

## **Certified TestStand Developer Requirements and Conditions**

This document contains the provisions and requirements for the Certified TestStand Developer credential.

### **A. Requirements for Attaining Certification**

**Discussion:** The goal of the Certified TestStand Developer (CTD) credential is to ensure that candidates are equipped to develop test sequences including customization for test systems. He/She is familiar with the TestStand environment and the different terms and definitions used. The evaluation necessary for this certification includes topics related to the components of the TestStand architecture, the use of various features in the Sequence Editor that aid sequence development, and customizations that can be implemented in TestStand.

The nature of TestStand requires a good working knowledge of either LabVIEW or LabWindows/CVI. For the programming requirements, refer to appendix A, Programming Prerequisites list.

**Steps:** To satisfy the requirements for the title of Certified TestStand Developer, the candidate must perform the following:

- Complete the Agreement to the Terms and Conditions.
- Register for the exam by calling National Instruments at (888) 484-4436 or register online at [ni.com/training](http://ni.com/training). The certification exam fee is \$295 or local currency equivalent.
- Pass the certification examination with a minimum score of 75%.

### **B. Requirements for Maintaining CTD Status**

**Currency:** Continued certification requires that the CTD holder maintain a level of proficiency commensurate with the expectations of National Instruments. All Certified TestStand Developers must maintain proficiency in the most recent version of TestStand. Each certification is current for a period of two years. Maintaining certification requires successful completion of recertification examination at the two-year expiration interval. Each CTD holder will be contacted using the contact information provided on their most recent agreement, and provided with a reasonable time frame to complete the recertification requirements. Failure to complete recertification in the time frame provided will result in revocation of that individual's certification status.

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Revocation: National Instruments reserves the right to revoke at any time the Certified TestStand Developer credentials of an individual for any reason deemed valid by National Instruments.

### C. Examination Specifics

Discussion: The certification is based on a job and task analysis performed by National Instruments and validated by industry professionals. Examination items are based on objectives from the job and task analysis.

Course work is not necessary for a candidate to apply for the certification examination. National Instruments approved course materials are focused on topics included in the examination, and may be beneficial, but are not required.

A listing of the tasks and objectives is available on the National Instruments website [www.ni.com](http://www.ni.com). The task and objective list may be modified at any time as industry requirements change, so candidates are encouraged to ensure they have the latest revision. The revision date is listed on the bottom right corner of all certification documents.

### Examination Rules

The following points apply to the Certified TestStand Developer exam:

- It contains both written and practical requirements.
- It is proctored by a certification administrator.
- No external written materials, cellular telephones, or objects that may assist the person taking the test are allowed in the exam area.
- No other person besides the test taker and the proctor are allowed in the testing area.
- The proctor is not allowed to make comments or suggestions concerning any part of the test.

### D. Requirements

- (a) Requirements: To attain CTD status, you must satisfy all applicable certification requirements stated in this document.
- (b) Maintaining Certification: To maintain your CTD Certification, you must comply with all continuing certification requirements. You agree that National Instruments may change the CTD Certification requirements (both initial and continuing) at any time.

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- (c) Certification Records: National Instruments maintains a record of all certifications attained by individuals in the certification program. A copy of your records may be obtained by contacting the Training Services department at certification@ni.com.

### E. Authorization and Restrictions

- (a) Authorization: When all CTD conditions have been satisfied, National Instruments authorizes you to use the title “Certified TestStand Developer.”
- (b) Currency: You agree that to maintain your CTD status, you may be required to take recertification examinations to show currency with the most recent versions and capabilities of TestStand, or to show familiarity with topics required of your CTD status. You further acknowledge that there may be fees associated with these examinations.
- (c) Confidentiality: National Instruments may from time to time disclose to you information that National Instruments considers to be confidential and proprietary. You agree to keep any information that National Instruments informs you is confidential and proprietary in confidence, and to use reasonable measures to maintain such information in confidence, and to not use or disclose such information or materials to the detriment of National Instruments. Your obligation of confidence, however, shall not apply if such information or materials is or becomes generally known to the public (other than as a result of a disclosure by you), or if you first obtain the written consent of National Instruments to disclose such information or materials.
- (d) Confidentiality of Examination Materials: All certification examination materials are National Instruments Confidential. You agree to not disclose either the content or intent of examination items regardless of your certification status.
- (e) Logos: National Instruments makes available certification logos to individuals who become certified either at the developer or architect levels. These logos are intended for individual use on common business collateral such as business cards, resumes, and personal business web sites. Companies are prohibited from using the certification logos in a manner that suggests that the company itself is certified. All usage of such logos must be in clear reference to the certified individual and shall not suggest any degree of certification beyond that single person. Proper reference is made by naming the individual and then stating their particular certification in such a way that the certification is clearly limited to that individual. Companies are permitted to state that they have a specific number of certified persons on staff. Do not alter the logos in any way beyond scaling them to fit a particular area.
- (f) Fees: All certification and recertification fees are non-refundable.
- (g) Limitations Regarding Instructional Credentials: You understand that the CTD credential is technical in nature and does not enable you to present training courses on National Instruments products. It also does not allow you to represent yourself as instructionally certified by National Instruments in any way. For instructional certification refer to the Certified Professional Instructor program documents.
- (h) Posting certification data on the National Instruments Web Site: National Instruments may maintain a listing of certified individuals on ni.com.

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### F. Terms of this agreement

- (a) Term: This Agreement becomes effective (“Effective Date”) on the date listed on your CTD certificate. This Agreement automatically expires if any recertification requirements are not met, or two years after the Effective Date, whichever comes first (Section F.(b) describes renewal terms).
- (b) Renewal: Certifications are reviewed by National Instruments at two-year intervals. To maintain certification, the certified individual must take a recertification examination. Notice of the recertification requirements, along with the specifics of the examination and time frame for completion, will be provided to the certified individual. If National Instruments determines that recertification of an individual is inconsistent with corporate goals, the certification for an individual will not be renewed. If the certification is not to be renewed, National Instruments will provide 30 days notice of non-renewal, and section F.(d) will take effect. Renewal is contingent on section F.(c).
- (c) Change of address / contact information: Notice of renewal and non-renewal is provided using the contact information on your agreement. National Instruments will make a good faith effort to contact certified individuals using the contact information provided by that individual on their agreement. If your contact information changes, you must provide this information to National Instruments in order for the process to proceed. If at the time of renewal or non-renewal National Instruments is unable to contact you with your provided contact information, section F.(d) will take effect. Change of contact information may be provided by completing the Personal Information of the CTD agreement and faxing the document to the number provided on the agreement.
- (d) Termination of CTD Certification: If you do not comply with all of the CTD certification and recertification requirements in this agreement, or your certification is not renewed per section F. (b), your certification will be terminated. If your certification is terminated for any reason, you agree to immediately stop representing yourself as a Certified TestStand Developer.
- (e) Termination by Either Party: Either party may terminate this Agreement at any time, with or without cause, on thirty (30) calendar days prior written notice to the other party.

# Certified TestStand Developer Requirements and Conditions

## Appendix A.

### Programming Requirements for the Certified TestStand Developer

TestStand is designed to be highly customizable. Because of this inherent flexibility, the certified person must possess programming skills to fully implement a TestStand application. For the examination, either LabVIEW or LabWindows/CVI must be used to satisfy the programming requirements. Listed below are the programming competencies needed to successfully pass the examination requirements:

#### LabVIEW

- Create, Edit, and Debug VIs
- Create SubVIs
- Generate Structures: Loops, Case and Sequence structures
- Display data on Charts and Graphs
- Implement Arrays and Clusters
- Work with string data
- Perform File I/O: ASCII, Byte Stream, and Datalog
- Customize VI Properties
- Manage Data: Local and Global variables
- Be able to pass data between the TestStand environment and a LabVIEW step type

#### LabWindows/CVI

- Program in ANCI C
- Develop a user interface in the LabWindows/CVI User Interface Editor
- Understand the use of callback functions
- Build an executable file
- Be able to pass data between the TestStand environment and a LabWindows/CVI step type

Knowledge of Visual Basic and/or Visual C++ is not required, but an understanding of programming concepts in these languages may be beneficial.