

Cognos Course Content

Course Description:

IBM Cognos Analytics is a cloud-based business intelligence and analytic solutions tool. It offers data aggression and creates user-friendly reports. Cognos analytics solution makes enterprises easy to visualize, analyze and share insights. Congo reports can be exported to XML or pdf format to view.

Congos is an efficient and fast method to deliver complex business intelligence data. Cognos enable business users without technical knowledge to extract data, analyze and assemble reports. IBM Cognos dedicated and low-cost cloud service empowers the enterprise to meet challenges in the digital world. The demand for Cognos data analysis reports and resolutions is tremendous in the IT industry.

Hachion IBM Cognos online training provides in-depth learning of all major concepts like Cognos analytics, data warehousing, and business intelligence. Our Cognos tool tutorial includes up-to-date topics like Cognos architecture, components, and analysis studio, report authorizing tools, OLTP system, Query Studio, advanced report designing, IBM Cognos framework manager, and Cognos administration. With the Cognos BI analytics course, one can easily appear for IBM Cognos certification exams.

Course Content:

Overview of Data Warehousing and Cognos BI Architecture

- Learning Objectives - In this module, you will be introduced to business intelligence, data warehousing concepts like architecture, its characteristics. Also, you will learn in brief about the types of OLAP, perform ETL operations using Informatica. You will learn how to design the Framework Manager and DMR.
- Topics: Study 3 tier platform architecture, Explore the IBM Cognos Dispatcher, Identify features of the IBM Cognos BI, architecture and components, Perform a single server or distributed installation, Data warehousing characteristics: Subject Oriented, Integrated, Time-variant and Non-volatile, Types of OLAP: ROLAP, MOLAP, HOLAP, Dimensions and facts, Introduction to ETL Concepts using Informatica, Design Framework Manager and DMR.

IBM Cognos Framework Manager: Relational Metadata Modelling

- Learning Objectives - In this module, you will be introduced to IBM Cognos Framework Manager and you will understand the workflow process. You will also learn how to write SQL queries and set relationships, perform calculations, apply filters and create star schema among the various query subjects.
- Topics - Define business/reporting requirements, what is Framework Manager, Framework Manager workflow processes. Create a baseline project, Identify facts and dimensions, Identify key differences amongst type data source, model, and stored procedure query subjects, Identify the effects on generated SQL when modifying query subjects, SQL settings, and relationships, Examine relationships and cardinality, Use calculations to create calculated query items, Use embedded/Model filters to reduce the data set, Merge query subjects to create as view behavior, Create star schema groupings to provide authors with logical groupings of query subjects, Create

a consolidated modeling layer for presentation purposes, Identify the conformed dimensions, Use tools to analyze the model, Create and publish a package, Use macros, parameters map and session parameters, Identify reporting traps, create aliases to avoid ambiguous joins, multiple paths and other traps. Describe multi-fact, multi-grain queries & stitch queries, Use determinants to specify multiple levels of granularity and prevent double-counting.

IBM Cognos Framework Manager: Multi-Dimensional Metadata Modelling

- Learning Objectives - In this module, you will learn the dimensional and relational database features in cognos, the definition of the keywords used along with a related example. You will be introduced to the DMR package in Cognos and learn how it is used for analysis. You will also be given a heads up to execute the SQL queries dynamically in the Dynamic Query Mode.
- Topics - Apply dimensional information to relational Metadata to enable OLAP-style queries, Define regular dimension, measure dimension, Define members and member unique names, Identify changes that impact a MUN, create analysis objects such as dimension, level, hierarchies, and measures, create multiple hierarchies, learn and apply scope, publishing the DMR package and using it over Analysis, Examine the IBM Cognos BI security environment, Restrict access to packages, Create and apply security filters, Restrict access to objects in the model, Data level security, Identify and implement techniques to optimize and tune your Framework Manager models, Achieve Minimized SQL, Governors Setting in Framework Manager, Overview Dynamic Query Mode in Framework Manager, Work in a Multi-Modeler Environment, Segment and link a project, Branch a project and merge results.

Basic Report Authoring

- Learning Objectives - In this module, you will learn to create different types of reports using Query and Report Studio and the various activities like applying filters, using parameters and prompts to focus data. You will also learn how to format charts and the various tools available to do this.
- Topics - Examine Query Studio and its Work Area interface; create ad hoc reports and charts in Query Studio. Sorting, Grouping, and filtering Query Studio Reports. Examine Report Studio and its Work Area interface, Explore different report types, Create simple list report, Explore how data items are added to queries, Create filters to narrow the focus of reports, Examine detail and summary filters, Determine when to apply filters on aggregate data, Create crosstab reports, Convert a list to a crosstab, Create charts, Use parameters and prompts to focus data, Identify various prompt types, Add run-time information to the reports, Create calculated query items and calculations using functions, Apply formatting, Create Sections, Share layout components among separate reports, Discuss report templates, Page breaks in reports, Other objects in Toolbox.

Advanced Report Authoring

- Learning Objectives - This module is a deep-dive into report authoring, linking two reports and displaying one report layer based on others using prompts. You will be given an opportunity to edit an SQL statement and use union, intersection and join operations. You will acquire knowledge on how to distribute one report contents to various recipients.

- Topics - Create Drill Through Report, Create Master-Detail Report, Create Boolean, language and String Variables for conditional formatting, Conditional Blocks, and Conditional Rendering, Edit an SQL statement to author custom queries, Filter Reports using Query Macros, Use union, intersect and Join Queries, Create Table of contents for a report book and add bookmark for navigation, create a report using an external data file, Enhance User Interaction with HTML items and Java Scripts, distribute reports using bursting, Configure IBM Cognos BI to perform Bursting, burst a report to IBM Cognos Connection Using a Burst Table and Performance Tuning of Reports.

Report Authoring - Multi-Dimensional

- Learning Objectives - Here, you will learn how to combine data and layout in a single file using Active Reports. You will learn the workspace of Analysis Studio and Event Studio using which we will create reports for relational and dimensional data. You will also do administrative activities to manage and schedule events.
- Topics - Active Reports Introductions, Create active report templates, Describe active report connections, Apply Filter and Select behavior to active report controls, Modify the interactive behavior of report controls, Identify active report controls and variables in a report, Use variables to control multiple controls independently, Describe characteristics of traditional charts in active reports, Control data display using decks and data decks, Describe characteristics of RAVE Visualizations, Analysis Studio, Define the fundamental terms of Analysis Studio, Identify the work area, overview area, and properties pane, Explain how to insert objects, Define and create sets, Employ drilling down and up to different levels of detail, Use charts to display data graphically, Suppress rows and columns, Workspace & Workspace Advanced: Identify the user interface components of IBM Cognos Workspace Advanced. Create a Report using Relational Data, create a Report using Dimensional Data, understand suppression options, explore filtering data, examine the use of external data in reports, Even Studio, create agents, use parameters and calculations, add tasks, manage task execution rules.

Other Report Authoring Tools

- Learning Objectives - In this module, you will learn the various dimensional concepts and compare it with the relational concepts. You will perform various actions on the dimensional data and create reports and dashboards based on the result generated. You will also learn how to create hyperlinks in the report.
- Topics - Introduction to Dimensional Concepts, compare dimensional and relational model types, examine dimensional data structure, Examine dimensional functions for members, sets, and tuples. Compare relational and dimensional queries, Identify dimensional style filtering techniques, Filter non-null data, Calculations, and few important Dimensional Functions, Functions for Navigating Dimensional Hierarchies, Use functions to traverse the dimensional hierarchies, Create reports with children(), ancestor(), and descendants() functions, Relative Functions, Review basic drilling up and drilling down, Set Up Drill-Through Reports, Drill through from one report to another, Drill through from dimensional data to relational data, Create a single report with data from multiple sources.

IBM Cognos Cube Designer - Dynamic Cubes

- Learning Objectives - In this module, you will learn what are Dynamic Cubes, how to create and deploy them and measure its performance with aggregates. You will also learn the various methods to provide security and the benefits of creating a Dynamic Cube. You will also learn to model a Virtual Cube and publish it.

- Topics - Overview of Dynamic Cubes, Identify the challenges of large data volumes that are resolved by dynamic cubes, Explore the IBM Cognos Cube Designer interface, Explore the IBM Cognos Cube Designer interface, Review the automatic and manual processes to create a cube, Examine query service administrative tasks, Optimize Performance with Aggregates, Examine aggregation in dynamic cubes, Define Security, Overview of dynamic cube security, Assign users and groups to security views, Model a Virtual Cube and Examine the benefits, requirements, and build process of virtual cubes.

IBM Cognos Analyzing and Administering Queries

- Learning Objectives - In this module, you will learn how to perform Cognos Analysis in Excel, the various query settings to be done to tune and enhance the performance and how to work with Dynamic Query Analyzer. You will also be exposed to the Business Driven Workflow of Cognos.
- Topics - Features of IBM Cognos Analysis for Microsoft Excel, IBM Cognos Analysis for Microsoft Excel use case, enhanced event management, human task service use case, query Service metrics, manage the cache in IBM Cognos Administration, query Service settings, disabling the Query Service. What is Dynamic Query Analyzer? Working with Dynamic Query Analyzer.

IBM Cognos Administration overview

- Learning Objectives - In this module, you will be given an overview of all the administration tasks that revolve around the Cognos Tool. It gives you an insight of how to move the data from the previous version to Cognos 10.1. You will learn how to audit and manage the Cognos Environment.
- Topics - IBM Cognos Administration Overview, using the various administrative features: Enhanced search, restricting the scheduling options, managing the Cognos environment, Auditing.