The Open Group® Professional Certification Program

Configuration Document for the Data Scientist Profession (Open CDS)

Version 1.0
December 2018
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1. Overview

The Open Group Professional Certification Program (the Program) is designed to validate the existence of those qualities and skills in a professional that enable the effective development, implementation, and operation of Business or IT-related specializations. The Program is skills and experience-based and goes beyond validating the mastery of any specific knowledge base.

The Program covers multiple Professions. This document is for the Data Scientist Profession, which leads to certification as an Open Certified Data Scientist (Open CDS).

The Open Group supports two different routes to certification:

- The first route is Direct Certification by The Open Group
- The second route is Indirect Certification through third-party programs accredited by The Open Group

The Conformance Requirements for each of the Professions in the Program apply equally to Direct and Indirect Certification.

This document is intended for individuals who wish to pursue Direct Certification in the Data Scientist Profession as Open Certified Data Scientists, and for organizations that wish to run Accredited Certification Programs internally.

1.1 Key Documents

The Data Scientist Profession is based upon three key documents:

- The Open Group Professional Certification Program Certification Policy, which sets out the policies and processes by which a Data Scientist may achieve certification
- The Open Group Professional Certification Program Conformance Requirements for the Data Scientist Profession (Open CDS), in which are documented the skills and experience that a Data Scientist must possess to achieve certification
- The Open Group Professional Certification Program Configuration Document for the Data Scientist Profession (Open CDS) (this document), which outlines the specific certification policies and processes for the Data Scientist Profession

Practical information about the certification process is available through the Open CDS FAQ and other Open CDS documentation on the Certification Authority’s website.

1.2 Levels of Certification

The Program recognizes three levels of certification:

Level 1: A professional who is able to perform with assistance/supervision with a wide range of appropriate skills as a contributing professional.

Level 2: A professional who is able to perform independently and take responsibility for delivery of solutions as lead professional.

Level 3: A professional who has significant breadth and depth of impact on the business through the application of their Profession.

1.3 Migration and Change History

This is the first version of this document.
1.4 Terminology and Definitions

Please see Section 1.5 (Terminology and Definitions) of The Open Group Professional Certification Program Certification Policy for the definition of terms.

2. Certification

2.1 Conformance Requirements

The Conformance Requirements for the Data Scientist Profession for this version of the Configuration Document are defined in The Open Group Professional Certification Program Conformance Requirements for the Data Scientist Profession (Open CDS), Version 1.0, published by The Open Group, December 2018, Document No. X1822.

2.2 Milestones and Milestone Badges

The Data Scientist Profession includes three types of Milestone Badge as part of the certification process. These are:

- The Open CDS Professional Communication Milestone Badge, which covers Core Basic skills relating to communication
- The Open CDS Professional Development Milestone Badge, which includes the Professional Development and Community Contribution requirements
- The Open CDS Experience Profile Milestone Badge, which includes the remaining Core Basic skills, the Data Science Basic skills, and the Experience Profile attributes; there are different Experience Profile Milestone Badges for each of the Disciplines

Candidates may apply for Milestone Badges at any time and in any order. Each level of certification has its own set of Milestone Application Forms.

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Conformance Requirements¹</th>
<th>Evaluation By²</th>
<th>Lifetime after which the Badge Ceases to be Valid</th>
<th>Milestone Badge ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Communication (Level 1 and Level 2)</td>
<td>CBS01, CBS02</td>
<td>Certification Authority</td>
<td>Eight (8) years from the earliest project start date of the experience cited</td>
<td>Open CDS PC L1 Open CDS PC L2</td>
</tr>
<tr>
<td>Professional Development (Level 1 and Level 2)</td>
<td>PD01, PD02, PD03, PD04, CC01, CC02</td>
<td>Certification Authority</td>
<td>Three (3) years from the latest project end date of the experience cited</td>
<td>Open CDS PD L1 Open CDS PD L2</td>
</tr>
</tbody>
</table>

¹ As defined in The Open Group Professional Certification Program Conformance Requirements for the Data Scientist Profession (Open CDS).

² As defined by The Open Group Professional Certification Program Certification Policy.
<table>
<thead>
<tr>
<th>Milestone</th>
<th>Conformance Requirements¹</th>
<th>Evaluation By²</th>
<th>Lifetime after which the Badge Ceases to be Valid</th>
<th>Milestone Badge ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Communication (Level 3)</td>
<td>No separate Milestone as Executive Communication is covered by DDS06 and is evaluated in each of the Level 3 Experience Milestone Applications.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional Development (Level 3)</td>
<td>DPD02, DPD03, DCC01, DCC02</td>
<td>Certification Authority</td>
<td>Three (3) years from the latest project end date of the experience cited</td>
<td>Open CDS PD L3</td>
</tr>
<tr>
<td>Experience Profile (Level 1 and Level 2)</td>
<td>CBS03, CBS04, CBS05, CBS06, CBS07, DSS01, DSS02, DSS03, DSS04, DSS05, DSS06, DSS07, DSS08, DSS09, DSS10, EXP01, EXP02</td>
<td>Peer Review Board Member Review</td>
<td>Eight (8) years from the end date of the project cited</td>
<td>Open CDS EXP L1, Open CDS EXP L2</td>
</tr>
<tr>
<td>Experience Profile (Level 3)</td>
<td>DDS01, DDS02, DDS03, DDS04, DSCF05, DDS06, DSCF07, DDS08, DDS09, DDS10, DDS11, DDS12, DEXP01, DEXP02, DEXP03</td>
<td>Peer Review Board Member Review</td>
<td>Eight (8) years from the end date of the project cited</td>
<td>Open CDS EXP L3</td>
</tr>
</tbody>
</table>

2.3 Experience Application Form

After achieving the necessary Milestone Badges, a Candidate must complete an Experience Application Form, which enables a Candidate to show that the experience profiles presented for their Experience Profile Milestone Badges meet a set of criteria called the Experience Requirements.

<table>
<thead>
<tr>
<th>Certification Level</th>
<th>Experience Requirements</th>
<th>Evaluation By</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1 or Level 2</td>
<td>EC01, EC02, EC03, EC04</td>
<td>Peer Review Board</td>
</tr>
<tr>
<td>Level 3</td>
<td>DEC01, DEC02, DEC03, DEC04, DEC05</td>
<td>Peer Review Board</td>
</tr>
</tbody>
</table>

2.4 Achieving and Maintaining Certification

After achieving the necessary Milestone Badges, a Candidate may apply for certification by completing and submitting an Experience Application Form to the Certification Authority.

At the time of applying for certification, all of the constituent Milestone Badges must be valid and at least one (1) Experience Profile Milestone Badge must have a start date less than three (3) years before the submission of the Experience Application Form.
Candidates applying for Level 1 or Level 2 certification are not required to have been certified in the Profession previously. Candidates applying for Level 3 certification must have been previously certified at Level 2 in the Profession – such certification need not be current and may be to a previous version of the Program.

Candidates applying for certification must apply with badges that are at the level of the certification for which the Candidate is applying or higher.

Certification is valid for three (3) years.

Re-certification is required to maintain currency as an Open Certified Data Scientist. Refer to Section 9 (Re-Certification) of The Open Group Professional Certification Program Certification Policy.

<table>
<thead>
<tr>
<th>Certification Level</th>
<th>Milestone Professional Communication</th>
<th>Milestone Professional Development</th>
<th>Milestone Experience Profile</th>
<th>Evaluation Process³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>A valid Open CDS PC L1 or Open CDS PC L2 Milestone Badge is required.</td>
<td>A valid Open CDS PD L1 or Open CDS PD L2 Milestone Badge is required.</td>
<td>Two (2) valid Open CDS EXP L1 or Open CDS EXP L2 Experience Profile Milestone Badges are required.⁴ At least one (1) Experience Profile Milestone Badge must have a start date less than three (3) years before the submission of the Experience Application Form to the Certification Authority.</td>
<td>Single Board Member Review Additional Board Member(s) assigned if declined.</td>
</tr>
<tr>
<td>Level 2</td>
<td>A valid Open CDS PC L2 Milestone Badge is required.</td>
<td>A valid Open CDS PD L2 Milestone Badge is required.</td>
<td>Three (3) valid Open CDS EXP L2 Experience Profile Milestone Badges are required. At least one (1) Experience Profile Milestone Badge must have a start date less than three (3) years before the submission of the Experience Application Form to the Certification Authority.</td>
<td>Peer Review Board Review</td>
</tr>
</tbody>
</table>

³ See Section 6 (Evaluation) of The Open Group Professional Certification Program Certification Policy for further information.

⁴ For Level 1 certification, a Candidate may use Level 1 or Level 2 Experience Profile Milestone Badges or any combination thereof. Note that Level 3 milestones are qualitatively different from Level 1 and 2 and therefore cannot be used to support a application for certification at Level 1 or 2.
### Additional Topics

#### The Specification Authority for the Profession and Program

The Open Group Open CDS Working Group is the Specification Authority for the Data Scientist Profession.

The Open Group Open Professions Working Group is the Specification Authority for the Program.

#### Logos and Labels for Use by Certified Professionals

The Open Group Professional Certification Program Trademark License Agreement for the Data Scientist Profession defines the Certification Logo that may be used, along with the following labels that identify the level of certification achieved:

- Level 1: Certified Data Scientist
- Level 2: Master Certified Data Scientist
- Level 3: Distinguished Data Scientist