### **Test Design Document**

### **NCP-AIDC Operations**

**Target Candidate Audience** 

Who are the intended, potential candidates for this credential? (For example, "Adults with high school diplomas seeking to distinguish themselves in the field of XXX" or "Nurses, physicians, or doctors who want to perform <some job role> in <some jurisdiction>" or "Experienced network administrators seeking to demonstrate advanced knowledge of <some software/platform>".)

Solutions Architect ML and Dev Ops Engineers Developer

#### Description of the Minimally Qualified Candidate (MQC)

The MQC is a conceptualization of the candidate who has the minimum competencies (i.e., knowledge, skills, and abilities) to just meet the expectations of a credentialed individual. The MQC is the borderline candidate who just barely qualifies—yet qualifies—to earn the credential. This candidate achieves the minimum score required on the exam to earn the credential. (Example 1: The Minimally Qualified Candidate (MQC) is either a systems administrator or junior engineer with 24–36 months of holistic IT infrastructure experience. The candidate should be able to configure, deploy, maintain, troubleshoot, secure, and manage infrastructure and services. Example 2: To protect the health, safety, and welfare of the public, a newly licensed <<pre>professional>> practicing independently must demonstrate the competence to be responsible for a project from its inception through completion. This includes, but is not limited to, the ability to...)

The Minimally Qualified Candidate (MQC) is an IT professional with typically 2-3 years of experience working in a hybrid cloud environment working on deploying cloud and containerized software solutions. The candidate should be able to monitor and manage all the parts of hybrid cloud infrastructure in support of AI workloads.

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Question	Response
What tasks should <i>all</i> MQCs be able to do without assistance?	<ul> <li>Full breadth knowledge of NVIDA AI software products</li> <li>Base level knowledge of all platforms</li> <li>Install, manage, and troubleshoot software products</li> <li>Integration of NVIDIA infrastructure with generic MLOps solutions</li> <li>Tune and optimize solution</li> <li>Troubleshoot Nsight UFM</li> <li>Hardware selection for a particulate workflow</li> </ul>
What tasks should be considered <i>below</i> the knowledge, skills, and ability level of all MQCs? (All MQCs should be able to perform these tasks [i.e., the task is too basic to assess on this exam].)	<ul> <li>Describe the NVIDIA software stack</li> <li>Basic knowledge of ML/DL terminology</li> <li>Basic knowledge of: Clara, RIVA, TOKKIA, MERLIN, ISAAC, MODULES, MAXINE, METROPOLI, CUOPT, NEMO, DRIVE, MORPHEUS</li> </ul>
What tasks should be considered beyond the knowledge, skills, and abilities of <i>all</i> MQCs? (Some MQCs may be able to perform the task, but it is not expected at this level [e.g., the task may be too advanced or too specialized for an MQC])	<ul> <li>Design architecture for a particular use case</li> <li>Program languages</li> <li>Developing and compiling user applications</li> <li>ML/DL Training</li> </ul>
With what tools should <i>all</i> MQCs be familiar?	<ul> <li>Omniverse</li> <li>KAF SDKs</li> <li>Containers</li> <li>Tao toolkit</li> <li>NGC</li> <li>K8S</li> <li>SLURM</li> <li>Key SDKs</li> </ul>
In which environments (e.g, types of virtual or in- person environments or practice types) should <i>all</i> MQCs be comfortable?	<ul><li>On prem</li><li>Hybrid</li><li>Cloud service providers</li></ul>

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What related tasks (e.g., content) are off-limits for assessing on this credential? (For example, a certification exam for a bicycle mechanic would likely not assess one's ability to ride a bicycle.) (If not applicable, enter "NA".)	Knowledge of 3 <sup>rd</sup> party infrastructure solutions