



Data Warehouse & Business Intelligence Fundamentals

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Data Warehouse & Business Intelligence Fundamentals

Course Scope

- DW Concept
- DW Architecture
- DW Data Modeling
- Data Integration
- Gathering and Analyzing Requirements
- Business Intelligence
- Deployment, Support and Maintenance

Deployment, Maintenance, Support

- Solution Deployment
- System Maintenance
- User Support
- Service Level Agreement (SLA)

Solution Deployment 1/2

- Deployment includes all the activities that make a solution release to become available for use by its users in concrete environment.
- Usually the most exciting time, when you prove yourself
- DW Deployment Specifics
 - Initially it isn't so risky as core system deployment
 - Usually it is an iteration deployment
- Environments – usually Development, Test, Production

Solution Deployment 2/2

- Deployment of Data models, ETL code, Subject Areas, Reports
- Testing
 - Procedures
 - Data quality assurance
 - Operational process
 - Performance
 - User acceptance
- Documentation
 - Data – subject areas (business processes), model, entities, relations
 - Dashboards, Analyses, Reports
 - How to use the BI tools; how to create ad-hoc analyses
- User Training
 - Preparation
 - Delivery

System Maintenance

- Maintenance
 - Hardware – up & running, accessible, tuned
 - Software – updating the solution to meet the requirements, fixing bugs
 - Data – load appropriated data at appropriated time
- ETL execution and monitoring; plans for running ETL jobs
- Data Reconciliation
- OLAP cubes rebuilding
- Resource monitoring – CPU, memory, disk space
- Ongoing Performance Tuning
- Data archiving
- Backup/Restore
- Process automation

User Support 1/2

- Support – a process for providing assistance to the users for usage of the DW/BI solution
- Develop procedures, mechanisms and scripts for communicating with the users and handling questions
- Three-tier level support
 - Power users in the business groups
 - Website, BI tool, self-service support
 - Standardized support channel – forms, e-mails, phones

User Support 2/2

- BI Portal
 - DW status – last loaded date/period
 - Scheduled outages
 - Warnings for problems and planned fixes
 - Usage monitoring information – current active users, current active queries, queries executed in the last 1h/24h, etc.
- Manage security
 - Levels – Database, BI app
 - Roles, privileges

Service Level Agreement (SLA)

- SLA – a contract between the vendor/service provider and the customer/end user that defines the level of the service expected.
- DW specifics
 - Data availability / latency / quality
 - System availability / downtime
 - Query response time

Terminology

- Deployment
- Maintenance
- Support
- Service Level Agreement (SLA)

Project Work

- Today
 - Review created reports with DWH data
 - Clarify all open questions
- Next steps
 - Finalize and send project documentation