

Cut through, with SmartMigrate™

OVERVIEW

n the journey to increase the BI maturity of an organization, a comprehensive approach needs to be considered. This includes a data discovery process to understand the data, its underlying information landscape and the information model. The standardization and consolidation of the information platform to convert the data into actionable insights is a key foundation activity. Once the technology layer for the integrated consolidated data and its information delivery mechanism is planned, the step of delivering this data to business users for analysis is taken up.

In this process, the standardization of BI platform, is important to gain efficiency of the entire system, in terms of rolling out analytics to business at a faster speed, not only in terms of development schedules but also end user training time and adoption. In large organizations, it is common to find multiple end user reporting and enterprise reporting tools being used across the business units and global regions. Some of this may be due to merger & acquisitions, changing business needs, higher license costs, or technically obsolete products that were not modernised. A fragmented tool set hampers the progress of the BI vision of making data and information available to large user groups, thereby reducing user adoption and delayed ROI.

We have seen many organizations in this dilemma of slowing down on BI vision due to proliferation of multiple BI tools as mentioned above. Even when a decision to standardize the reporting or data platform is made, some big questions faced by IT managers are given alongside.

- How do I migrate the existing reports to a new platforms?
- How many months or years will take to migrate even the rationalized subset of these reports?
- Will I need a huge army of developers to migrate my 10,000 reports?
- How will I need to manage developers knowing my three reporting tools to the new reporting tool?
- Will business users give me time to do the testing?
- Is there a way to automate the migration?



Rolta SmartMigrateTM

Accelerating your BI Maturity Journey

Rolta SmartMigrate $^{\text{m}}$ is an automated solution that enables an organization in this key area of technology standardization and BI maturity enhancement. Some of the features of this solution are:

- Matured methodology and IP accelerator built by ROLTA for easy consolidation / migration onto the required reporting platform
- Supports leading reporting platforms as source and target like SAP BusinessObjects, Microstrategy, Cognos, Microsoft and Oracle OBIEE
- Retains source project / module structure on the target platform
- Migration of individual and batch of reports
- Architected to facilitate optimal adoption of features in target platform



Rolta SmartMigrate™

The architecture

META MODEL

The core of Rolta SmartMigrate™ architecture is the Meta model which stores the metadata extracted from the source reporting tool. This meta model is based on CWM format and it facilitates XML based metadata interchange (XMI). The architecture supports single and batch mode migrations.

SOURCE ADAPTORS

Source adapters connect to the Source BI platform and extract metadata related to semantic layer, reports, filters, prompts, dashboards etc., to create the meta model and they are completely parameter (configuration file) driven. The key features of the source adapters are:

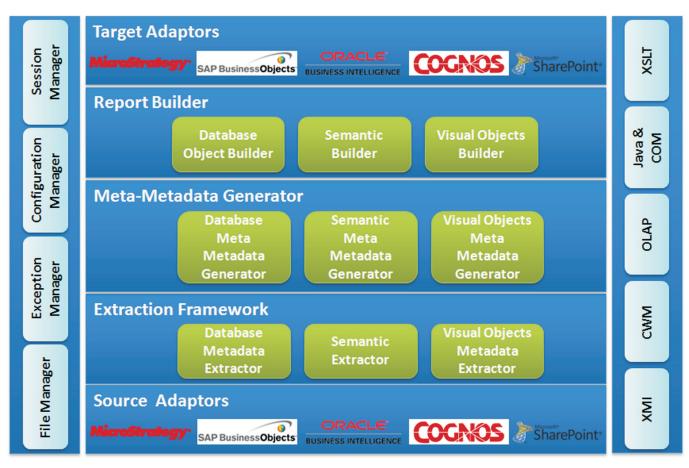
 Logging – Logs are created both for SmartMigrate[™] users and the developers for troubleshooting purposes

- Connection Pooling A pool of connections is used as and when required to reduce the impact on source systems.
- Multi-threading –All threads execute in parallel which enables faster extraction of a high volume of reports
- Extract subset/all reports As indicated in Configuration file, reports can be extracted based on their names, folders or all. This facilitates selected migration of reports.

TARGET ADAPTORS

Target adaptors connect to the Target BI platform and create the target semantic layer, reports, prompts, filters, dashboards etc. The key features of target adaptors are:

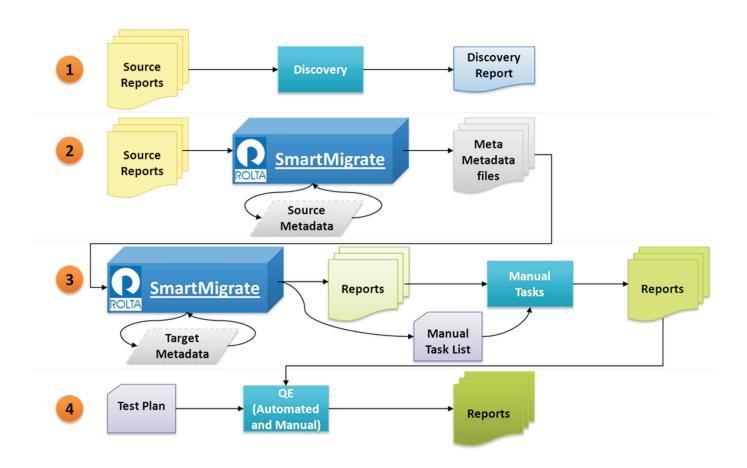
- Function Mapping Maps the source function to target function for easy migration
- Class Mapping Stores the relation between source folder/groups and target folder/groups
- Creates various semantic layer objects such as Joins, Contexts, Conditions, Measures, Hierarchies, Dimensions etc., programmatically



The migration process

Migration of reports from source to target happens in a series of steps. An initial discovery process is done to analyze the source inventory and its nuances like versions, number of reports, dashboards, complexity of these objects. This information is used to plan the entire migration process.

- Depending on the version and specific source tool the metadata is extracted to a meta model by the source adaptor. The analysis of the source reports happens as next step. During this phase the subset of reports that need to be migrated (for testing/UAT) are analyzed. A report is created which is used to tune the SmartMigrate™ tool to handle special functions used in the source and also create the appropriate test criteria for post migration testing.
- Extraction of source reports metadata such as reports created using different modules begins and the reports meta model is created
- The target adaptor then takes over, creating the target reports and Dashboards from the meta model. Due to differences between source and target platforms, some of the reports need manual intervention. This list of manual actions required is also generated by the tool which are then applied over the migrated reports and dashboards.
- The highly automated test plan is then executed to verify the content of source and target reports.



KEY BUSINESS BENEFITS

The migration automation achieved through this tool supplemented by a mature methodology for execution and validation creates a very efficient process and also ensures quality of the migrated reports.

- Enable stakeholders to realize planned benefits of BI reporting environment
- Typical automation of 70% to 80% for simple reports, between 40% to 70% for reports of medium complexity and about 20% to 40% automation for complex reports (Maps, complex charts and graphs, Security, OLAP cubes) can be achieved
- Increases user acceptance and adoption
- Reduced cost of migration
- Reduced dedicated time of support and development staff to be involved in new initiatives

A REPRESENTATIVE USE CASE

Customer Context

The customer is a global high-tech manufacturing company having more than three Business Intelligence tools. The objective was, migrate over 3,000 micro-strategy reports to SAP Business Objects. This large volume had to be migrated within nine months and rolled out to multiple regional business units spread globally.

Rolta Solution

Rolta SmartMigrate™ solution accelerator along with the migration methodology was used to migrate the reports in record time. A collaborative approach was used to achieve a high throughput of about 300 reports per month. A detailed migration roadmap was created while working with users to plan, process and perform the migration in optimal batches.

Customer Benefits

- The accelerated migration at reduced cost has enabled IT to progress rapidly on the technology consolidation program.
- Significant reduction in maintenance costs due to standardized platform.
- Rapid speed of migration alleviated the concern over expiring support of source platform
- Created opportunities for IT to consider migrating other BI tools using Rolta SmartMigrate™

BI SOLUTIONS CENTER OF EXCELLENCE

olta's Global Products and Technology Solutions (GPTS) organization drives Rolta's IT business. GPTS leverages its industry-specific know-how, rich repository of intellectual property that spans business intelligence, operational intelligence, analytics, geospatial applications, photogrammetry, image processing, field-proven solution frameworks, and deep expertise in cutting-edge technologies like Geo BI, Cloud computing, Software Defined Infrastructure and Big Data for providing sophisticated enterprise-level integrated solutions. Rolta GPTS group's IP led solution strategy and proven leadership for decades in Engineering, Geospatial, Security and IT has ushered in the innovative and proven solution Rolta OneView™ for our customers to realize significant ROI in weeks.

The Rolta BI Solutions CoE is a part of the GPTS business unit and is primarily chartered with the objective of creating comprehensive value adding BI solutions. These solutions cover the complete spectrum of BI maturity and help in enhancing customer's BI maturity taking them from reactive BI to prescriptive BI implementation. The solutions cover data discovery accelerators like Rolta Advizor™ consolidation and migration of information platform like SmartMigrate™ and RapidHANA™. The flagship solution Rolta OneView™ is an analytics solutions with best in class industry standard metrics, architecture and processes for enabling insights by integrating data across business IT systems and Operational technology systems for verticals like Oil and Gas, Petrochemicals, Utilities and Manufacturing.

ABOUT ROLTA

Rolta is a leading provider of innovative IT solutions for many vertical segments, including Federal and State Governments, Defense/HLS, Utilities, Process, Power, Financial Services, Manufacturing, Retail, and Healthcare. By uniquely combining its expertise in the IT, Engineering and Geospatial domains, Rolta develops exceptional solutions for these segments. The Company leverages its industry-specific know-how, rich repository of intellectual property that spans photogrammetry, image processing, geospatial applications, business intelligence, analytics, field-proven solution frameworks, and deep expertise in cutting-edge technologies like Geo BI, Cloud computing, Software Defined Infrastructure and Big Data for providing sophisticated enterprise-level integrated solutions. Rolta is a multinational organization headquartered in India. The Company operates from 40 locations worldwide through its subsidiaries, and has executed projects in over 45 countries. The Company benchmarks its quality processes to the world's best standards, like successful assessment for Software Application Development and Maintenance at the highest Level 5 of SEI's CMMI® version 1.3. Rolta is listed on the Bombay Stock Exchange & National Stock Exchange, and forms part of various indices on BSE/NSE in India. The Company's GDRs are listed on the Main Board of London Stock Exchange. The Company's 'Senior Notes' are listed on Singapore Stock Exchange.

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