CCBOOTCAMP's Approach and Methodology for CCIE Voice

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Introduction

Since 1998, CCBOOTCAMP, a division of Network Learning, Inc., has become the industry leader in developing CCIE training products and services. To date, we have helped over two thousand experts obtain their CCIE certification; view our online Hall of Fame, http://www.ccbootcamp.com/about-ccbootcamp/ccbootcamp-ccie-hall-of-fame.html.

This document outlines the CCBOOTCAMP recommended approach toward obtaining your CCIE certification using our proven self-study and instructor-led methods.

Requirements for Certification

There are no formal prerequisites for CCIE certification, meaning no other professional certifications or training courses are required. To obtain certification, all CCIE candidates must first pass a written qualification exam, and then the corresponding hands-on lab exam. However, candidates are expected to have an in-depth understanding of all topics found in the exam blueprints, and are strongly encouraged to have three- to five-years of job-related experience before attempting the certification process. For additional information, please review the exam preparation materials referenced below.

Step One: CCIE Voice Written Exam

The first step is to pass a two-hour written qualification exam, covering networking concepts and some equipment commands. You must pass the written exam before you are eligible to schedule the lab exam.

- Written Exam Information
- Schedule and Pay for Written Exam

Step Two: CCIE Voice Lab Exam

The second step is an intense, eight-hour lab exam, which tests your ability to configure actual equipment to get the network up and running in a timed-test situation. Please note that you must make your first lab attempt within 18 months of passing your written exam, and you must pass the lab within three years of passing the written exam to achieve CCIE certification.

- Lab Exam Information
- Schedule and Pay for Lab Exam

CCIE Voice Written Exam Preparation

To assist you in your preparations for the CCIE Voice Written Exam, CCBOOTCAMP offers two products/services:

1) CCIE Voice Written Exam Study Guide
2) CCIE Voice 5-Day Instructor-Led Written Exam Boot Camp

CCIE Voice Written Exam Study Guide

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The CCIE Voice Written Exam study guide contains all materials needed to pass the current CCIE Voice Written Exam. In this one-hundred seventy-four page book, every topic in the blueprint is covered in detail. In addition, the guide contains over one-hundred and forty practice questions to test your perspective knowledge and readiness.

Chapter Titles
Chapter 1: Infrastructure Protocols
Chapter 2: Telephony Protocols
Chapter 3: Cisco Unified Communications Manage (CuCM)
Chapter 4: Cisco IOS IP Telephony
Chapter 5: Qualify of Service (QoS)
Chapter 6: Unified Messaging
Chapter 7: Integration
Chapter 8: Presence
Chapter 9: UC Security
Chapter 10: Application Protocols
Chapter 11: Operation and Network Management
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CCIE Voice 5-Day Instructor-Led Written Exam Boot Camp

The CCIE Voice 5-Day Instructor-Led Written Boot Camp is comprised of four days intense coverage of the CCIE Voice Written Exam blueprint, covering all relevant technologies, and providing detailed whiteboard examples of each. This methodology is closely aligned to the approach we use in our advanced lab boot camp. At the end of each day of classroom instruction, every student receives over 75 practice questions to work on in preparation for the next day's instruction. In addition, we include a complimentary eBook version of CCBOOTCAMP's CCIE Voice Written Study Guide. Written classes are taught from 9am - 5pm Monday through Thursday, and on Friday, students take their CCIE Voice Written Exam.

Recommended Approach for the CCIE Voice Written Exam

We highly recommend our students prepare in advance by spending two to four weeks reviewing and developing an understanding of our CCIE Voice Written Exam Study Guide. After a perspective student feels comfortable with the material, we recommend they attend our written boot camp. The written boot camp will round out their individual knowledge base, and will also lay the foundation for the next step – studying for the CCIE Voice Lab Exam. Our proven approach to learning has resulted in our students achieving a 97% pass rate. The 3% who do not pass their Friday exams typically falter due to a lack of pre-class preparation and evening practice test question review.

CCIE Voice Lab Exam Preparation

To assist you in your preparations for the CCIE Voice Lab Exam, CCBOOTCAMP offers the following products:

- CCIE Voice Virtual Racks
- CCIE Voice Home Lab Kits
- CCIE Voice Technology Lab Workbook
- CCIE Voice Advanced Lab Workbooks (Volumes 1 – 3)
- CCIE Voice 5-Day Instructor-Led Foundation Lab Boot Camp
- CCIE Voice 5-Day Instructor-Led Advanced Lab Boot Camp
- CCIE Voice 5-Day Instructor-Led Mock Lab Boot Camp

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CCIE Voice Virtual Racks

CCBOOTCAMP has spent over $7M (Cisco list price) on the most advanced Voice training racks in the Cisco training industry. CCBOOTCAMP training racks are loaded with the latest Cisco gear, including (but not limited to): 3 Cisco 2811s running 12.4T (HQ, Branch 1, Branch 2); 1 Cisco 2811 for PSTN/WAN cloud, 1 Catalyst 3750G running 12.2.x, 1 Server with Cisco Unified Communication Manager 7.0 Pub, 1 Server with Cisco Unified Communication Manager 7.0 Sub, 1 Server with Cisco Unity Connection 7.0, 1 Server with Cisco Presence 7.0, 1 Server with Cisco Unified Contact Center Express (UCCX) 7.0, 1 NM-CUE (Cisco Unity Express Network Module), and 7 Cisco 7960/5 IP Phones.

These racks are used for instructor-led classroom training and are also available for remote rack rental. Enrollment in the Voice program includes rack sessions each lasting eight hours in duration.

CCIE Voice Home Lab Kits

CCBOOTCAMP can assemble the perfect home lab to fit most any budget. We include all devices, cables, device memory and miscellaneous parts necessary to meet your requirements. By having CCBOOTCAMP prepare your home lab kit, you can be assured of receiving all relevant items needed for a successful lab.

CCIE Voice Technology Lab Workbook

CCBOOTCAMP's new CCIE Voice Lab Technology Lab Workbook is designed to specifically prepare students to understand the core technologies of the CCIE® Voice lab exam. This 360+ page voice technology lab workbook breaks down major voice technologies such as, Basic Campus Design, Voice Gateway and Signaling, Voice Codec, Presence and much more, into specific chapters. Voice lab scenarios and well documented solutions including explanations and screen shots are included.

Chapter Titles

Chapter 1: Basic Campus Design
Chapter 2: Call Manager and Call Manager Express Configuration
Chapter 3: Voice Gateway and Signaling
Chapter 4: Call Routing
Chapter 5: Voice Codec
Chapter 6: Call Admission Control
Chapter 7: High Availability Features
Chapter 8: Media Resource Management
Chapter 9: QoS Considerations
Chapter 10: Unity Connections
Chapter 11: CRS/IPCC Express Application
Chapter 12: CallManager Voice Applications
Chapter 13: Supplementary Services
Chapter 14: Fax
Chapter 15: Presence

CCIE Voice Advanced Lab Workbooks

The CCIE Voice Advanced Lab Workbooks are written specifically to prepare students for the CCIE Voice Lab Exam. Each volume contains five full eight-hour mock labs, with complete walk-throughs and explanations. Currently there are three volumes for a total of fifteen practice labs.

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CCIE Voice 5-Day Instructor-Led Foundation Lab Boot Camp

CCIE Voice 5-Day Instructor-Led Foundation Boot Camps are a mixture of lectures and labs with focus on teaching the fundamentals of the technologies and developing a strong understanding of key concepts. Foundation classes are typically for the student who is approximately six months prior to taking their CCIE Lab Exam. Before attending this course, students should be at the CCNP Voice level of training and experience. Prior passing of the CCIE Voice Written Exam is strongly suggested, but not required. Foundation classes are taught from 9am - 5pm Monday through Friday.

CCIE Voice 5-Day Instructor-Led Advanced Lab Boot Camp

If you can only attend one CCIE Voice Lab course this is the course for you. The CCIE Voice 5-Day Advanced Lab Boot Camps are for students in the final stages of preparing for their CCIE Lab Exam. This boot camp focuses on individual student weaknesses and filling the gaps in the individual student's background of knowledge. The CCIE Voice Advanced Lab Boot Camp will comprise of advanced technology focused labs and white boarding sessions; no questions go unanswered. This is the only boot camp that covers the CCIE Voice Lab Blueprint from A-Z. CCIE Voice Advanced Lab Boot Camp begins each morning at 9am and typically runs for eight plus hours. On Friday the boot camp runs from 9am - 5pm. Courses are available at a variety of locations, and are also available for access via WebEx; CCBOOTCAMP's online training classroom.

CCIE Voice 5-Day Instructor-Led Mock Lab Boot Camp

CCIE Voice Instructor-Led Mock Lab Boot Camps are five days of strictly mock labs. The mock lab class is for students who have already mastered all of the advanced lab topics, yet desire additional practice in building speed, logical methods of approach, and solid test-taking conditioning. Each day is spent on tackling a mock-lab scenario with feedback from the mock proctor (instructor) after the day is finished. This boot camp is a great addition to our 5-Day CCIE Advanced Lab Boot Camp. These boot camps are taught from 9am - 5pm Monday through Friday. All mock lab classes are available for access via WebEx; CCBOOTCAMP's online training classroom.

Recommended Approach for the CCIE Voice Lab Exam

In preparation for taking the CCIE Voice Lab Exam, CCBOOTCAMP recommends spending two- to three-months focusing on building a strong foundation and understanding of core voice protocols and VoIP integration. A great resource for additional, self-paced training is the CCIE Voice Technology Lab Workbook. This workbook has technology-focused labs that concentrate on the core technologies. Upon completion of the technology workbook, CCBOOTCAMP recommends attending the CCIE Voice Foundation Boot Camp.

Once the core voice technologies are completely understood, focus should be placed on interaction between the technologies. The best way to practice is by completing the advanced practice labs; this includes all three volumes of the CCIE Voice Advanced Lab Workbooks. This process typically takes another two- to three-months. At this point, CCBOOTCAMP recommends attending the CCIE Voice Advanced Lab Boot Camp, which covers advanced technologies and specific deficiencies at a level that is customized around the individual student. Once the advanced topics and integration of technologies have been mastered, shift focus to concentrate on specific lab exam items, such as speed, exam approach, and recognizing "gotchas." CCBOOTCAMP offers the CCIE Voice Instructor-Led Mock Lab Boot Camp, containing five days of strictly mock labs. The mock lab class is for those who have already mastered all of the advanced lab topics, yet desire additional practice in building speed, logical methods of approach, and solid test-taking conditioning.

The CCIE Voice Lab Exam should be scheduled early in CCIE Lab preparation process. This will assist students in planning out their training all the way to the first attempt of the lab exam. The student should

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plan on taking the CCIE Voice Lab Exam within two weeks - thirty days of attending the CCIE Voice Advanced Lab Boot Camp and CCIE Voice Mock Lab Boot Camp. If the student elects to take the CCIE Voice Advanced Lab Boot Camp, with a thirty day break, and then attend the CCIE Voice Mock Lab Boot Camp the student should take their lab exam within two weeks of the boot camp.

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Appendix A – Company Information

About CCBOOTCAMP

In 1998, Network Learning, Inc. began with a vision to develop smarter, more advanced products and services for the Cisco training community. Since our humble beginnings, Network Learning, Inc. has grown into a leading learning partner with several dedicated single, dual, triple and quad CCIE instructors who lead our classes, author our workbooks, develop our labs, support our products, and most importantly, who give our customers the knowledge and skills they need to succeed in today's rapidly evolving networked business world.

Through our specialized Cisco Certification training division, CCBOOTCAMP, we are known for effectively raising the level of integrity, commitment, skill and knowledge with Cisco Certified experts worldwide. No other training company in the world has a higher level of personalized instruction to help you succeed than Network Learning, Inc. Our quality of service and support speaks for itself. Just ask our previously certified customers.

Our state of the art facility houses the finest equipment in the Cisco training industry. We have spent over $6M (Cisco list price) to date building the most advanced training racks for our students to utilize. We have 16 full CCIE Routing and Switching racks that contain the following: 10 Cisco 2811s running 12.4T, 4 Cisco Catalyst 3560s running EMI code, Frame-relay switch, and Terminal Server. We have 16 full Security racks that contain the following:10 Cisco 2811s running 12.4T Adv Enterprise Services, 4 Cisco Catalyst 3560s running 12.2, Cisco 4235 IPS Sensor running 6.x, 2 Cisco ASA-5510s running 8.x, ACS/CA Server running 4.x, Frame-relay switch, Terminal Server, and Test PC. We have 16 full Service Provider racks that contain the following:10 Cisco 2811s running 12.4T, 4 Cisco Catalyst 3560s running EMI code, 1 Cisco 3640 with ATM, 1 Backbone LS1010 connected ATM to backbone Cisco 3640, Frame-relay switch, and Terminal Server. We have 16 full Voice racks that contain the following: 3 Cisco 2811s running 12.4T (HQ, Branch 1, Branch 2), 1 Cisco 2811 for PSTN/WAN cloud, 1 Catalyst 3750G 12.2.x, 7 Cisco 7960G IP Phones, 1 Server with Unified Communications Manger 7.0 Pub, 1 Server with Unified Communications Manager 7.0 Subscriber, 1 Server with Unity Connection 7.0, 1 Server with Presence 7.0, 1 Server with CallCenter 7.0, and 1 NM-CUE (Cisco Unity Express Network Module).

No other training company in the world offers this level of training equipment to their customers.

Because we own and operate our training facility and equipment, we are able to support and scale class sizes from a minimum of two (2) students, to a maximum of ten (10) students for our CCIE boot camp classes, to ensure each student receives ample one-on-one instruction from our CCIE certified trainers. We also provide each individual student their own gear to work with. Our students do not share gear, regardless of which level course they are enrolled in.

Headquartered in the United States in Henderson, Nevada, we offer certification classes and boot camps at remote locations all around the globe, with the majority of our classes held at our state of the art facility, less than six miles from Las Vegas McCarran International Airport. For additional information, visit us at www.ccbootcamp.com.

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Email: sales@ccbootcamp.com

Customer Support Web Sites

http://www.routerie.com (Routing and Switching / Service Provider)
http://www.securityie.com (Security)
http://www.voiceie.com (Voice)

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Appendix B – Online Training

Online Training Classroom

While CCBOOTCAMP prefers that students attend our boot camps in person at one of our facilities, we can accommodate those who cannot be physically present via WebEx; CCBOOTCAMP's online classroom. CCBOOTCAMP utilizes state of the art technology to provide online classrooms for remote training of students around the globe. Our online classrooms provide audio, direct messaging, whiteboard, and shared applications via desktop interaction with our live boot camp instructor. If you would like a demonstration of our online classroom configuration, please email us at: sales@ccbootcamp.com.

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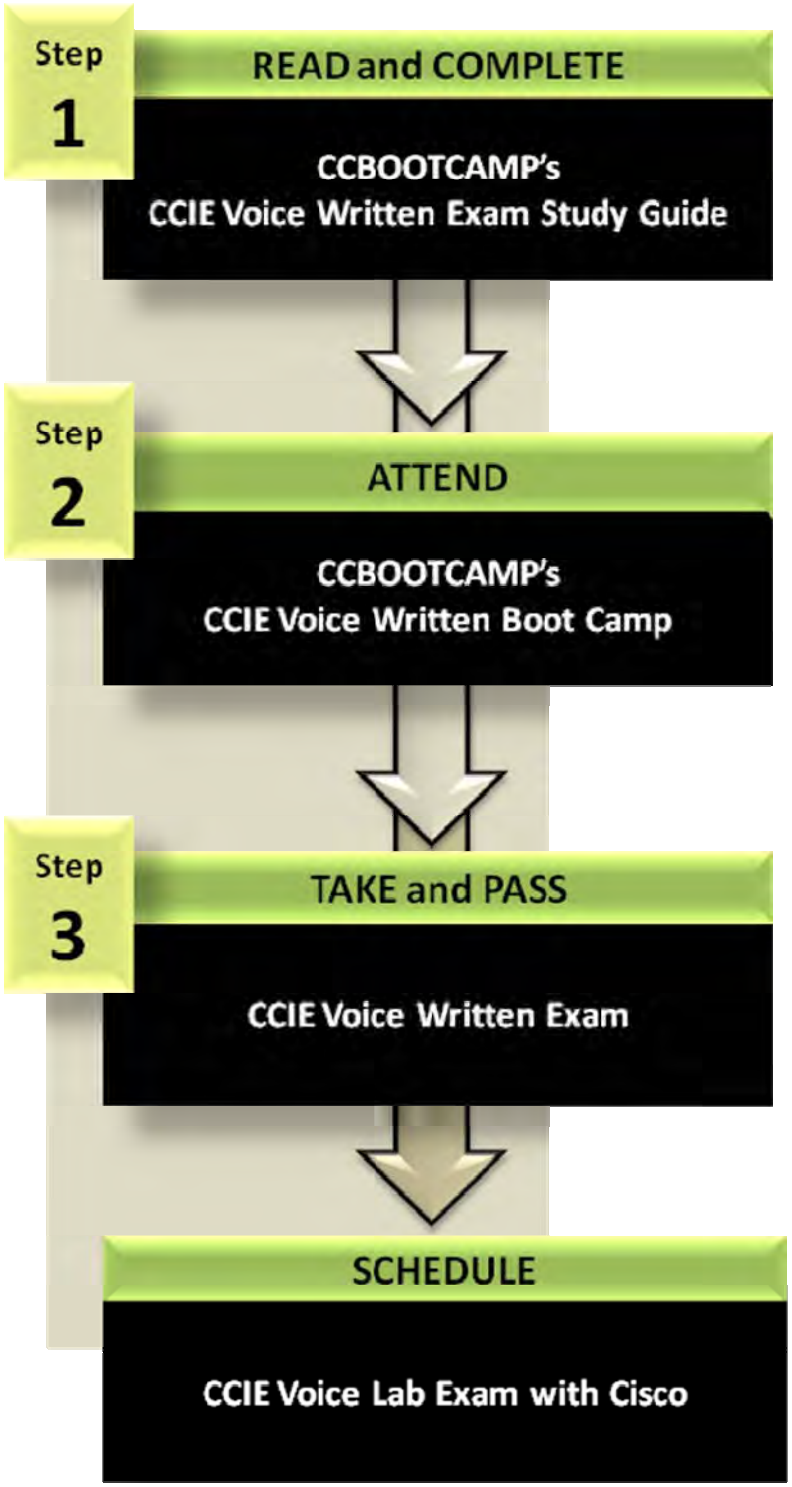
Appendix C – Training Flowchart

CCBOOTCAMP's Approach and Methodology for CCIE Voice Written



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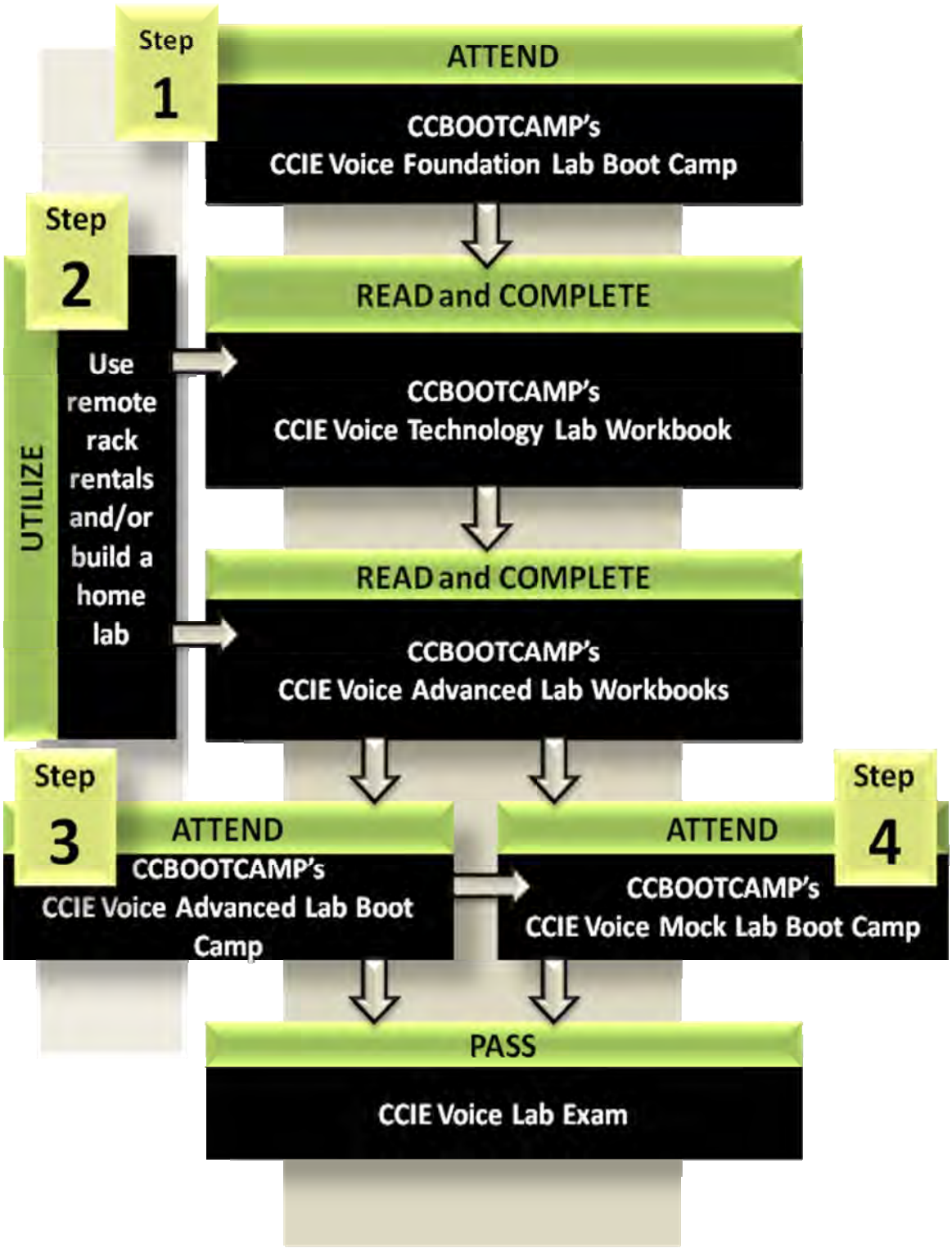
CCBOOTCAMP's Approach and Methodology for CCIE Voice Lab



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Appendix E – Pre-Lab Checklist

- Remove all possible work/life variables from your mind and your schedule to increase your chances, and to ensure you are physically and mentally ready for your exam!
- Arrive at the testing city/location at least one day prior to your scheduled exam. If your time zone is plus/minus more than six hours difference from the time zone of the Cisco office where you will be taking your exam, plan on arriving at least two days prior to the exam to adjust your body to the local time.
- Drive to the facility where your lab exam will be held in advance to be certain you know how long it will take you to get to the testing location on the day of your exam.
- Find a good, reliable place to eat breakfast near the testing facility.
- The night before your exam, be sure to eat a healthy dinner consisting of protein and complex carbohydrates. Stay away from greasy, fatty, and sugary foods. Also, if you want to eat meat, try to eat chicken or fish, though avoid red meat as it takes your body longer to digest.
- Get a good night's rest. Do not stay up the entire not trying to cram or study last minute materials. Do not take any type of sleep aid that could still be in your system the following day.
- Wake up at least ninety minutes before your exam start time. Shower, get dressed, and go eat breakfast.
- At breakfast, eat only healthy foods. No greasy, fatty, or sugary items should be consumed. Eat fruits, vegetables, oatmeal, etc.
- Arrive at the testing facility at least fifteen minutes prior to your scheduled exam time.
- Relax, breathe, focus, and trust your instincts.

Good Luck!

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