

Database Analysts and Data Administrators

An employment guide for newcomers to British Columbia



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Database analysts & data administrators NOC 2172

Database analysts & data administrators NOC 2172 may also be called:

- *database administrator (DBA)*
- *database analyst*
- *database architect*
- *database designer*
- *data dictionary administrator*
- *data analyst informatics and systems*
- *EDP (electronic data processing) analyst*
- *information resource analyst*
- *data custodian*
- *data warehouse analyst*
- *data miner / mining analyst*

1. What Would I Do?

Database analysts design, develop and administer data management solutions using database management software. Their duties may include:

- collect and record user's requirements
- design and develop database architecture for information systems projects
- design, construct, modify, integrate, implement and test data models and database management systems
- carry out research and provide advice to other information systems professionals regarding the selection and use of database management tools

- operate database management systems to analyze data and perform data mining analysis.

Data administrators develop and implement data administration policy, standards and models. Their duties may include:

- develop and put into use data administration policy, standards and models
- research and record data requirements, data collection and administration policy, data access rules and security
- develop policies and procedures for network and/or internet database access and usage, and for the backup and recovery of data
- carry out research and provide advice to other information systems professionals regarding the collection, availability, security and suitability of data
- write scripts related to stored procedures and triggers
- lead and coordinate teams of data administrators in the development and implementation of data policies, standards and models

More information:

- **WorkBC Career Profile for Database Analysts & Data Administrators**
<https://www.workbc.ca/careers/2172>

2. Am I Suited For This Job?

Database analysts & data administrators must be:

- logical
- creative
- detail oriented
- willing to keep up with advances in the field

They must have:

- strong communication skills

Most database analysts & data administrators spend much of their time on computers and may be at risk of neck and back strain. They work mainly in offices, alone or as part of a team and usually work a regular five day week.

Sources:

- **WorkBC Career Profile for Database Analysts & Data Administrators**

<https://www.workbc.ca/careers/2172>

- **Career Cruising (Profile for 'Database Developer')**

<http://www.vpl.ca/digital-library/career-cruising>

Available from the VPL Digital Library | Explore our Digital Library page

3. What Are The Wages And Benefits?

WorkBC reports that the *median* annual salary for Database Analysts & Data Administrators in British Columbia is approximately \$65,000 with a \$31.25 median hourly wage rate across the province.

In BC's regions, Database Analysts & Data Administrators can expect to make:

**Database analysts and data administrators (NOC 2172)
Hourly Wages**

| Community/Area | Wages (\$/hour) | | |
|---|-----------------|--------|-------|
| | Low | Median | High |
| Canada | 18.27 | 34.87 | 51.00 |
| British Columbia | 19.19 | 31.25 | 48.08 |
| Cariboo Region | N/A | N/A | N/A |
| Kootenay Region | N/A | N/A | N/A |
| Lower Mainland–Southwest Region | 19.23 | 31.25 | 48.08 |
| Nechako Region | N/A | N/A | N/A |
| North Coast Region | N/A | N/A | N/A |
| Northeast Region | N/A | N/A | N/A |
| Thompson–Okanagan Region | 19.19 | 31.25 | 48.08 |
| Vancouver Island and Coast Region | 19.19 | 31.25 | 48.08 |

Source: Job Bank Wage Report <https://www.jobbank.gc.ca/trend-analysis/search-wages> [search 2172]

Database analysts & data administrators who find permanent full-time positions typically receive benefits in addition to their salaries. Benefits often include dental coverage and paid vacation and sick leave.

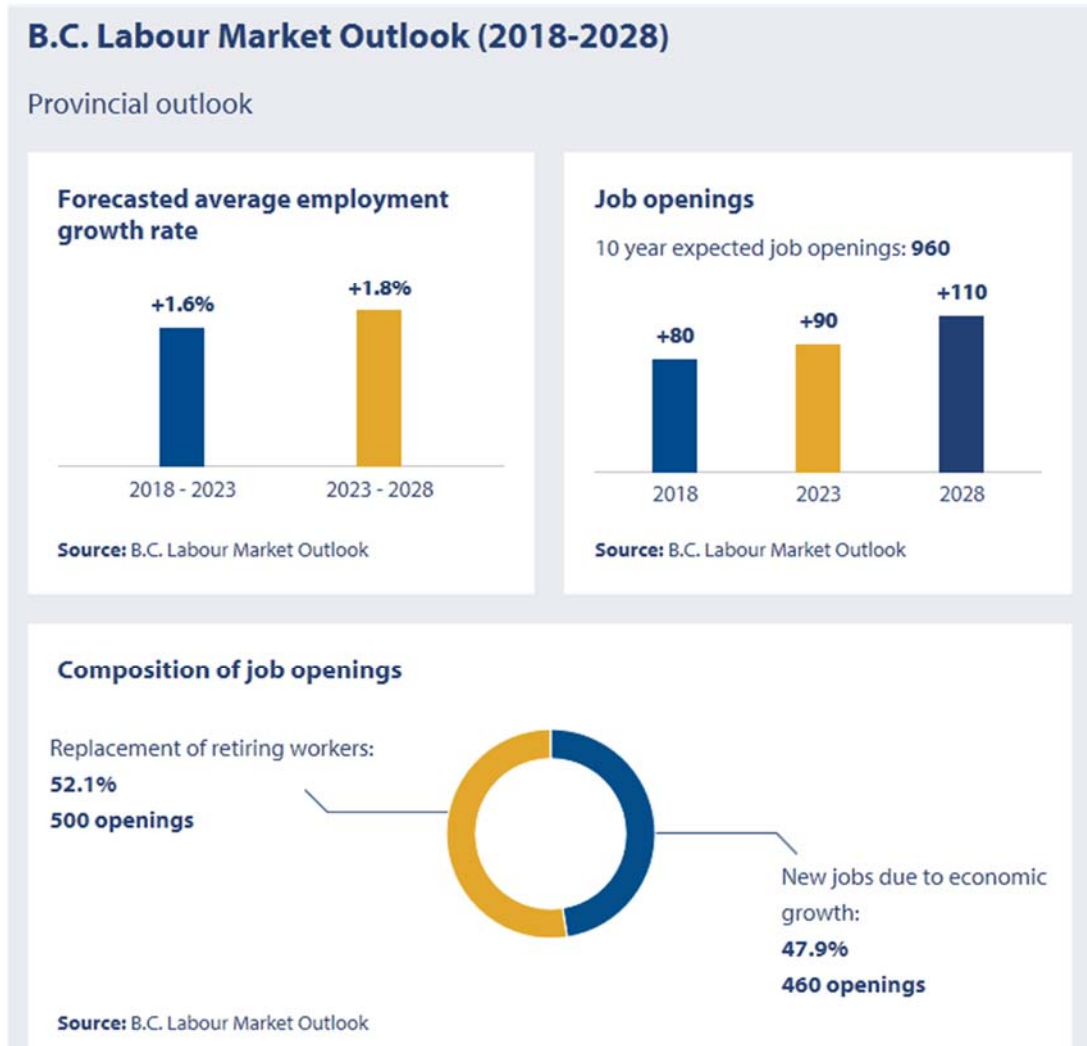
Sources:

- **WorkBC Career Profile for Database Analysts & Data Administrators**
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- **Career Cruising (Profile for 'Database Developer')**
<http://www.vpl.ca/digital-library/career-cruising>

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4. What Is The Job Outlook In BC?

Database Analysts & Data Administrators NOC 2172



Source:

WorkBC Career Profile for Database Analysts & Data Administrators

<https://www.workbc.ca/careers/2172>

WorkBC reports that for the period 2018-2028, the expected annual demand growth rate for database analysts & data administrators will be 1.8% across the province. The largest growth will be in these regions:

- Lower Mainland & Southwest (1.7% annual employment growth and total 690 job openings from 2018-2028)
- Vancouver Island Coast (1.7% annual employment growth and total of 200 job openings from 2018-2028)

JobBank Canada reports that for the 2018—2020 period, the employment outlook is expected to be 'good' for Database Analysts & Data Administrators (NOC 2172) in British Columbia. Employment growth is expected to be strong and a moderate number of people are expected to retire.

Sources:

- **WorkBC Career Profile for Database Analysts & Data Administrators**
<https://www.workbc.ca/careers/2172>
- **JobBank Canada, Employment Outlook,**
<https://www.jobbank.gc.ca/trend-analysis/search-job-outlooks>

5. How do I become a Database Analyst or Data Administrator?

In BC, there is no certification/licensing required to be a Database Analyst or Data Administrator. However, a bachelor's degree, usually in computer science or in mathematics is required, or completion of a college program in computer science. Computer programming experience is also a requirement. You should have a solid knowledge base in relational database theory, computer operating system software, programming languages, and the skills and tools needed for database maintenance.

Voluntary certification is available through CIPS (Canada's Association of I.T. Professionals) in three categories: Associate Information Technology Professional (AITP), Information Systems Professional (I.S.P.), and Information Technology Certified Professional (ITCP) (see: <http://www.cips.ca/certification>
<http://www.cips.ca/AITP>)

Sources:

- **WorkBC Career Profile for Database Analysts & Data Administrators**

<https://www.workbc.ca/careers/2172>

- **Career Cruising (Profile for 'Database Developer')**

<http://www.vpl.ca/digital-library/career-cruising>

Available from the VPL Digital Library | Explore our Digital Library page

6. How Do I Find A Job?

Where would I work? Database analysts & data administrators work in:

- *information technology consulting firms*
- *information technology units throughout the private and public sectors*
- *governments, universities, banks, and other large organizations that use databases*

Finding Advertised Jobs

Jobs are advertised in a variety of sources including newspapers, magazines and online job sites.

Local Newspapers

You can look at the *Vancouver Sun & The Province* at Vancouver Public Library for free. Check the job postings daily, the careers section in the *Vancouver Sun* on Wednesdays and Saturdays and, in *The Province* on Sundays.

Job White Pages

Available in print at the Central Library or online at
JOB Freeway.com

<http://www.vpl.ca/digital-library/jobfreeway.com>

Available from the VPL Digital Library | Explore our Digital Library page

NOTE: Access at VPL locations only

Online Job Postings

- **CIPS – Canadian Association of Information Technology (IT) Professionals**
<http://jobs.cips.ca/> [can search by province]
- **Jobs.ITWorldCanada**
<http://jobs.itworldcanada.com/> [can search by province or city]
- **Robert Half Technology Staffing Agency**
<https://www.roberthalf.ca/en/looking-for-a-job>
- **T-Net British Columbia**
<http://www.bctechnology.com/jobs/search.cfm>
- **Indeed.ca**
http://ca.indeed.com/advanced_search
<http://ca.indeed.com/Data-Analyst-jobs-in-Vancouver,-BC>
<http://ca.indeed.com/Database-Administrator-jobs-in-Vancouver,-BC>
- **Neuvoo**
<http://neuvoo.ca/en>
- **WorkBC**
<https://www.workbc.ca/JobSeekers/SearchResults.aspx>
- **BC Jobs.ca**
<https://www.bcjobs.ca/>
- **BC JobConnect**
<https://www.bcjobconnect.ca> **must have permanent resident number**
newcomers can post their skills, education and work experience to BC employers looking for workers

Finding “Hidden Jobs”

Many job vacancies are not advertised. The resources below will help you *with finding jobs in this “hidden” job market.*

Using Directories to Create a List of Potential Employers

You can use directories to produce lists of employers who are in this industry. Contact them directly to find out if they're hiring.

- **BC Tech Association, Member Directory**
<https://wearebctech.com/membership/member-directory/>
- **BC Tech, Technology Guide (special issue of BC Tech magazine)**
includes company lists for: biggest BC tech companies, BC software developers, BC telecommunication companies, and the top 100 tech companies in BC.
Available at the Central Library, 380 EL3CBh
- **Information Technology Association of Canada ITAC**
<http://itac.ca/regular-members/>
- **Reference Canada**
<http://www.vpl.ca/digital-library/reference-canada>
Click on "Start Search" beside Canadian Businesses, then select the "Advanced Search" button. Select both "Keyword/SIC/NAICS" under Business Type and "City" under Geography. In the top search box enter "data management" and click SEARCH. Select the appropriate headings. Lower down, select the Province, choose the cities, and click the "View Results" button.
Available from the VPL Digital Library | Explore our Digital Library page

NOTE: *You can access this database from a Library computer. If you are using a computer from outside the Library, you will need a Vancouver Public Library card to login to this database. After clicking on the database name, you will be asked to enter your library card number and PIN (usually last four digits of your telephone number).*

Volunteering and Temporary Agencies

Many positions are filled by people who have been recommended by someone they know. Networking, working as a volunteer or registering with a temporary employment agency are good ways of helping you find jobs and meet people in your industry.

Networking and the Hidden Job Market:

When looking for work, be sure to talk to friends, relatives and neighbours. They may know someone who is hiring! Working as a volunteer, attending events, and joining clubs and associations are good ways to gain "Canadian experience." They are also good ways to meet people to learn about the local job market.

Volunteer opportunities

- **Volunteer BC**

<http://www.volunteerbc.bc.ca/>

- **GoVolunteer.ca**

<http://govolunteer.ca/>

- **Charity Village**

<http://charityvillage.com/>

<https://charityvillage.com/app/job-listings>

[in 'Position Type' box, scroll down and select 'unpaid volunteer position' and then select a relevant 'Job Category' e.g. 'IT Service & Support']

- **Community Volunteer Connections**

<https://volunteerconnections.ca/volunteer/>

[volunteer opportunities in Coquitlam, Port Coquitlam, Port Moody, New Westminster, Anmore, Belcarra and Surrey]

- **Career Mash**

<http://careermash.ca/educators/participating-careermash> [Career Mash is a service of the Information Technology Association of Canada (ITAC); it promotes information technology careers]

[committed tech professionals volunteer with CareerMash for the 'In-Class Guest Speaker program' and/or the 'Online Presenter program', spreading the word about the benefits of choosing a tech-related career]

For additional tips see:

- **Networking for Employment**

Go to <http://skilledimmigrants.vpl.ca>

[Search Networking for Employment]

- **Getting Canadian Work Experience**

Go to <http://skilledimmigrants.vpl.ca>

[Search Getting Canadian Work Experience]

7. Applying for a Job

In Canada, employers usually expect to receive a resume and a cover letter that identifies the position you are applying for and summarizes your experience. Use the library catalogue, <http://vpl.bibliocommons.com/> to find books on writing resumes and cover letters specific to your industry.

For more information see:

- **Writing Resumes and Cover Letters**

Go to <http://skilledimmigrants.vpl.ca>

[Search Writing Resumes and Cover Letters]

8. Where Can This Job Lead?

With experience advancement to Senior Developer or Project Manager is possible. Mobility may be possible between specializations in this group, to management or regulatory program management.

9. Where Can I Find More Information?

- **CareerMash**

<http://careermash.ca/careers>

Explore CareerMash to learn how to mash up your personal interests with a well-paid tech career.

- **CIPS: Canada's Association of I.T. Professionals**

<http://www.cips.ca/>

- **Information and Communications Technology Council ICTC**

<http://www.ictc-ctic.ca/>

- **ITAC Talent: inspiring tech careers (Information Technology Association of Canada)**

<http://itactalent.ca/>

- **Canadian ICT Sector Profile 2018** Information & Communications Technologies
https://www.ic.gc.ca/eic/site/ict-tic.nsf/eng/h_it07229.html
- **Learn More About Working in BC and Canada**
Go to <http://skilledimmigrants.vpl.ca>
[Search Learn More About Working in BC and Canada]

Questions? Please ask the Information Staff at the Central Library or telephone 604-331-3603.

Please note that the information in this guide is also available online through the Skilled Immigrant InfoCentre website at <http://skilledimmigrants.vpl.ca/>.