Introduction to IBM Cognos for Consumers

IBM Cognos

June 2015
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These materials were customized for Colorado School of Mines on IBM Cognos 10.2.1.
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting Started in IBM Cognos</td>
<td>1</td>
</tr>
<tr>
<td>Introduction to IBM Cognos 10</td>
<td>1</td>
</tr>
<tr>
<td>Why use IBM Cognos?</td>
<td>1</td>
</tr>
<tr>
<td>Overview of IBM Cognos 10</td>
<td>2</td>
</tr>
<tr>
<td>What is Framework Manager?</td>
<td>4</td>
</tr>
<tr>
<td>What is IBM Cognos Connection?</td>
<td>5</td>
</tr>
<tr>
<td>Getting Started</td>
<td>5</td>
</tr>
<tr>
<td>Understanding IBM Cognos Connection</td>
<td>7</td>
</tr>
<tr>
<td>Navigating in IBM Cognos Connection</td>
<td>8</td>
</tr>
<tr>
<td>Folder Tools</td>
<td>10</td>
</tr>
<tr>
<td>Running a Report</td>
<td>11</td>
</tr>
<tr>
<td>Understanding IBM Cognos Viewer</td>
<td>16</td>
</tr>
<tr>
<td>Viewing Public Reports</td>
<td>19</td>
</tr>
<tr>
<td>Personalizing the Portal</td>
<td>25</td>
</tr>
<tr>
<td>Tips for Using IBM Cognos</td>
<td>26</td>
</tr>
</tbody>
</table>

*** There are Notes pages in the back of this document for your use.***
Getting Started in IBM Cognos

Introduction to IBM Cognos 10

IBM Cognos 10 Business Intelligence is a web-based, integrated business intelligence suite. It provides a toolset for reporting, analysis, scorecarding, monitoring of events and metrics, and business analytics.

Why use IBM Cognos?

In many organizations, finding answers to business questions is a manual process that uses a mix of different tools and interfaces. Before using Cognos, business users across the organization pull together different versions of the same numbers. Different users will likely make slightly different assumptions, use different calculations, and perhaps even use different definitions for terms to describe the data. They might have used different interfaces, different time periods, or even different data sources. The result of these differences is sometimes disappointing for the business users, as they’ll sit down in a meeting and spend most of the time talking about where the numbers came from as opposed to what to do with the numbers. This slows down the decision making processes that drive performance.

IBM Cognos has simplified this process by focusing on organizing the users into user groups and leveraging best practices when using multiple data sources.
Overview of IBM Cognos 10

Components and license roles in IBM Cognos 10 Business Intelligence (BI) tool suite:
Components in IBM Cognos 10 Business Intelligence (BI) tool suite:

<table>
<thead>
<tr>
<th>IBM Cognos Component</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metric Studio</td>
<td>Monitor performance against benchmarks and priorities</td>
</tr>
<tr>
<td>Event Studio</td>
<td>Invoke tasks, and track events and processes</td>
</tr>
<tr>
<td>Report Studio</td>
<td>Create managed reports – most advanced studio</td>
</tr>
<tr>
<td>Query Studio</td>
<td>Create ad hoc reports</td>
</tr>
<tr>
<td>Analysis Studio</td>
<td>Explore and analyze data</td>
</tr>
<tr>
<td>Cognos Insight</td>
<td>Explore data, build scenario models, and share insights</td>
</tr>
<tr>
<td>Cognos Workspace</td>
<td>Author reports with relational or dimensional data and analyze data in lists, crosstabs, and charts.</td>
</tr>
<tr>
<td>Advanced</td>
<td></td>
</tr>
<tr>
<td>Cognos Workspace</td>
<td>Build and use sophisticated, interactive dashboards using Cognos content as well as external data sources.</td>
</tr>
<tr>
<td>IBM Cognos Viewer</td>
<td>View results of all reports, queries, and analyses. Cognos Viewer shows report output after a user has interacted with any prompts.</td>
</tr>
<tr>
<td>IBM Cognos Connection</td>
<td>Access all data available through IBM Cognos</td>
</tr>
<tr>
<td>Framework Manager</td>
<td>Create and publish metadata models on which reports are based. Query Studio and Report Studio can report from all models. Query Studio, Analysis Studio, and Report Studio can report from dimensionally modeled relational data (which can be created in Framework Manager)</td>
</tr>
<tr>
<td>Transformer</td>
<td>Create and publish cubes on which reports are based. Query Studio, Analysis Studio, and Report Studio all can report from cubes</td>
</tr>
<tr>
<td>Metric Designer</td>
<td>Create scorecards and metrics</td>
</tr>
</tbody>
</table>
Let’s take a closer look at three of the key components you use to model, access, and analyze your data.

What is Framework Manager?

Framework Manager is the metadata modeling tool that allows your Cognos Administration team to model relational data.

The result of a Framework Manager model is a package(s). When packages are published, report developers can create reports against the data using Cognos.
Getting Started in IBM Cognos

What is IBM Cognos Connection?

IBM Cognos Connection is the portal interface to all of the functionality available in IBM Cognos 10.2. It is a web application for viewing, creating, and managing queries and reports. In the portal, you can view and run public reports and personalize the portal to meet your needs.

Getting Started

1. In Internet Explorer type the following URL into the address bar:

   https://cognos.mines.edu/ibmcognos/cgi-bin/cognos.cgi

2. In the fields provided type your assigned Cognos User ID and Password. This login and password are the same as your usual CSM network login. Click OK.
The **Welcome Page** may appear, with links to IBM Cognos Connection (IBM Cognos content) and the Actions available to you.

Note the option to uncheck the box to “Show this page in the future” if you’d prefer to bypass this page when you login.

![IBM Cognos Software](image)

*Note: You may not see all of the icons that appear in this image on your home screen as they are based on permissions.*

3. **Under My Content click IBM Cognos Content.**

![IBM Cognos content](image)
Understanding IBM Cognos Connection

Once you have successfully logged into IBM Cognos, or selected IBM Cognos content from the Welcome Page, the portal appears. This is the primary way to access reports and reporting tools. The web interface means that nothing needs to be maintained on the user’s desktop.

**NOTE**

IBM Cognos Connection is the web portal and primary way to access Report Studio. This allows developers to create hyperlinks to reports directly from another application or web page and link them to Cognos. This bypasses IBM Cognos Connection after the user has been authenticated.
Getting Started in IBM Cognos

Navigating in IBM Cognos Connection

1. In Public Folders click the Student folder.

2. Click the General Campus folder.
3. Use the “breadcrumbs” and click on the **Student** folder link to navigate back up.

IBM Cognos Connection

<table>
<thead>
<tr>
<th>Public Folders</th>
<th>My Folders</th>
</tr>
</thead>
</table>

Public Folders > **Student** > **General Campus**

- Class Roster - Master Schedule
- Registered Student Numbers by Term
- Security Test - PE Students for 201550
Folder Tools

As you navigate through the Public Folders, a Toolbar of available options displays.

The Toolbar shows the actions that can be performed in the portal. They are described below.

<table>
<thead>
<tr>
<th>Action Description</th>
<th>Icon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refresh the portal</td>
<td>![Refresh Icon]</td>
</tr>
<tr>
<td>Cut selected entries</td>
<td>![Cut Icon]</td>
</tr>
<tr>
<td>Show entries in a List View</td>
<td>![List Icon]</td>
</tr>
<tr>
<td>Copy selected entries</td>
<td>![Copy Icon]</td>
</tr>
<tr>
<td>Show entries in Detail View</td>
<td>![Detail Icon]</td>
</tr>
<tr>
<td>Paste selected entries to the current location</td>
<td>![Paste Icon]</td>
</tr>
<tr>
<td>Create a New Folder</td>
<td>![Create Icon]</td>
</tr>
<tr>
<td>Delete selected entries</td>
<td>![Delete Icon]</td>
</tr>
<tr>
<td>New Job - run multiple reports</td>
<td>![New Job Icon]</td>
</tr>
<tr>
<td>Set properties for the current folder or package</td>
<td>![Set Properties Icon]</td>
</tr>
<tr>
<td>New URL - to an external file or web site</td>
<td>![New URL Icon]</td>
</tr>
<tr>
<td>Set the order for folders or entries</td>
<td>![Set Order Icon]</td>
</tr>
<tr>
<td>New page</td>
<td>![New Page Icon]</td>
</tr>
</tbody>
</table>

NOTE

The Folder Tool icons vary based on licensing permissions and only appear where they are relevant. On some pages they are not displayed.

Due to security permissions, not all users are able to see all folders.
Running a Report

1. In IBM Cognos Connection click on the Public Folders tab.
2. Click to open the Student folder, and the General Campus folder.

3. Find the Class Roster – Master Schedule report specification and notice the Actions Menu and the options available:

<table>
<thead>
<tr>
<th>Name</th>
<th>Modified</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class Roster - Master Schedule</td>
<td>June 24, 2015 8:04:55 AM</td>
<td>Create a report view (shortcut)</td>
</tr>
<tr>
<td>Registered Student Numbers by Term</td>
<td>June 24, 2015 8:04:34 AM</td>
<td>Schedule recurring jobs</td>
</tr>
<tr>
<td>Security Test - PE Students for 201550</td>
<td></td>
<td>All available report options</td>
</tr>
</tbody>
</table>
4. In the Actions Menu click Run with options.

5. In the Run with options window, from the Format dropdown select HTML.

6. Click Run.

When you click on the report name link in IBM Cognos Connection, the report displays as it was last run; the data displayed may not be the most current.

We recommend that you always select Run with options in the Actions Menu to execute a report in Cognos Connection.
A prompt page appears.

Before the report can run, you must enter a Term into the field provided. Term Example: 201510. The dotted orange line under the Term field and the asterisk next to Enter Term* indicates that this Prompt is required.

There are two Optional prompts for this report:

To view data for one or more Colleges, type the College codes one at a time into the blank field and click Insert to add them to the Choices box. College Code Example: EN.

To view data for one or more Departments, type the Department codes into the blank field and click Insert to add them to the Choices box. Department Code Example: MS.
7. In the Prompt for Term type “201510”.

   Enter Term*: ________
   201510

8. In the Prompt for College type “EN” and click the Insert button to add it to the Choices box.

   Enter College(s) or Leave Blank for All:
   Choices:  
   EN

   Select all  Deselect all

9. In the Prompt for Department type “MS” and click the Insert button to add it to the Choices box.

   Enter Department(s) or Leave Blank for All:
   Choices:  
   MS

   Select all  Deselect all

10. Click Finish.
The report executes and displays the results in IBM Cognos Viewer. This is the interface used to display reports in IBM Cognos. This output is in HTML format.

Notice, in the Report Header, the yellow filter icon that indicates the Filters applied to this report – Term: 201510; College(s): EN; Department(s): MS.

**NOTE**
Report Writers can specify a default format in the properties of any report. Adobe Reader is required on the user's desktop to allow selection of the PDF option (as the default or at runtime).
Understanding IBM Cognos Viewer

When you view a report in IBM Cognos Viewer, there are many actions available in the Toolbar:

Click the blue arrow ▶ to run the report again. This is a quick way to access the Prompt page, update Prompt selections and run the report again.

Click the View options ↘ drop down to change the View output of the report. Options include: HTML, PDF, XML, Excel.

Click on the arrow ← to return to the previous folder.

Click on Home 🏡 to return to IBM Cognos Connection home.

Click on the Browser’s X button to close IBM Cognos Viewer and IBM Cognos Connection.
11. In the Cognos Viewer Toolbar click the View in dropdown and select Excel 2007 Data.

12. At the bottom of the Internet Explorer window click Open:

The report opens in a new Microsoft Excel window:
Getting Started in IBM Cognos

13. In your computer’s task bar, mouse over the Internet Explorer icon and click to return to the IBM Cognos Viewer tab.

14. In the upper right hand corner of the Viewer Window click Home to return to IBM Cognos Connection and the Public Folders.
Getting Started in IBM Cognos

Searching and Viewing Public Reports

1. From IBM Cognos Connection and the Public Folders click on the down arrow next to the Search box and select Name field.

2. In the Search box type “Registered Student” and click Search (the magnifying glass).

In the Search results you should see a report called Registered Student Numbers by Term.

3. In the Actions Menu click Run with Options.
In the next steps you learn how to schedule a report to run one time:

4. In the upper right hand corner of the Run with options window, click **advanced options**.

5. In the Run with advanced options window, under Time and mode, click the radio button to select **View the report now**. Leave the Format set to HTML.

6. Click Run.
A prompt page appears.

Before the report can run, you must enter a Term into the field provided. Term Example: 201510.

Note that the dotted orange line under the Term field and the asterisk in Enter Term* indicates that this Prompt is required.

There is one Optional prompt for this report.

To view data for one or more Student Levels, type the Student Level codes one at a time into the blank field and click Insert to add them to the Choices box. Student Level Code Example: GR.

You are also provided with a required Prompt to select the Cross-Tab report you wish to view.
15. In the Prompt for Term type “201510”.

16. In the Prompt for Student Level type “GR” and click the Insert button to add it to the Choices box.

7. In the Prompt to select the Cross-Tab, leave it set to the default choice of Registered by Student Type.

8. Click Finish.
The report opens in IBM Cognos Viewer. Notice the option to select a different Cross-Tab view from inside the report.

9. In the Select the Cross-Tab Prompt on the page click to select **Registered by Term Credits**:

Select the Cross-Tab you wish to view:

- [ ] Registered by Student Type
- [ ] Registered by Student Class
- [ ] Registered by Student Gender
- [ ] Registered by Student Ethnicity
- [ ] Registered Term Credits
- [ ] Registered by Student Program
- [ ] Registered by Student Type and Degree
- [ ] Registered by Student Gender & Student Ethnicity

ID: Spring 2015

<table>
<thead>
<tr>
<th>X-Mines</th>
<th>Continuing</th>
<th>New Graduate Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate</td>
<td>3</td>
<td>1141</td>
</tr>
</tbody>
</table>

Notice how the report automatically runs again to display a different view of the Cross-Tab.

<table>
<thead>
<tr>
<th>REGISTERED_TERM_CREDITS</th>
<th>Spring 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate</td>
<td>11,434.00</td>
</tr>
</tbody>
</table>
11. In the upper right hand corner of the screen click Return to go back to IBM Cognos Connection.

NOTE

When you use IBM Cognos Viewer in HTML output, always check to see if there is a Page Down option in the bottom left of the report. There may be more data that isn’t displayed on the initial page.
1. In the upper right section of the portal click on the My Area Options drop-down arrow and select My Preferences.

   ![My Preferences dropdown](image)

   In My Preferences, you can personalize your portal view.

   ![Set preferences](image)

   **Number of entries in list view:**
   - 15

   **Separators in list view:**
   - No separator

   **Style:**
   - Corporate

   **Report format:**
   - HTML

   **Show the Welcome page at startup**
   - Checked

   **Show a summary of the run options**
   - Checked

   **Enable accessibility support for reports I run or schedule**
   - Unchecked

2. In the General tab, notice the Number of entries in list view is set to 15.

   This means that you only see 15 entries in each folder in IBM Cognos Connection and must use the Page up and Page down buttons in the Folder Tools to see more reports. We recommend you change this to 25.

3. For Separators in list view select **Alternating backgrounds**. Click OK.

   Notice in the Alternating backgrounds that appear in the folder on your screen.
Tips for Using IBM Cognos

As you work with IBM Cognos, keep these tips in mind for easier use and better performance.

- **It doesn’t work like a browser.** IBM Cognos does not fully support the functionality of the Internet Explorer browser (or other browsers). For example, you may notice that sometimes the Back button works and sometimes you get errors or no response at all. For greater Cognos Workspace Advanced happiness, only use options visible within the IBM Cognos interface and not in your browser.

- **Cancel doesn’t really mean Cancel.** When you run a report, you might notice that Cancel is an option while the report runs. Unfortunately, if you click on the Cancel button it does not cancel the query and can contribute to a backlog of data requests if used repeatedly for the same report. Unless you plan to change the report in some way and resubmit the query, it is better to wait out the report rather than try to interrupt it. As an alternative, you can choose **Select a delivery method.**

- **Navigate to the Bottom for faster performance.** If you run a long report in HTML there will be navigation options at the bottom of the screen. If you pick **Page down**, the report needs to re-run. Choose **Bottom** instead, which places the entire report into memory (cache) and allows you to more quickly move between pages.