

CXONE TERMS AND ACRONYMS

This document defines terms and acronyms used in CxOne. Some terms are unique to CxOne, most are precise CxOne definitions for general software engineering terms. Common dictionary, computer science, project management, and engineering terms employed by CxOne are not listed here unless a precise definition is critical for their use in CxOne.

Cross references to terms in this document are denoted by *italicized* text. References to CxOne documents are by file name.

Term	Acronym	Definition / Description
Acceptance Test		Formal test defining acceptance criteria for a <i>release</i> .
Activity		An element of work performed during a project, normally associated with an expected resource usage. The terms <i>activities</i> and <i>tasks</i> are somewhat interchangeable, although the PMBOK defines <i>tasks</i> as resulting from the breakdown of <i>activities</i> .
Activity Model		Specifies work or workflow by showing and describing the states and flow of control of the system or process.
Ad Hoc Testing		See <i>informal testing</i> .
Agent		In a <i>project charter</i> , responsible for initiating, sponsoring, and supporting the project. Also see <i>project sponsor</i> .
Algorithmic Estimation		See <i>statistical estimation</i> .
Analogy Estimation		Creating estimates by using expert judgment to compare proposed work to historical data for similar past work. Often coupled with <i>fuzzy logic</i> techniques.
Architecture		Top level overview and plan for a software system. See <i>CxStand_Design</i> for more information.
Artifact		The tangible result of work performed. May be used at any level of detail, e.g., the artifact resulting from a task might be a document, while the artifact resulting from a project might be a software system.
Assessment		A review of the state or practices of a project or organization, often performed by an independent entity.
Audit		Sometimes used as a synonym for <i>assessment</i> , usually in a more formal and independent context.
Author		For a <i>review</i> , the person assigned to represent the author viewpoint for an <i>artifact</i> . The author is normally the primary contributor to the creation of the <i>artifact</i> .
Authority		Responsible for funding and championing a project, the <i>project sponsor</i> .
Automated Testing		The use of tools and technology to encode, execute, and note results of <i>test cases</i> on a <i>system</i> without human intervention.

Term	Acronym	Definition / Description
Change Control Board	CCB	The group of individuals responsible for processing and making final decisions on <i>change requests</i> to the artifacts under <i>change control</i> .
Change Control Plan	CCP	Documents the types and levels of change control used on project artifacts.
Change Management		Systematic management of feature, scope, or other requested changes to an <i>artifact</i> or <i>project</i> . Part of both <i>configuration management</i> and <i>corrective activity management</i> .
Change Request	CR	A request to change an item under <i>change control</i> . Usually a request to add, modify, or remove a system requirement based on a business need. May also be a request to change project planning. Change requests are a type of <i>corrective activity management</i> item.
Checklist	CxCheck	CxOne checklist material type. Short list of brief items that provide guidance when creating <i>artifacts</i> or performing actions. See <i>CxOneOverview</i> for description.
Class Model		An internal object oriented view of a system showing the static class structure.
Code and Fix Lifecycle		The system is started from a general concept and evolved through some combination of informal design, code, debug, and test methodologies until it is ready to release
Coding		The core activity of <i>construction</i> ; involves creating source code instructions and/or data that define the behavior of a software system.

Term	Acronym	Definition / Description
Coding Standard		Synonym for <i>Construction Standard</i> .
Collaboration Model		Specifies the set of object roles and their interactions by showing and describing the messages exchanged. The focus is on the relationship between roles.
Collaborative Construction	CCON (see-kahn)	A technique used during construction where a small group of 2-6 engineers work together closely to incrementally construct system functionality. Marked by frequent, informal communication, iterative, code-oriented <i>low level design</i> techniques, and shared ownership of source code and test responsibilities.
Compatibility Test		See <i>configuration test</i> .
Component		Software component. An abstraction that refers to a part of a software system.
Component Test		Test of a software component in isolation from its <i>system</i> .
Cone of Uncertainty		The amount of possible error in a software project estimate, which is very large in the early stages of a project and shrinks dramatically as the project nears completion.
Configuration Item	CI	A description of an artifact or group of artifacts that is identified by the configuration management plan. Configuration items are used to apply CM policies and processes to organizational and project artifacts.
Configuration Management	CM	Activities and tasks related to defining, documenting, releasing, and maintaining the integrity of information in or about a system.
Configuration Test		Test of a software system to determine behavior with different configurations, platforms, environments, etc.
Construction		Software construction. Implementing a <i>design</i> to create a software system using technology. Also denotes the construction CKA. See <i>CxStand_Construction</i> for more information.
Construction Environment		See <i>development environment</i> .
Construction Lead		Responsible for construction, integration, product builds, technology issues, development environment, and deployment issues.
Construction Standard		A standard describing detailed conventions, and styles that developers should follow when creating a system's source code or related construction artifacts. <i>Coding Standard</i> is a common synonym.
Construction Test Environment		See <i>local test environment</i> .

Term	Acronym	Definition / Description
Construction Testing		A best practice that calls for several types of testing to be performed during the <i>construction</i> of a component, by the engineer(s) creating it, to verify additions or modifications both at the component level and in the context of the system.
Construx Knowledge Area	CKA	The basis for organizing CxOne and other Construx software engineering resources. Based on the <i>SWEBOK</i> organization of software engineering. Sometimes referred to as 'CxOne Knowledge Areas'.
Corrective Activity Management	CAM	The management of identified <i>change requests</i> , <i>defects</i> , <i>risks</i> , and <i>issues</i> . CAM is a CxOne abstraction allowing reuse of materials and processes for the management of project work not explicitly identified in the project plan.
CxOne	CxOne	Construx's lightweight, tailorable, scalable, framework for software engineering knowledge management, process definition, and material reuse.
Database Lead		Projects with large and/or critical database components may assign a <i>database lead</i> responsible for <i>design</i> and <i>construction</i> issues relating to the database portions of the system.
Decomposition Estimation		See <i>bottom-up estimation</i> . Refers specifically to creating estimates for the decomposed parts of a system.
Defect		A failure of a <i>system</i> or <i>process</i> to perform as specified, or expected. A behavior or representation that does not conform to project plans or goals. Deviation from the expected or defined representation of information in an <i>artifact</i> . Nonconformance of a <i>system</i> , <i>process</i> , or <i>artifact</i> to a standard. Defects are a type of <i>corrective activity management</i> item.
Defect Management		The representation of identified defects and the planning, tracking, and control related to ensuring all identified defects are managed. Part of both <i>quality</i> and <i>corrective activity management</i> .
Defect Report		A request to modify an artifact due to lack of conformance to a standard, requirement, project need, or a failure/error.
Deliverable		Any artifact or set of artifacts that are delivered as output from a <i>project</i> or other well defined set of work.
Deployment		The process and/or act of installing and readying a software system for use, including integration and customization that is specific to a particular site.
Deployment Lead		Projects with complex deployment needs may assign an individual to plan and oversee execution of <i>deployment</i> and possibly operational and maintenance related issues.

Term	Acronym	Definition / Description
Deployment Plan		A plan specifying the method of releasing a system. Includes items like target platforms, configuration to release, etc.
Design		Software design. The creation of abstracted models and plans for implementing requirements in software. Also denotes the design CKA. See <i>CxStand_Design</i> for more information.
Design Lead		Responsible for the system architecture and overseeing design activities.
Design to Tools		The content of a system is determined by what is directly supported by existing software tools
Desk Check		An <i>informal review</i> in which the <i>author</i> asks one or more people to read an <i>artifact</i> with the intent of finding <i>defects</i> .
Detailed Design		Commonly used term that captures parts of <i>high level design</i> and <i>low level design</i> . See <i>CxStand_Design</i> for more information.
Detailed Schedule		Fine grain project schedule that includes tasks, estimated effort, assigned resources, dependencies, etc. Usually created in a bottom-up fashion from a <i>work plan</i> . Normally implemented as a sliding window that covers a <i>project's head-lights</i> . Compare to <i>business schedule</i> .
Developer		Synonym for software engineer, usually used when referring to design and construction activities.
Developer Integration Test	DIT	<i>Integration test</i> performed by a developer in the <i>system test environment</i> after a <i>project build</i> as part of releasing functionality.
Development Environment	DE	The hardware and software environment that <i>construction</i> work occurs in.
Diagram		A graphical representation of a system, process, or other information.
Downstream		Used to refer to project activities and artifacts that occur later in a project lifecycle, often after significant construction has begun. Includes coding, low level design, testing, deployment, and system use. See <i>upstream</i> .
Draft		An artifact under revision control but not yet under <i>change control</i> .
Earned Value	EV	A scheduling technique for tracking variance of actual performance to planned performance.
Earned Value Management	EVM	The act or discipline of managing projects utilizing <i>earned value</i> techniques and practices.
Editor		For <i>inspections</i> , performs any necessary rework on artifacts.

Term	Acronym	Definition / Description
Engineering Discussion		A brainstorming meeting designed to frame an <i>issue</i> and seek solutions for it. If materials are prepared ahead of time for review by participants the meeting may be considered a <i>preview</i> .
Engineering Management	EM	Software engineering management. Planning, staffing, tracking, and controlling execution of software projects, along with team and organizational management. Also denotes the engineering management CKA. See <i>CxStand_EngineeringManagement</i> for more information.
Engineering Process		Software engineering process. Defining how software engineering activities occur. Also denotes the engineering process CKA. See <i>CxStand_Process</i> for more information.
Estimate		The output of an estimation process, containing a description of inputs, assumptions, methodology, and the resulting estimate values. Depending on purpose and formality an <i>estimate</i> 's packaging can range from a document containing complete output of several different estimation techniques (see <i>project estimate</i>) to a terse summary (see <i>task estimate</i>).
Estimation		The process of determining the size, cost, schedule, effort, and/or quality <i>estimates</i> for a project. It is best to use as many different estimation techniques as possible when creating <i>estimates</i> , and to create <i>estimates</i> regularly through the life of a project.
Evaluation	CxEval	CxOne evaluation material type, see <i>CxOneOverview</i> for description.
Evolutionary Delivery Lifecycle		A combination of the <i>evolutionary prototyping</i> and <i>staged delivery</i> lifecycles.
Evolutionary Prototyping Lifecycle		A system concept is evolved through iteration until the system is ready for delivery.
Expert Judgment		<i>Estimation</i> technique that relies on participants creating estimates based on personal experience and heuristics. Expert judgment can be used stand-alone, but is always best when combined with analogy, statistical, and decomposition estimation techniques.
Explicit Change Control		Refers to <i>artifacts</i> managed directly by a <i>change control board</i> . Requirements and project plans are often under explicit change control. Compare to <i>implicit change control</i> .
Explicit Risk Management		Synonym for <i>extrinsic risk management</i> .

Term	Acronym	Definition / Description
Extrinsic Risk Management		Formal <i>risk management</i> techniques that are added to a project or processes to explicitly manage risks. An example would be using a top 10 risks list to explicitly identify, prioritize, plan mitigation, and report outcome of risk management. Compare to <i>intrinsic risk management</i> . CxOne uses <i>corrective activity management</i> techniques to handle some details of <i>extrinsic risk management</i> .
Feature Test		Testing a specific subset of <i>system</i> functionality after construction of the functionality is completed.
Formal Testing		Execution of testing using documented <i>test cases</i> . Compare to <i>informal testing</i> .
Frequently Asked Question	FAQ	Documents commonly asked questions and their answers.
Function Point		Size measure for a software system based on abstracted measure of system functionality.
Functional Requirement		Functionality that must be built into the system to satisfy the business requirements. Also known as a <i>what requirement</i> .
Functional Testing		Comparing a system's behavior against expected behavior, without concern for the internal workings of the system.
Fuzzy Front End		Term coined by Steve McConnell to describes the initial inception phases of a project. CxOne defines the start of the fuzzy front end as the point someone starts thinking about a project and working on chartering it, and the end as the point at which the charter is approved and the project begins.
Fuzzy Logic		A relative ranking technique for describing characteristics. Often used in conjunction with items that contain uncertainty, like estimates. A general example is to take three buckets called small, medium, and large. Items are assigned to each bucket, and then the bucket values are used as stand-ins for a possible range of quantitative values. One common characteristic of fuzzy logic buckets is that the high end value from one bucket overlaps the low end value of the next bucket.
Gate		A set of defined criteria that must be completed for an artifact or even to be complete, or to allow a process or workflow to move from one phase to the next.
Gate Checklist		A special checklist type that defines and supports verification of a <i>gate</i> .
Goals		The desired results of a <i>project</i> , <i>process</i> , or <i>activity</i> . In general, software projects exist to meet business or organizational goals through the creation of software. Goal and <i>objective</i> are synonyms in CxOne.

Term	Acronym	Definition / Description
Guide	CxGuide	CxOne guide material type. Provides detailed, educational information for creating an <i>artifact</i> or performing an action. See <i>CxOneOverview</i> .
Happy Path		See <i>nominal path</i> .
HiFi Prototype		See <i>high fidelity prototype</i> .
High Fidelity Prototype		Mockup of a system using a software or technology based tool, usually one with a <i>RAD environment</i> , e.g., Visual Basic or Delphi.
High Level Design	HLD	Design level between <i>architecture</i> and <i>low level design</i> . Focuses defining the details of the software solution at levels abstracted from their construction. See <i>CxStand_Design</i> for more information.
How Requirement		Often a synonym for <i>non-functional requirement</i> . Sometimes used to refer to design issues.
How Well Requirement		Synonym for <i>non-functional requirement</i> .
Implementation		Used as a synonym for both <i>construction</i> and <i>deployment</i> .
Implementation Lead		Sometimes used as a synonym for <i>construction lead</i> and/or <i>deployment lead</i> .
Implicit Change Control		Artifacts under implicit change control are not managed directly by the CCB, but changes to the artifacts are controlled by upstream artifacts that are directly managed by the CCB. Source code is often under implicit change control. Compare to <i>explicit change control</i> .
Implicit Risk Management		Synonym for <i>intrinsic risk management</i> .
Inch-Pebble		Synonym for <i>miniature milestone</i> .
Informal Review		Any form of review, e.g. <i>walkthrough</i> or <i>desk check</i> , other than an <i>inspection</i> .
Informal Testing		Expert judgment testing that is conducted without the use of documented test cases. Compare to <i>formal testing</i> .
Inspection		A formally defined review process.
Inspector		A reviewer in the inspection process
Institute of Electrical and Electronics Engineers	IEEE	Electrical engineering organization whose Computer Society is the world's largest professional organization for computer and software engineers. Developers of the SWEBOK www.ieee.org
Integrated Development Environment	IDE	Refers to a software tool that combines one or more programming languages with editing and debugging tools. Often IDEs will also include reusable software components.
Integration		The activity of combining multiple software components and making them work together.

Term	Acronym	Definition / Description
Integration Test		Test focused on verifying functionality and stability of a software system or component after changes or additions.
International Organization for Standardization	ISO	An international organization established to promote the development of standards.
Intrinsic Risk Management		Performing risk management as part of all project and organizational processes. Intrinsic risk management includes activities like risk-focused project and issue management and selecting lifecycles and processes that create environments which naturally manage risks.
Issue		Something that needs to be resolved. An <i>issue</i> is a catch-all term for a unit of work that will impact the project if not addressed, and which is not captured by project planning (work planning, scheduling, etc.) or a formally identified change, defect, or risk. Issues are a type of <i>corrective activity management</i> item.
Issue Management		The management of <i>issues</i> on a project. Part of <i>corrective activity management</i> .
Item		Sometimes used as a synonym for <i>CAM item</i> ; representing a <i>change request</i> , <i>defect</i> , <i>risk</i> , or <i>issue</i> .
Joint Application Development	JAD	A facilitated workshop that produces a draft set of requirements. JAD sessions must involve customer representatives.
Knowledge Management	KM	A mechanism or method of retaining, reusing, and providing people with useful and relevant information.
Lifecycle		A model of all <i>activities</i> between the initial idea for a <i>system</i> and its last use, often heavily focused on the creation of the <i>system</i> as part of a project. Lifecycles are quite varied, but normally separate <i>activities</i> into <i>phases</i> that reflect progression of time and/or grouping of similar activities. Projects select and customize lifecycles to define ordering and optimize performance of <i>activities</i> .
Lines of Code	LOC KLOC	Size measure for a software system that captures the number of lines of source code in the system. Normally created by a tool that seeks to count non-comment, non-blank source code instructions. KLOC is often used for ‘thousands of LOC’.
Link		Reference to content inside of CxOne, usually denoted as an italicized file name. Compare to <i>pointer</i> .
Lite	Lite	CxOne concept, see <i>CxOneOverview</i> for description.
Local Build	LB	<i>Build</i> performed in a <i>local development environment</i> . Compare to <i>project build</i> .

Term	Acronym	Definition / Description
Local Development Environment	LDE	A <i>development environment</i> that is local to an individual engineer. This is normally the machines in an engineer's office. Compare to <i>build environment</i> .
Local Test Environment	LTE	The portion of the <i>local development environment</i> that supports <i>construction testing</i> .
LoFi Prototype		See <i>low fidelity prototype</i> .
Low Fidelity Prototype		A mockup of a system using pencil and paper, post-its, or other non-technology based tools.
Low Level Design	LLD	Design level between <i>high level design</i> and <i>construction</i> . Defines design in a way that directly supports construction. See <i>CxStand_Design</i> for more information.
Macro Estimation		Refers to estimating the whole of something. See <i>top-down estimation</i> . Also a synonym for <i>project estimate</i> .
Maintenance		Software maintenance. Deploying, updating, correcting, evolving, and operating software systems. Also denotes the maintenance CKA. See <i>CxStand_Maintenance</i> for more information.
Maintenance Plan		A plan specifying the method for maintaining the system after its initial release.
Management by Walking Around	MBWA	Term used to describe set of management techniques focused on frequent, informal communication with team members. MBWA can be used in conjunction with more formal techniques to help manage project risks, track actual progress to plan, and facilitate quick issue resolution.
Manual Testing		Executing of <i>test cases</i> by a human operator exercising a <i>system</i> and noting results.
Material		Materials support the creation, review, and maintenance of different types of artifacts. See <i>CxOneOverview</i> for additional information.
Metric		Data collected or derived from a project or organization to determine if it possesses the desired attributes.
Micro Estimation		Refers to estimating the details of something. See <i>bottom-up estimation</i> . Also a synonym for <i>task estimate</i> .
Microstone		Synonym for <i>miniature milestone</i> .
Milestone		A waypoint in a schedule. Often represents a notable accomplishment or date.
Milestone Release		A <i>release</i> that is produced for a milestone in a project plan.
Miniature Milestone		A milestone capturing a collection of short, coherent tasks that requires a couple of days or less to complete. For project tracking purposes completion is binary; a <i>miniature milestone</i> is considered to be either done or not done, but never partially done.

Term	Acronym	Definition / Description
Miniature Milestones		Plural for <i>miniature milestone</i> . Also used to describe the best practice of breaking a project's tasks down into a rolling window of <i>miniature milestones</i> . See <i>CxBest_MiniatureMilestones</i> .
Mini-milestone		Synonym for <i>miniature milestone</i> .
Model		A representation of a system or process that uses <i>diagrams</i> and abstraction to describe characteristics of the systems.
Modeling		The practice of using models in <i>requirements</i> and <i>design</i> activities.
Moderator		Leads an <i>inspection</i> meeting.
Native Risk Management		See <i>intrinsic risk management</i> .
Nominal Path		Execution path for software system that performs functionality without encountering exceptional conditions.
Non-functional Requirement		Captures requirements such as compatibility, usability, performance, reliability, etc. Also known as the <i>how</i> or <i>how well requirements</i>
Objectives		Synonym for <i>goals</i> .
Operations Plan		A plan specifying how a system will be utilized after deployment along with other information such as roles, responsibilities, maintenance schedules, etc.
Parametric Estimation		Estimation using an algorithmic model, normally as part of a software tool. Models work by taking input factors and calculating outputs with algorithms based on historical data.
Pattern	CxPattern	CxOne pattern material type. A predefined model or template used to create an artifact or accomplish a goal. See <i>CxOneOverview</i> for description.
Perspective		During an <i>inspection</i> , an assigned focus used to increase the likelihood that each inspector will find unique issues or to focus attention on particular aspects of an artifact.
Phase		A translation of a group of <i>activities</i> onto a portion of a <i>life-cycle</i> or a period of time defined by a <i>schedule</i> .
Phased Estimation		The practice of creating <i>estimates</i> throughout a project's lifecycle, utilizing groups of estimation techniques optimized for each lifecycle phase.
Planning and Tracking Lead	PTL	Directs overall flow of technical work on the project. Directly responsible for project planning and overseeing the execution of work breakdown, estimation, scheduling, and tracking.
Pointer		Reference to material outside of CxOne, usually captured in a <i>CxRef</i> file. Compare to <i>link</i> .

Term	Acronym	Definition / Description
Postmortem		A phase at the end of a software project during which project team members evaluate the project and learn lessons that can be applied to the next project. "Postmortem" also refers to the report created during the postmortem phase.
Preview		An <i>engineering discussion</i> where materials have been prepared ahead of time for review and discussion in a meeting. The goal is to probe proposed solution to detect <i>defects</i> and suggest alternatives. <i>Previews</i> differ from <i>reviews</i> in that they are solution oriented rather than detection oriented.
Process		A standard method for performing an <i>activity</i> or <i>task</i>. Processes may or may not be documented; a defined process implies that it is documented. Processes are often supported by materials, tools, conventions, and other infrastructure. The terms process may also refer to the execution of the activities and tasks that make up the process, e.g., "the outcome of the build process".
Process Flow		A process model which defines the materials, structure, techniques, actions, events, and other elements necessary to implement a lifecycle, workflow, or methodology. CxOne uses <i>process flow handbooks</i> to guide use of CxOne materials with common lifecycles and methodologies.
Process Flow Handbook	CxProcess	CxOne material type that documents the use of particular <i>process flows</i> . See <i>CxOneOverview</i> for description.
Product		Sometimes used in CxOne as a synonym for the 'output of a project' meaning of <i>system</i> (e.g., when referring to product quality separate from project quality).
Product Release		A <i>release</i> that is produced for distribution and/or deployment to end users.
Progressive Elaboration		PMBOK term for iteratively defining a project's requirements, moving from the general to the specific as the project is underway. Most software lifecycles and projects employ some degree of progressive elaboration. Relates to <i>project headlights</i> and <i>rolling wave planning</i> .
Project		A temporary endeavor undertaken to create a unique product or service. Normally used with CxOne to refer to a project creating a software <i>system</i> .
Project Build	PB	<i>Build</i> performed as part of a shared project build process, usually in a dedicated <i>build environment</i> . Compare to <i>local build</i> .

Term	Acronym	Definition / Description
Project Business Manager	PBM	Responsible for successful business outcome of the project. In charge of project staffing, acquiring resources for the project, personnel issues, top-level work assignments, and client interaction. Is the top decision maker on the project, but normally defers technical decisions to the appropriate technical lead.
Project Charter		Used to inception and define a project. Documents the objectives, business case, risks and assets, resources, and constraints of a project.
Project Estimate		An <i>estimate</i> that characterizes work on an entire project or large portion of a project. Project estimates are often the result of significant effort to predict a large phase of a project, and utilize several different techniques. Compare to <i>task estimate</i> .
Project Headlights		The concept that there is a sliding window of time that a project's plan can be clearly defined with confidence. Beyond this "lighted" area, project planning is less precise and entails more uncertainty. Derives from the phrase "don't drive beyond your headlights". See <i>rolling wave planning</i> and <i>CxBest_ProjectHeadlights</i> .
Project History		Summarizes the significant information and statistics about an entire project.
Project Log		Describes significant information and statistics about each phase of a project.
Project Management	PM	The act of managing a project, including planning, tracking, control, and reporting activities.
Project Management Body of Knowledge	PMBOK	PMI developed definition of the essential knowledge related to the science and discipline of project management.
Project Management Institute	PMI	Professional organization for project managers. Developers of the PMBOK. www.pmi.org
Project Manager	PM	Often used as synonym for <i>project business manager</i> , especially when one person is playing both <i>project business manager</i> and <i>planning and tracking lead</i> roles. Also used to refer generically to an individual playing a management role on a project.
Project Plan	PP	The controlling document for a project that defines how the project will be executed.
Project Reviewer		Performs reviews and audits on projects using personnel who are not participating on the project. Ensures processes are being followed and risks are being identified and managed.

Term	Acronym	Definition / Description
Project Sponsor		Individual or entity responsible for sponsoring a <i>project</i> . Synonym for <i>authority</i> in a <i>project charter</i> . Initiates and staffs a project, directly oversees the <i>project business manager</i> . Ensures that the project is meeting the technical and business needs of external and internal <i>stakeholders</i> .
QA Lead	QAL	Responsible for a project's process and product quality.
Quality		Software quality CKA. Covers activities designed to ensure that a system and related artifacts have the desired characteristics and conformance to requirements and standards. See <i>CxStand_Quality</i> for more information.
Quality Assurance	QA	Often used as synonym for the <i>quality</i> CKA. Also a subset of the <i>quality</i> CKA covering prevention of <i>defects</i> .
Quality Assurance Plan	QAP	See <i>quality plan</i> .
Quality Control	QC	A subset of the <i>quality</i> CKA covering detection of <i>defects</i> . Usually consists of <i>reviews</i> and <i>testing</i> .
Quality Plan	QP	Documents the quality methods and practices that will be used on a project to support QA and QC, along with coverage plans for project artifacts. Often delegates testing details to the <i>test plan</i> .
RAD Environment		Refers to a software tool the combines one or more programming languages with an <i>IDE</i> and a toolbox of modular software user interface components.
Rapid Application Development	RAD	A collection of software development techniques that focuses on user interface prototyping techniques and tools to create applications in an incremental fashion.
Reading Inspection		An inspection in which all components of the full inspection process are done except the inspection meeting.
Reference	CxRef	CxOne reference material type, see <i>CxOneOverview</i> for description.
Release		A software release. Providing a deployable version of a software <i>system</i> to a customer, e.g., test group, client, customer, etc.
Release Management		The identification, packaging, and delivery of the elements of the product to an external or internal customer.
Release Test		Test to ensure software is ready for a <i>release</i> .
Requirement		A detailed description of what the software is supposed to do
Requirements		Software requirements. Determining and capturing what a software system should do. Also denotes the requirements CKA. See <i>CxStand_Requirements</i> for more information.
Requirements Lead		Responsible for defining, maintaining, and tracing product requirements. Ensures proper end-user documentation is developed from the requirements.

Term	Acronym	Definition / Description
Review		A defined process in which people who are not the author of an artifact look over it with the intent of finding issues. Reviews range in formality from <i>desk checks</i> to <i>inspections</i> .
Reviewer		A person who participates in a review to identify issues in an artifact
Revision		An instance of a specific artifact, generally as noted by an automated system.
Revision Control	RC	The identification, storage, and management of projects artifacts and the revisions over time of those artifacts. Usually performed to artifacts stored in electronic form, through an automated system.
Rework		Any unforeseen or unplanned activity necessary to bring an <i>artifact</i> into conformance with project needs. Compare to <i>update</i> .
Risk		An undesirable outcome. Risks on projects generally refer to the captured representation of a possible future negative impact to a project's scope, budget, schedule, or quality. Risks are a type of <i>corrective activity management</i> item.
Risk Analysis		Assesses <i>risks</i> for the likelihood and impact of occurrence.
Risk Identification		The elicitation and determination of current <i>risks</i> .
Risk List		A technique for <i>extrinsic risk management</i> that documents current and previous <i>risks</i> . Normally includes analysis information and mitigation plans.
Risk Management		A process or activity involving formal or informal means of identification, control, and elimination of project risk. Risk management may be explicit, or may be implicit in other activities (see <i>intrinsic and extrinsic risk management</i>). Managing identified risks is part of <i>corrective activity management</i> .
Risk Mitigation		The planning or steps taken to minimize either the probability or impact of a <i>risk</i> .
Rolling Wave Planning		Planning a project, often with an iterative lifecycle, with a sliding window of visibility. Items closer to the present are planned and tracked with greater detail than items further in the future. See <i>project headlights</i> .
Sample	CxSample	CxOne sample material type, see <i>CxOneOverview</i> for description.
Scenario		A narrative description of an activity or activities which take the form of a story

Term	Acronym	Definition / Description
Schedule		General term for a plan that defines calendar timing, re-sources, dependencies, and other details for <i>tasks</i> necessary to complete a project or part of a project. CxOne defines two major classes of schedules, <i>business schedules</i> and <i>detailed schedules</i> .
Scribe		Records issues during an <i>inspection</i> or other formal meeting.
Sequence Model		Specifies the set of object roles and their interactions by showing and describing the messages exchanged. The focus is on the timing of messages.
Single Step Test		Test conducted in a debugging environment by stepping through the source code while executing.
Smoke Test		Test conducted to prove a <i>build</i> .
Software Change Request	SCR	See <i>change request</i> .
Software Configuration Management	SCM	See <i>configuration management</i> .
Software Development Plan	SDP	Sometimes used as a synonym for <i>project plan</i> on software focused projects.
Software Engineering Body of Knowledge	SWEBOK	IEEE led industry effort to define a body of knowledge for software engineering. Is intended to support defining software engineering as a profession. CxOne bases its top-level organization on SWEBOK. www.swebok.org
Software Engineering Lab	SEL	NASA lab developed to improving the software process used to develop systems at Goddard.
Software Engineering Process Group	SEPG	Provides experienced and objective technical oversight from individuals who are not directly involved in the project. Also provides process improvement input for projects and the organization.
Software Requirements Specification	SRS	A text based document that captures the requirements for a software system. Often used in conjunction with other requirements techniques such as <i>modeling</i> and <i>prototyping</i> to provide a complete view of system requirements.
Spiral Lifecycle		A set of mini-projects cumulating in final delivery. Each mini-project focuses on addressing the current major project risk(s).
Sponsor		Synonym for <i>project sponsor</i> .
Staff Days		A measure of effort indicating how much work needs to take place on an activity or artifact. Is often used to differentiate from <i>calendar days</i> . Also applies to other units of time.
Stage		Synonym for <i>Phase</i> . Sometimes a hierarchy may be defined with phases that are made up of stages.

Term	Acronym	Definition / Description
Staged Delivery Lifecycle		Project development occurs in stages, where the most critical functionality is delivered first
Stakeholder		Individuals or entities with significant investment in the outcome of a project. Normally includes clients, customers, internal/external organizations affected by the project, etc.
Standard	CxStand	CxOne standard material type. Defined terminology, processes, policies, knowledge, and/or guidelines. See <i>CxOne-Overview</i> for description.
Statistical Estimation		Estimation techniques that utilize historical data coupled with a statistically derived model to provide output estimates based on input characteristics. Most often use size as an input to predict effort and time. Works best when calibrated with relevant historical data and influence modifiers.
Storyboard		A sequence of images which depict a <i>scenario</i> or <i>use case</i> .
Strategy		The way a problem or issue is approached.
System		A functional entity, normally composed of software, hardware, and closely related operational processes. In CxOne, <i>system</i> is often used to refer to the software portions of a system. Also used in CxOne to refer to the end output of a project, i.e., the system a project was chartered to create. This is useful when discussing attributes of a the <i>system</i> separate from attributes of the <i>project</i> .
System Test		Test focused on verifying operational behavior of the entire system, using a <i>project build</i> and the <i>system test environment</i> .
System Test Environment		Environment that simulates operational environment and conditions as closely as possible.
Task		An atomic unit of work on a project. See <i>activity</i> .
Task Estimate		An <i>estimate</i> for a particular task. Depending on purpose and formality these <i>estimates</i> are often created and captured as part of ongoing planning and tracking and incorporated in <i>work plans</i> and <i>detailed schedules</i> .
Template	CxTemp	CxOne template material type. Provides an outline, framework, or container for creating an <i>artifact</i> . See <i>CxOneOverview</i> for description.
Test		See <i>Testing</i> . May also be used to describe an individual <i>test case</i> .
Test Activity		A specific test procedure created by combining one or more <i>test techniques</i> and <i>test types</i> .

Term	Acronym	Definition / Description
Test Case	TC	A description of inputs, execution instructions, and expected results, which are created for the purpose of determining whether a specific software feature works correctly or a specific <i>requirement</i> has been satisfied.
Test Case Specification	TCS	Documents the set of <i>test cases</i> needed to verify one or more product features.
Test Design		Provides a bridge between the <i>test cases</i> and the product's <i>requirements</i> and <i>design</i> . Test design is analogous to software design, and is used when test solutions require a significant amount of analysis and defined structure. Test design is not software design necessary to support testing (e.g., design of an automated test framework).
Test Design Specification	TDS	Documents the <i>test design</i> for a group of <i>test cases</i> .
Test Level		Synonym for <i>test type</i> .
Test Plan	TP	Documents the scope, approach, resources, test items, and schedule of the testing activities.
Test Technique		Strategy and approach to a <i>test activity</i> .
Test Type		Standard definitions capturing the what, how, why, and when of a <i>test activity</i> .
Testing		Software testing CKA. Dynamic execution of software to detect <i>defects</i> . See <i>CxStand_Testing</i> for more information.
Top Level Schedule		See <i>Business Schedule</i> .
Top-Down Estimation		Estimating a system by deriving values for the entire system, and then splitting the total values among decomposed pieces of the system.
Unified Modeling Language	UML	A defined set of rules, concepts, and notations used to specify object-oriented systems
Unit Test		Lowest level <i>component test</i> for a <i>system</i> .
Update		Any foreseen or planned activity necessary to bring an artifact up to date with current project needs. Compare to <i>re-work</i> .
Upstream		Used to refer to project activities and artifacts that occur early in a project lifecycle. Includes chartering, planning, defining scope and requirements, architecture and high level design, and any other activities that occur to some extent before significant construction begins. See <i>downstream</i> .
Use Case		A single use of the system depicted as an interaction between the user and the system.
Use Case Model		An external view of the system used to describe the dialog between the users of the system and the system.

Term	Acronym	Definition / Description
Use Case Specification		The documentation required to capture a use case.
User Experience	UX	Describes the total experience of human-machine interface. Includes user interface and aesthetic issues that may not normally be considered as part of user interface design.
User Interface	UI	The interface between a system and its external users. Normally used to describe interaction of the system with human operators.
User Interface Design		Design issues specific to human-machine interfaces. See <i>CxStand_Design</i> for more information.
User Interface Prototype		A prototype created to explore the user interface functionality or look and feel.
Verifier		Verifies any <i>rework</i> for <i>inspections</i> .
Version		A formally released revision of an artifact, recognized by the configuration management process that oversees the artifact.
Walkthrough		An <i>informal review</i> in which the <i>author</i> and one or more people meet to review an <i>artifact</i> with the intent of finding <i>defects</i> .
Waterfall Lifecycle		An orderly sequence of phases from system concept to delivery with a review at the end of each phase.
Weekly Individual Plan		A mechanism for individuals to create <i>miniature milestone plan</i> on a weekly basis. See <i>CxGuide_WeeklyIndividualPlan</i> .
What Requirement		Synonym for <i>Functional Requirement</i>
Why Requirement		Synonym for <i>Business Requirement</i>
Work Breakdown Structure	WBS	A representation of all work (<i>activities</i> and <i>tasks</i>) on a project, decomposed into <i>work packages</i> . The WBS provides the fundamental project management view of a project. Smaller projects may capture their WBS implicitly in <i>work plans</i> or <i>detailed schedules</i> . Larger projects will often define the WBS as a separate artifact.
Work Item		Synonym for <i>artifact</i> .
Work Package	WP	A leaf element of a WBS, often defined as a tangible deliverable. Bottom-up project estimation and planning is driven by work packages and is often captured in a <i>work plan</i> . <i>Work packages</i> are normally broken down into <i>activities</i> and <i>tasks</i> for <i>task estimation</i> and <i>detailed scheduling</i> .
Work Plan		A key project artifact that captures <i>work packages</i> along with their <i>task estimates</i> . Used to plan, track, and control detailed execution. See <i>CxGuide_EarnedValueWorkPlan</i> .
Work Product		Synonym for <i>artifact</i> .