pros include the ability for Prophix users to control the data being sourced
    - Cons include the lack of ability to transform data, need basic SQL programming skills
  - Specialty Prophix integration software
    - Pros include GUI interface, generally required for Cloud source or off premise hosting
    - Cons include software costs, software specific knowledge and training

Polling Question # 3

- Can new accounts that have been added to the GL automatically show up in Prophix?

Types of Data Integrations

- Cube Import
  - Data import
    - Import data from external data sources, flat files or other Prophix models
  - Dimension updates
    - Automatically add members to a dimension
    - Update member properties of members
    - Rebuild hierarchies
- DPM Import
  - Member and attribute import
    - Commonly used to import a list of employees for Personnel planning or assets for CapEx planning
  - Data import
    - Some uses are when revenue generated by sales staff need to be used to calculate commissions
- Cube Export
  - Data export
    - If Prophix needs to be used as the source of data for other systems
    - Can also be used to transfer data between cubes within Prophix

Polling Question # 4

- When do you need a Prophix Update Cube process?

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Demonstration – P1

- Sample Balance Sheet query; pre-calculated opening balance
- What is a Custom SQL process
- View and control number of Rejected records
- Reverse Credits/Debits
- Time down vs Time Across
- Use Named Sets for Start and End Time and Time related errors
- Adding to an existing Data Connector
- Update Cube dos and don'ts

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Demonstration – P2

- Update the Accounts dimension from a source Accounts master table
- Import Financial data into the Financial cube
- Import a list of employees for Personnel planning
- Import producer revenue to calculate commissions
- Export cube data to a flat file

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Performance and best practices – P1

- Maintain data governance processes to support high quality data
- Re-use any existing data views/logic that you may be using for other processes/reports to push data to a staging area. This will give you logic consistency across applications and allow you to maintain that logic centrally in one place.
- Staging data allows you to use the same data multiple times for various purposes while connecting to the source just once. It also allows you to index the tables for better performance
- Use SQL table hints like WITH(READUNCOMMITTED) when accessing data from sources shared by other users to prevent table locking

Performance and best practices – P2

- Use Prophix mapping tables or Infoflex processes instead of maintaining them outside Prophix or embedding the logic in code wherever possible. Some examples include mapping accounts from 2 GLs into one COA in Prophix or mapping customers from 2 CRMs into one list in Prophix
- There is no need to have separate processes or groups for each year
- Include processes like currency conversion, allocations, etc., that are required for source data transformation, in your integration process group. Organize them in a separate folder to allow them to be run individually when required. Delete unused processes and groups as they cause confusion and could cause undesired results
- Create only one data connector per source. You can refresh the connector to add new tables when required

Performance and best practices – P3

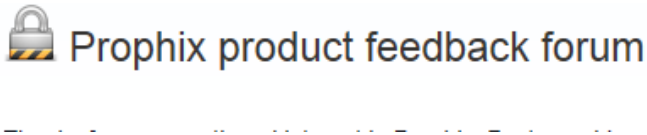
- Trigger integration processes from within Prophix. Since processes run synchronously within Prophix, this lessens the odds that some other process will interfere with the integration processes
- Use Named Sets to control process date parameters. These named sets can also be referenced for filtering data in SQL
- Use update cube processes only after all your processes have completed. Make sure to select the appropriate processing options. You do not need to process they entire cube if you have only loaded data or updated a dimension
- Data Cleanup – keep only the data you need in Prophix

Summary

- Prophix can integrate data from numerous data sources and systems
- Advanced thought and preparation will lead to a smoother and scalable integration, higher quality data and lower ongoing maintenance
- Sometimes less is more – automating is nice but only when necessary
- Keep processes organized and clean up unused items as soon as possible. Orphan processes can be run unintentionally leading to undesired results
- Keep integration scheduling down to a minimum so as not to interfere with other processes

Resources

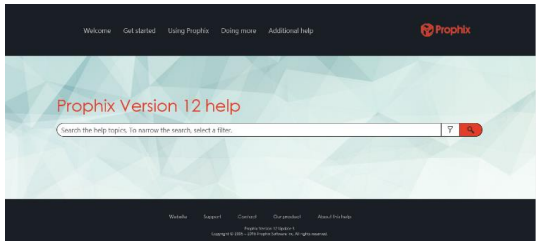
- http://support.prophix.com



- https://feedback.prophix.com

- https://www.prophixacademy.com

- http://info.prophix.com/CEWS-2017-Recordings



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Questions?

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