



Commissioning Firm Company Information

Virtual Commissioning Inc.

Cloud-Based Commissioning Services

IRVINE, CA • MOUNTAIN VIEW, CA • SAN DIEGO, CA

CHICAGO, IL • VIRGINIA/DC



COMPANY BACKGROUND

Virtual Commissioning Inc. is a small business founded to serve North American commissioning firms. Its primary focus is cloud-based commissioning software and services.

GEOGRAPHIC DISTRIBUTION

VirtualCx is located in Northern and Southern California, Chicago and in Virginia/DC.

PROJECT METRICS

The firm's principals and associates have performed over 250 commissioning projects in the US, Asia and Europe, in sizes ranging up to two million SF.

Specialties: hospitals, data centers, schools, pharmaceuticals, universities, office towers/complexes, coliseums, military bases, government facilities, correctional facilities, and more.

OPERATING PHILOSOPHY

- Paperless commissioning makes sense
- Cloud-based Cx projects are easier
- Cx documentation should be clear
- Cx software should be intuitive
- We support open source software

COMPANY SPECIALIZATIONS

- Cloud-based Commissioning
- Cx Documentation Services
- Test and Script Writing (Levels 1-5)
- New/Existing Building Commissioning
- LEED Commissioning
- Operations & Maintenance Assessments

PUBLICATIONS

- "Building Commissioning" - the largest Cx blog in the United States
- "VirtualCx Daily" - published on Twitter
- "VirtualCx on Twitter" - daily updates
- "Building Commissioning Newsletter" - free to subscribers
- "Cx 2.0" - we coined the term that describes moving commissioning to the cloud.



VirtualCx is a cloud-based focused firm

MEMBERSHIPS/ASSOCIATIONS

- California Commissioning Collaborative
- ASHRAE
- ASHE
- USGBC/LEED
- Association of Energy Engineers
- buildingSMARTalliance
- National Institute of Building Sciences
- Building Commissioning Association



FIRM BACKGROUND

HISTORY AND BACKGROUND

We started in the HVAC industry in 1964, and have compiled nearly 50 years of design, service, installation, controls programming, commissioning and project management experience.



Our first commissioning project was in 1997. Since then we have been commissioning projects throughout the United States, with clients and projects including the federal government, high-rise commercial office buildings, data centers, banks, museums, hospitals, labs, jails, transportation centers, schools and universities, and more.

Our customers include commissioning providers - ranging from one-person firms to national companies - as well as A&E firms, owners and general contractors. We are a full-time, independent third-party commissioning, and have commissioned or retro-commissioned over 250 projects in the US, Asia and Europe - ranging in size up to three (3) million square feet. Our project commissioning values have ranged from \$2500 to over \$3,000,000.

SPECIALIZATIONS AND LOCATIONS

Virtual Commissioning specializes in:

- Healthcare
- Data Centers
- Campuses
- Education
- Commercial Offices
- Industrial Processes

The background of our staff includes MEP designers, control technicians/programmers, industrial process specialists, professional project managers and professional engineers.

We are located in the following areas:

- Irvine, CA - Corporate
- Mountain View, CA
- San Diego, CA
- Chicago, IL
- Virginia/DC



COMPANY VISION AND APPROACH

Virtual Commissioning was founded on the concept of improving an already well-established commissioning process. Our vision on how to do that includes a methodology and approach to cost control that works effectively across projects and from company-to-company:

- Collaborative, professional team approach
- Clean and simple processes
- Thorough, consistent documentation
- Sustainable processes and approaches
- Concise and comprehensive test procedures
- Easy-to-use reports, tests and forms
- High quality, submittal-ready deliverables

PROCESSES AND GUIDELINES

VirtualCx processes are designed to be in compliance with one or more of the following commissioning guidelines:

- The Building Commissioning Association's (BCA) "Essential Attributes of Building Commissioning" (version 4/14/99)
- ASHRAE Commissioning Guidelines 0 and I
- The Association of Energy Engineers (AEE) "Functional Testing Guide"
- PECE's "A Practical Guide for Commissioning Existing Buildings" (4/99)
- Collaborative for High Performance Schools.

MEMBERSHIPS

- California Commissioning Collaborative (CCC), Advisory Council
- Building Commissioning Association (BCA), Member
- American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), Member
- Association of Energy Engineers (AEE), Affiliate Member
- U.S. Green Building Council (USGBC), Member
- buildingSMARTalliance, Member
- National Institute of Building Sciences, Member



CERTIFIED BUILDING COMMISSIONING FIRM

Virtual Commissioning is the first company in the US to be awarded the designation of Certified Building Commissioning Firm. This certification is designed:

- To raise the professional standards of firms engaging in building commissioning
- To improve the practice of building commissioning by encouraging professionals in a firm to engage in a continuing education program of professional development related to commissioning
- To identify firms with acceptable knowledge of the principles and practices of building commissioning through completing an application and fulfilling prescribed standards of performance and conduct
- To award special recognition to those firms who have demonstrated a high level of competence and ethical fitness for building commissioning

SPONSORSHIPS

The company sponsors the Building Commissioning blog, founded in 2007. It is the largest commissioning blog in the United States, and is published on four separate blogging platforms, along with VirtualCx on Twitter. The firm also publishes the Building Commissioning Newsletter.

FOUNDERS/DEVELOPERS OF Cx 2.0

Virtual Commissioning Inc. is the founding company of the Cx 2.0 movement. We came up with the phrase, which describes a cloud-based initiative to improve the user's experience. Too often we hear people say that they view commissioning as some kind of 'black box' - a frustrating experience in which owner's, designers and contractors feel little to no sense of control. We think it's time for a change.

Cx 2.0 includes our cloud-based project management software **VirtualCx**, which is all about improving the user experience, including making the commissioning process - along with its' data - transparent, open and available. Cx 2.0 is Sustainable. It is designed to be 100% paperless. Features include unlimited seats (team members) and file sizes.

Cx 2.0 includes **VirtualCx Testing+**, iPad-friendly checklists and test forms, which include voice integration. Our test forms are not only practical and easy-to-use, but also designed to considerably speed up the field-testing process.

Virtual Building Browser is the latest addition to the Cx 2.0 family - an asset-based, patent-pending information system designed for the life of the building.



SOFTWARE OVERVIEW

VIRTUAL COMMISSIONING INC.

Virtual Commissioning specializes in software development and independent, third-party services for the building commissioning and building operations and maintenance segments. The software products provide cloud-based access for in-depth building information, starting with pre-design and extending throughout the building life cycle.



The firm is owned and managed by experienced commissioning professionals, holding numerous industry credentials. The group has commissioned hundreds of projects, including LEED Platinum, ranging as large as 3M SF. Members of the team have practical design and hands-on field experience, ranging from seven to 40 years.

GOAT TREE LABS INC.

Goat Tree Labs™ is a newly formed company founded to create cloud-based software applications for buildings and facilities. Our design philosophy is “simple, easy and intuitive.”



VIRTUALCX

In 2009, Virtual Commissioning released a cloud-based commissioning project management software tool, called **VirtualCx™**, designed to help ease the difficulty of the heavy documentation requirements of commissioning. VirtualCx has received highly favorable reviews based on its simplicity, low training requirements, and other features. The first well-known firm to deploy VirtualCx on one of their projects was Google, in 2010. Other high profile users include Intuit, Apple, DPR Construction, Los Angeles County, Camp Pendleton Marine Base, Southern California Edison, and more.



VIRTUAL BUILDING BROWSER

Virtual Building Browser™ is a new and exciting real-time asset management product. It is currently in development, slated for a 2013 release. The cloud-based software focuses on the interests and needs of building O&M teams, and is designed to be deployed on new construction projects or in existing buildings. For new construction projects, it starts in pre-design phase, and is then turned over to the owner to be utilized in on-going asset management. In existing buildings, O&M teams use it as a daily tool. Virtual Building Browser features virtual reality tours and individual-asset associations with documents and information.

